

**MM&O COLLECTION SERVICES FORM 2**  
**MAXIMUM COLLECTION SERVICE RATES PROPOSAL****Instructions for Completing Forms 2A-2K (Provided in Excel Workbook)**

Prior to preparing the MM&O Collection Services Maximum Collection Service Rate Proposal Forms, proposers should review Article 7 of the MM&O Collection Services Contract, included as **Error! Reference source not found.** of this RFP, to familiarize themselves with the Maximum Collection Service Rate adjustment methodology. In addition, it is the sole responsibility of the proposer to conduct their own due diligence and calculate and be responsible for the costs and other information quoted in the MM&O Collection Services Maximum Collection Service Rates Proposal Forms.

**Disposal Facilities**

Four (4) Disposal Facilities intend to provide proposals for Disposal Services in response to the City's Request for Proposals for Zero Waste Services. In the event proposers' Maximum Collection Service Rates would differ, depending on which Disposal Facility is selected by the City to provide Disposal Services, for each Disposal Facility, proposers must submit a separate set of forms with the facility name listed on every form for each Disposal Facility listed below. If the Maximum Collection Service Rates will not change, regardless of the Disposal Facility selected by the City, proposers must note this in the space provided for the Disposal Facility name.

1. Recology Hay Road  
6426 Hay Road  
Vacaville, CA 95687
2. Potrero Hills Landfill, Inc.  
3675 Potrero Hills Lane  
Suisun City, CA 94585
3. Altamont Landfill and Resource Recovery Facility  
10840 Altamont Pass Road  
Livermore, CA 94550
4. Keller Canyon Landfill  
901 Bailey Road  
Pittsburg, CA 94565

**Proposed Maximum Collection Service Rates**

(Forms 2A through 2G). The proposers Maximum Collection Service Rates shall consist of two (2) elements: a Disposal Rate Element and Collection Rate Element. Proposers should base their Maximum Collection Service Rates calculations on the service requirements set forth in the MM&O Collection Services Contract provided in **Error! Reference source not found.** of this RFP document.

**Disposal Rate Element.** Proposers should provide a proposed Monthly Unit Generation Factor (Tonnage amount) representing the total **Tonnage** the proposer anticipates disposing at the Disposal Facility for the first Contract Year.

Proposers **should not** provide a Disposal Rate Element. The spreadsheet is set up to calculate this based on the Monthly Unit Generation Factor and will be adjusted by the City based on the actual Disposal Charge per Ton. An estimated \$50.00 per Ton charge has been input for calculation purposes. Prior to evaluation of the Maximum Collection Service

MM&O COLLECTION SERVICES FORM 2  
MAXIMUM COLLECTION SERVICE RATES PROPOSAL

Rates, the actual proposed Disposal Rates will be entered.

**Collection Rate Element.** Proposers should provide a maximum Collection Rate Element that includes all costs of providing Collection Services including, but not limited to, Collection, Processing, transportation, disposal, government and franchise fee costs.

Default MFD Cart and Bin Collection (Forms 2B and 2C). The Default MFD Cart and Bin Collection Services shall include unlimited subscription to Organic Materials Collection.

Option 1 MFD Cart and Bin Collection (Forms 2D and 2E). Option 1 MFD Cart and Bin Collection Services shall have a separate charge for subscription to Organic Materials Collection.

Commercial Cart and Bin Collection (Forms 2F and 2G). The Commercial Cart and Bin Collection Service shall have a separate charge for subscription to Organic Materials Collection.

Commercial Non-Exclusive Recyclable Materials Collection (Form 2H). Proposers shall provide proposed Maximum Collection Service Rates for Commercial Non-Exclusive Recyclable Materials Collection.

SFD, MFD, and Commercial Temporary Roll-Off Box Collection (Forms 2I). The proposers Maximum Collection Service Rates shall consist of a pull rate only. This includes costs of providing Temporary Roll-Off Box Collection Services including, but not limited to, Collection and franchise fee costs. Proposers should base their Maximum Collection Service Rate calculations on the service requirements set forth in the MM&O Collection Services Contract provided in **Error! Reference source not found.** of this RFP document. Disposal will be based on actual Disposal costs. The total rate to be paid by the Customer will be the pull rate and Disposal.

Emergency Service Rates (Form 2J). The proposers Maximum Collection Service Rates shall consist of a pull rate only. This includes costs of providing Temporary Roll-Off Box Collection Services including, but not limited to, Collection and franchise fee costs. Proposers should base their Maximum Collection Service Rate calculations on the service requirements set forth in the MM&O Collection Services Contract provided in **Error! Reference source not found.** of this RFP document. Disposal will be based on actual Disposal costs. The total Customer rate will be the pull rate and Disposal.

Multiple Service Discount (Form 2K). Proposers proposing to offer MM&O Collection Services and RR Collection Services and/or Disposal Services shall indicate the discount, if any, that will be applied to all proposed Maximum Collection Service Rates proposed on MM&O Collection Forms 2A through 2J in the event both services are awarded to the proposer. Please note the franchise fees will not be adjusted due to the award of multiple services to a single proposer and the discounted rate will include the entire franchise fee as provided in 3.1.17.2.

### Adjustments

The following adjustments will be collectively applied before any multiple service discounts proposed in MM&O Collection Form 2K, based on the City's decision to accept the proposed adjustment.

**Lien Process / Property Assessment Adjustment.** If the CITY does not provide a lien process / property assessment indicate the adjustment, if any, that will be applied to all

**MM&O COLLECTION SERVICES FORM 2**  
**MAXIMUM COLLECTION SERVICE RATES PROPOSAL**

proposed rates proposed on MM&O Collection Forms 2A through 2J.

Adjustment to all proposed rates on MM&O Collection Forms 2A through 2J: 10.00%

**Call Center Adjustment.** Indicate the adjustment, if any, if the CITY does not require the call center to be located in Alameda County, California. Additionally, indicate the total estimated annual savings if the call center is located outside Alameda County, California.

Adjustment to all proposed rates on MM&O Collection Forms 2A through 2J: NA

Estimated Savings Annually – Wages & Benefits: NA

Estimated Savings Annually – Administration: NA

Estimated Savings Annually – Operations: NA

Estimated Savings Annually – Capital: NA

**Mitigating Inflation**

In order to provide some mitigation for inflation between the time that the Maximum Collection Service Rates were proposed and the time when Collection Services will commence, the Maximum Collection Service Rates contained on Forms 2A through 2J, including the Franchise Fee, shall be adjusted on July 1, 2015 by the annual change in the Consumer Price Index – All Urban Consumers, Series ID cuura422sa0, Not Seasonally adjusted, San Francisco-Oakland-San Jose, CA for the prior calendar year, January 1, 2014 through December 31, 2014.

### 2.10. Diversion

Table 4 shows CWS' original diversion guarantees alongside CWS revised diversion guarantees.

**Table 4 Diversion**

	<u>New BAFO 6/13/14</u>
	<u>MMO</u>
7/1/2015 – 12/31/2015	<u>30.00%</u>
1/1/2016 – 12/31/2016	<u>31.50%</u>
1/1/2017 – 12/31/2017	<u>33.00%</u>
1/1/2018 – 12/31/2018	<u>34.50%</u>
1/1/2019 – 12/31/2019	<u>36.00%</u>
1/1/2020 – 12/31/2020	<u>47.50%</u>
1/1/2021 – 12/31/2021	<u>49.00%</u>
1/1/2022 – 12/31/2022	<u>50.00%</u>
1/1/2023 – 12/31/2023	<u>51.00%</u>
1/1/2024 – 12/31/2024	<u>52.00%</u>
1/1/2025 – 6/30/2025	<u>52.00%</u>

Shown in the above table is CWS' new diversion guarantees. CWS has been able to maintain similar diversion guarantees as were made in the original January 2013 proposals, assuming the North Gateway Facility was fully operational for the first five years because of the EBMUD outlet for organics. In addition, during the future years when at North Gateway, CWS has increased the diversion guarantees by an additional 10 percent.

### 2.11. Multi-Service 15-Year Term Discount

CWS proposes that the City consider a base contract term of 15 years. Lengthening the contract term allows CWS to utilize its trucks, carts, and radios for a longer term, with replacement as needed, and allow CWS to amortize these assets over the longer term.

CWS proposes to grant the City significant discounts in all service rates proposed if the City awards one or more contracts to CWS for a 15-year term:

- 7% discount for year one only for all services;
- 6% discount for year one only for MMO and RR services;
- 5% discount for year one only for 15-year agreement for MMO only services; **or**
- 5% discount for year one only for 15-year agreement for RR only services.



of this facility, can provide for the disposal needs of the City of Oakland. CWS has made arrangements for disposal of materials at the Vasco Road Landfill beginning on July 1, 2015.

In addition, CWS has also taken the extra step to secure a contingent site, the Keller Canyon Landfill located at 901 Bailey Road, Pittsburg, California, also owned and operated by RSG. RSG has also pledged additional contingent landfill sites.

Both sites are fully permitted and meet the most stringent California landfill environmental, health, and operational safety requirements. A full submittal for Service Group 3 – Disposal Services including detailed site information on both the primary and contingent landfill facilities has been submitted to the City on June 13, 2014.

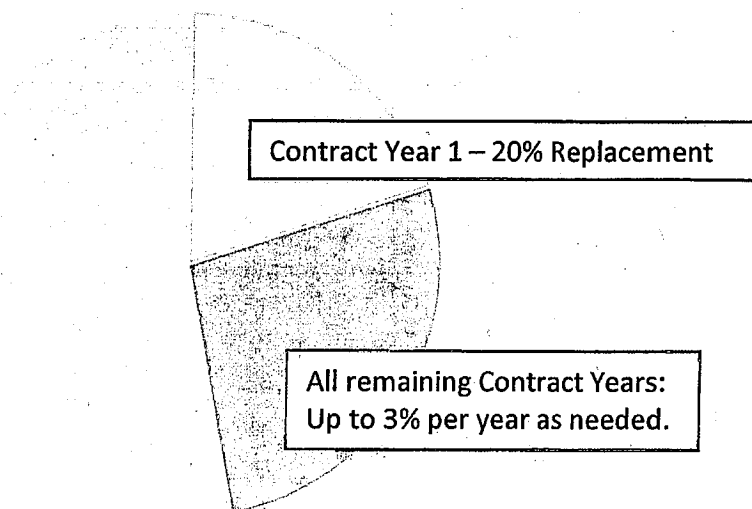
### 2.9. *Carts and Vehicles*

CWS is able to reduce vehicle requirements as a result of the proposed East Bay Municipal Utility District interim transfer station and organics processing facility. The local interim facility located on EBMUD property is described in detail in Section 2.7 of this proposal.

The use of EBMUD organics processing being performed by Recology in a facility adjacent to the CWS interim facility allowed CWS to reduce the number of vehicles required to perform the services under the contract. Other factors that resulted in a reduction in vehicle count includes the use of current collection vehicles as spares. CWS is proposing to reduce the truck count as outlined in Table 3.

CWS is proposing the following revised cart replacement program as shown in Figure 2. CWS believes services levels can be maintained through diligent cart maintenance.

Figure 2 Cart Replacement





## 2. CWS SERVICE MODIFICATIONS

Table 3 Vehicle Count

### MM&O

Truck Type	Application	Manufacturers	Capacity	Total Vehicles	Route Vehicles	Designated Spare Vehicles
<b>SFD Services</b>						
Satellite Side loader (HTS)	Routed Collection Services	Ford/Heil	10 yd	5	4	1
Manual/Automated Side Loader	Routed Collection Services	Peterbilt/McNeilus	31 yd	58	49	9
Standard Rear Loader (REL)	Routed Collection Services	Peterbilt/McNeilus	25 Yd	5	4	1
Claw Flat Bed	Collection Services (Bulky)	Peterbilt	22'	3	2	1
Flat Bed with Lift Gate	Cart Delivery	Ford		2	2	0
Service Body with Lift Gate	Service Truck	Ford	N/A	2	2	0
Supervisor Pick up	Collection, Route Management and Customer Service Support	Ford	N/A	4	4	0



CALIFORNIA WASTE  
SOLUTIONS

## 2. CWS SERVICE MODIFICATIONS

MFD Services						
Roll Off Dead Lift	Roll-Off Collection	MFD, Comm	Peterbilt/Nor Cal	N/A	4	3
Container Carrier (Forklift)	<i>included in Commercial</i>					
Long Floor Front Loader (FEL)	Routed Collection Services		Peterbilt/McNeilus	40 yd	11	9
Commercial Services						
Roll Off Dead Lift	<i>included in MFD</i>					
Container Carrier (Forklift) - NCC - 4000	Container Delivery	MFD, Comm	Ford/Nor Cal	N/A	2	1
Long Floor Front Loader (FEL)	Collection Services		Peterbilt/McNeilus	40 yd	14	12
Transfer Services						
Tractor	Material Transfer	TRS	Peterbilt	N/A	13	11
Trailer Live Floor	Material Transfer	TRS	Western	135 yd	23	12

4	3	1
11	9	2

2	1	1
14	12	2

13	11	2
23	12	11



## 2. CWS SERVICE MODIFICATIONS

RR

Truck Type	Application	Manufacturers	Capacity	Total Vehicles	Route Vehicles	Designated Spare Vehicles
<b>SFD Services</b>						
Satellite Side loader (HTS)	Routed Collection Services	Ford/Heil	10 yd	3	1.7	1
Manual/Automated Side Loader	Routed Collection Services	Peterbilt/McNeilus	31 yd	32	22	4
Standard Rear Loader (REL)	Routed Collection Services	Peterbilt/McNeilus	25 Yd	3	1.7	1
Flat Bed with Lift Gate	Cart Delivery	Ford		2	2	0
Supervisor Pick up	Collection, Route Management and Customer Service Support	Ford	N/A	2	2	0
<b>MFD Services</b>						
Roll Off Dead Lift	Roll-Off Collection	Peterbilt/Nor Cal	N/A	2	1	1
Container Carrier (Forklift) NCC-4000	Container Delivery	Ford/Nor Cal	N/A	2	1	1
Long Floor Front Loader (FEL)	Routed Collection Services	Peterbilt/McNeilus	40 yd	2	1	1
<b>Commercial Services</b>						
(non-exclusive)	Assets will be based on customers serviced					
<b>Transfer Services</b>						
Tractor	Material Transfer	TRS	N/A	1	1	0
Trailer Live Floor	Material Transfer	TRS	135 yd	1	0	0

*Date: Thursday, June 26, 2014.*

*Please review and respond to the questions below. We had previously requested revised rate sheets to correct for the 1.5% increase over RRI, due 6/24/14. Item 1 will also require rate sheet revisions. Please make all necessary revisions, including the RRI+1.5% correction, by 6/26/14 close of business.*

- 1. The City wishes to clarify the required cost composition of the MM&O and RR rate sheets. Please revise and resubmit rate sheets as indicated below.*
  - a. For the rate sheet use carts 100% new, unless the term sheet option that includes only 20% new carts in first year is selected, and that such option is demonstrably feasible. For the latter, unless CWS can provide evidence that WMAC will not remove its carts at the expiration of the Franchise Agreement, please provide revised MM&O and RR rate sheets that assume WMAC will remove its carts.*

CWS Answer to Question #1:

CWS prepared its BAFO rate sheets with an RRI adjustment approach that increases rates by an additional 1.5% in Years 2-5. Your request asking CWS to resubmit our rate sheets without that feature appears contrary to the stated desire of the City Council on May 29, to provide new and lower pricing to lower rates at the start of the Zero Waste Program in July 1, 2015, and ease the rate increase to Oakland citizens. Without this creative approach, CWS's rates would be initially higher than in the enclosed rate sheets. However, we abided by the ZeroWaste team's request and new rate sheets are attached in an unlocked Excel files.

We suggest that the City needs to be interested in the long-term impact of the proposed rates and how rates may be affected by the contract terms included that provide the City and/or the Contractor the right to terminate the agreement at the end of the base term or either of the two five-year extensions. WMAC has proposed that their contract terms be changed to give WMAC solely the right to terminate the agreement, giving the City one-year's notice. If it does give notice, WMAC would continue for one

additional year at the contracted rates as adjusted. In the event WMAC gives notice, the City then would need to re-procure services at significant expense and with the likely outcome of significant increases in rates as a result.

Two questions need to be considered by the ZeroWaste team and City Council:

- *What is the likelihood of WMAC giving the City notice to terminate?*
- *What is the likelihood there will be other competitors ready to respond with better pricing than WMAC?*

CWS believes that the chances are significant WMAC will give the City notice, knowing that there will not be anyone in the Oakland market that will have infrastructure to respond to a similar procurement as the City of Oakland has recently issued. Because of the terms of the Zero Waste RFP, there was little opportunity and time for other competitors to develop bonafide responses since no others besides CWS and WMAC had significant operating assets in the City of Oakland. If the City awards all to WMAC, CWS has the potential to end its business in Oakland and leave only WMAC in place. The City will be completely at the mercy of the WMAC and significant rate increases can be expected. If a future Zero Waste procurement provides other proposers sites and/or more time between selection and award, then it might be possible for the City to get proposals from other firms. However, WMAC will calculate what that pricing might be, and it will be much higher, and WMAC will knowingly raise their rates to just below what new market participants will need to propose. This contract term modification strongly favors WMAC's long-term profit, and is very unfavorable for the City and its ratepayers. In addition to evaluating first year rates, the City staff and Council must evaluate the 20-year net present value (NPV) analysis comparing WMAC and CWS rates. NPV is the pivotal metric that one must use to compare competing program costs where costs differ over

time, and unless this analysis is conducted and clearly presented to Council, the City is considering only a very incomplete picture of the impact of the rates to ratepayers over the next 20 years. The known, probable and possible factors must be included in any credible NPV calculation. CWS acts in good faith by providing reliable NPV so the City can make rational assessment of its choices.

CWS has not nor does not want this provision, and has stated it accepts the original term, with the City having that right solely so that continued services at the agreed upon rate structure can continue seamlessly.

CWS Answer to Question #1a.:

Attached are revised rate sheets adjusting for the 1.5% increase over RRI and assuming WMAC will remove its carts, per the City's request.

*b. Please confirm that the rate impacts shown in Tables 1 and 2 (ILWU costs) would be additive to the rates provided in the BAFO, i.e., that these costs are not already embedded in the BAFO rates. If these costs are embedded in the BAFO rates, provide complete MM&O and RR rate sheets with these costs removed.*

CWS Answer to Question #1b.:

Yes, the rate impacts show in Tables 1 and 2 (ILWU costs) would be additive to the rates provided in the BAFO.

*c. City Council requested the cost of providing bulky waste pickup services directly to MFD tenants. Please confirm that \$6.67 per MFD unit to provide bulky waste pickup services, per Section 2.1 of CWS' BAFO, is an additive monthly rate, i.e., that this cost is not already embedded in the BAFO rates. If the cost of the MFD bulky service is embedded in the BAFO rates, please revise and resubmit the MM&O rate sheets with that cost removed.*

CWS Answer to Question #1c.:



Yes, the \$6.67 per MFD unit to provide bulky waste pickup services (and illegal dumping pickup services), per Section 2.1 of CWS' BAFO, is an additive monthly rate.

2. *Please describe where CWS MM&O and RR containers (carts, bins, and debris boxes) would be stored prior to delivery to customers, particularly prior to the start of Collection Services in 2015. Include a description of the steps of the cart delivery plan CWS would implement in the event WMAC elects to remove their carts at the end of the current franchise agreement.*

CWS Answer to Question #2.:

CWS will store MM&O and RR containers (carts, bins and boxes) at its 10<sup>th</sup> Street properties or at CWS alternative secured site.

3. *The City has received CWS' a combined SG1 and SG2 proposal for "Public Outreach and Education." Please submit separate proposals for SG1 and SG2, responsive to RFP Section 3.3.2.5.5 and Section 4.3.2.5.5, respectively, addressing the Community Outreach Strategy requirements of each franchise contract. Please note that the MM&O and RR Contracts require the Contractor to implement Contractor's Community Outreach Strategy.*

CWS Answer to Question #3.:

This language replaces CWS's SG1 section 5.5 Community Outreach Strategy from its original proposal which responds to section 3.3.2.5.5 of the RFP. Transition plan element will be included in the City's response due on June 30, 2014.

CWS is proposing a comprehensive public and customer outreach and engagement program that, working in partnership with City staff, we achieve Oakland's goal of zero-waste. Our proposal is organized to reflect our public education foundation, drivers, scope and nature of work as we progress from concept, coordination and kick-off with the City, through the transition period, extensive customer engagement and broad public outreach. We herein provide an overview and detail of our proposed work in relation to community and customer engagement.

The program will build from a strong history of Oakland pride, taking advantage of the rich cultural and environmental consciousness of residents. The program will provide individualized information on demand, encourage good overall as well as specific green waste diversion habits through example, and influence and link overall and green waste diversion to broader environmental and civic goals in a way that resonates personally to Oakland residents.

CWS has been very effective and successful at encouraging diversion and recycling behaviors in the Cities of San José and Oakland through the development and distribution of public education materials and creative communication techniques. CWS will continue developing creative and compelling educational materials that will increase participation and adoption of the new environmental and diversion initiatives. The strategies described herein will utilize a breadth of available media, including ethnic media advertisements, outdoor advertisements, social media, online advertising, and retail tie-ins, in the major languages spoken in Oakland (as well as less spoken languages as needed).

**Highlights of our program and team include:**

- All Oakland-based public education team, with City of Oakland business certifications, who individually and collectively have delivered effective communications and outreach programs specifically in Oakland
- Specialized firms that provide a combined 60 years of public education campaign experience in California, locally and Oakland specifically, including significant experience in waste reduction and diversion programs.

- Creative services delivered by our team members who specialize in public education campaigns aimed at diverse populations with long records of success.
- Application of a data-driven approach
- Full use of cutting edge technology
- Creative and considerable use of social media
- Unique approaches to citizen involvement
- A diversion program focused on changing the way that the public thinks about the waste stream and takes the recycling process a big step forward.
- Specially designed Public Education Center
- Specialized staff specifically dedicated to public education

Fundamentally, behavior modification is about real change. Merely delivering or increasing knowledge typically will not result in the type of meaningful and consistent behavior that accomplishes and sustains the stated goals. Ultimately, improving responsible waste behavior to accomplish the Zero Waste goal requires a true commitment to focus on and improve behavior on the part of individual citizens.

Our approach does not rely on cookie-cutter, trial and error pilot programs that may initially be generic in nature to see what works, or the dissemination of materials and collateral merely for the sake of saying that public education was done. Recognizing that if we want to replace the vagaries of intuition with something more reliable, data must first be gathered. Therefore, we will incorporate a data defined and driven methodology to help direct specifics of the public education program. This will allow the City and CWS together to have a targeted focus on the variety of touchpoints with the public and customers where we can most effectively educate, engage and influence individual habits and actions to meaningfully achieve zero waste over the long term.

### **Winning and Expert Oakland-based and Committed Team**

CWS will partner with local firms Circlepoint, The Next Generation, Kneal Resource System and the City to develop public education and outreach materials and campaigns. In consultation with City staff, a Public Education Plan (PEP) will be developed during the transition planning period and presented to the City for approval. Additional information on these team members is provided below.

## **PROGRAM GEOGRAPHIC ORIENTATION**

CWS will work with each City Council member to assure that public education delivery is tailored to and appropriate for each Council District. At the same time, Oakland is a city of neighborhoods with very distinct personalities and several of these “personalities” may reside within one Council District. For example, District 2 includes Chinatown, San Antonio and part of the Lake Merritt area; or District 6 runs from the flats to the hills. Just as these each have varying personalities, they also have different cultures, economics and often different languages. For this reason, our approach to public education will work with and respect Council Districts and their representatives as well as, based on the data-driven approach described below, will be specifically designed and organized for success in Oakland’s diverse communities.

## **DATA DRIVEN APPROACH**

To achieve Oakland’s Zero Waste goals, our team proposes a data-driven, highly visual, and innovative outreach program to ensure significant behavior changes and real-world success of diversion programs, especially the new organics diversion program. Based on the results of early data gathering, CWS will begin to focus outreach efforts on areas where the greatest benefits are possible. This will

continue and adjust as new data becomes available or unexpected changes are seen in the waste stream.

This data approach will be complemented by an innovative and highly strategic outreach program that takes advantage of all available media and builds a connection to neighborhoods and communities in Oakland. Using motivational and culturally relevant techniques that prompt consumers to take action, the outreach program will utilize the latest research in behavioral economics to create lasting changes on the habits of Oakland residents and business owners. We will weave in messages designed to prompt behavioral changes, using both cutting edge and traditional media elements that will earn consumer attention. While it may be contemplated to distribute information and messages through traditional methods such as mailers, flyers and branded collateral, we will also be better equipped to identify which delivery mechanisms and items are best received by which components of Oakland's population.

In order to maximize the benefit of outreach, the team will conduct an initial assessment of Oakland residents' waste disposal habits through polling, focus groups and a waste stream audit. This initial effort will help to identify communities in Oakland that have the greatest opportunity for improvement in their waste, and especially green waste, disposal habits. Based on the results of early data gathering, CWS will begin to focus outreach efforts on areas where the greatest benefits are possible, using the delivery methodologies and mechanisms that have the greater opportunity to grab attention as indicated by the data. These efforts will continue and periodically adjust as new data becomes available or unexpected changes are seen in the waste stream and/or behavior.

Combined with a comprehensive front-end waste stream audit, early data gathering will establish the baseline for improvement, identify target areas for tailored outreach and help guide the most effective

delivery mechanisms. In-person focus groups and telephone polling will identify individuals' attitudes, test consumer habits, reveal patterns of thinking about composting and waste, and determine cultural factors relevant to Oakland's highly diverse population that play into City and CWS objectives.

Once this information has been collected, directed outreach can address specific information needs or incentive programs that would be beneficial to these communities. Information from multiple sources, outlined below, will be combined to provide a comprehensive, detailed, and multi-dimensional picture of waste behavior and its improvement in Oakland. This "map" will provide a baseline for measuring progress and adjusting programs as outreach continues beyond the transitional period.

Baseline data on actual waste and composting perspectives, motivation and habits will support ongoing evaluation of outreach tactics employed during the program. Ongoing audits and surveys will measure organics diversion and monitor the efficacy of outreach programs, allowing the team to continuously adjust programs and messages for maximum impact. Follow-up audits and surveys will further refine goals and benchmarks, and outreach will be designed with flexibility to take advantage of this real-time, changing information.

This initial effort will help to identify communities in Oakland that have the greatest opportunity for improvement in their waste and specifically green waste disposal habits. Once this information has been collected, directed outreach can address specific information needs or incentive programs that would be beneficial to these communities.

## **Polling**



A series of telephone polls will build our dataset on the attitudes of Oakland residents, especially towards green waste diversion for composting. Well-crafted polls provide a scientific basis of attitudinal information and allow us to add dimension to the information, by cross-referencing demographics with geographically-based waste stream information, all the while being able to test specific messages and analyze attitudes. Combined with market research, a series of consumer profiles will be developed in concert with geographic distribution of the Oakland population to allow for micro-targeting and robust information-gathering at the street level. This level of information is vital to success in significantly increasing local waste reduction and composting rates.

### **Focus Groups**

Based on the results of polling, and combined with the waste stream audit, focus groups will allow the team to focus on target communities and demographics and ensure the efficacy of brands and messages. Focus groups provide additional data to drive education around waste diversion and composting in the most effective manner. One goal of the focus groups is to understand how different communities within Oakland think about waste and compost so that the team can develop culturally-relevant and effective outreach strategies and messages.

### **Waste Stream Audit**

Prior to the start of services and coordination of cart and vehicle purchases, CWS proposes to initiate an investigatory waste composition study in the franchise area to better understand the potential for green and other materials diversion from the waste stream. This will allow CWS to better tailor education programs to target diversion of specific recyclable materials present in the waste stream. It will also better prepare the new Oakland Gateway Facility to process the mixed waste collected in the City, and process materials in the organics or commercial recyclables stream as a result of increased



diversion from the waste stream following directed education programs.

### **Ongoing Survey, Evaluation, and Program Refinement**

To continue the data-driven nature of outreach on recycling and Zero Waste, the team will conduct additional waste audits periodically to identify successes. The targeting and messaging of the outreach program will be refined based on demographics and knowledge gained from focus groups, and ongoing audits and surveys. All interactive outreach efforts will include some level of data-gathering to provide a depth of information about consumers and the effectiveness of the programs. A database of best practices will be established and maintained to ensure a systematic approach to the campaign.

At a minimum, CWS will survey users twice a year at key times. Surveys will be offered in online and interactive form, allowing the survey itself to provide advice and behavior reinforcement to the survey taker based on responses. Enticements, such as contests with awards will be promoted to motivate survey participation and responses. Other media for surveys, such as distribution of printed copies in well populated locations with clear and easy response directions, will be provided to ensure the “digital divide” does not preclude a response from anyone who is interested or hamper accurate collection of information.

### **DELIVERY MECHANISMS**

#### **Branding**

The public education team, in close collaboration with the City, will collaborate on a “brand” for Zero Waste Oakland, informed by focus groups, polling, and other data. This brand will be included on all

future project materials to support program continuity and name recognition. Branding will be guided by collected data, as well as Oakland pride and environmentalism.

Example taglines include:

- *Reduce Your Waste-Line*
- *Oakland Composts*
- *Oakland Greens Oakland*
- *Feed the Green Economy*

This campaign will be branded with a strong dose of Oakland pride. We will convey the idea that Oakland can become known nationally as a model for reducing waste. In addition, branding will be tested in multiple cultural contexts to ensure relevancy to every Oakland waste consumer.

As collateral costs money, we want to assure that items are selected that will have maximum impact. Again, this will be best directed through a data driven approach. Collateral may consist of the typical printed materials, reusable bags, magnets, etc. However the input received from Oakland residents may also suggest additional or other collateral that is unique yet effective.

### **Community Outreach Strategy**

Following the period of initial data collection, campaign branding, and introduction of the new service provider, the outreach program will be integrated into the broader delivery effort. The following sections outline an outreach program that, pending City staff approval, could be in place for the first 6 months, July-December

2015, and continually improved through data-driven program evaluation.

This program would focus on establishing new habits for Oakland customers while building connections to civic environmental goals. Micro-targeting will ensure each community in Oakland receives the message that is most likely to produce behavior changes, based on polling, focus groups and updated waste stream data. Directed outreach (information and materials available in multiple languages), broad visibility, community partnerships, special events, media outreach, and paid advertising are all elements that contribute to the success of the recycling program in Oakland.

CWS will utilize a variety of methods to convey service and diversion messages to its customers that could include bill inserts, direct mail, container deliveries, cart tags, bin designs, calendar giveaways, posters, reply and opt-in emails, website, social media, and other methods as appropriate. We will set up a program of email alerts through which we can share news worthy items and tips for diversion to our customers. A crisis communications plan and protocol will be developed to address unlikely but possible events that would adversely affect service delivery, such as a natural disaster.

### **Community Partnerships**

CWS will establish contact with key community groups during the transitional period to create and prepare for collaborative programming in the next phase of outreach. We will work with them to jointly develop one or more initiatives that deliver mutual benefits to the participants. In order to create a successful program and ultimately conduct this outreach, the team will first develop an informational package with an overview of benefits to potential partners (e.g. supermarket, drug store and convenience store chains; newspapers and radio stations, including Spanish, Chinese and Vietnamese outlets; outdoor advertising companies). We will follow

up to identify what possible elements of a partnership would be of interest, draft a or some partnership design(s) and then sign up partners.

The team may also establish contact with community organizations, non-profits and local schools to introduce the educational outreach program and explore what type of partnerships, their content, structure and implementation might be created using the methodology described above.

### **Oaklanders are the best Spokespeople**

Rather than use celebrities like many advertisements, to make the media buys most habit-changing, the team would use ordinary Oaklanders as spokespeople. The audience identifying with the spokespeople, and hearing about successful composting efforts, improves the efficacy of advertising in driving real consumer habit changes. Some examples of Oaklanders to seek out are:

- A tree-planting activist could talk about reducing pollution and how plants and trees thrive and grow faster with compost products as a soil amendment
- A restaurateur could talk about how their organics being separately collected are being turned into compost and being part of a sustainable agricultural environment
- A teacher could talk about using recycled paper and cutting material costs for schools and how educating the students at the CWS Oakland Gateway Facility Education Center about recycling instills both an environmental and resource conservation ethic
- An artist could discuss using recycled materials to create works of art; a real example with the art images present would be sought

## **Social Media**

The public education team will further change consumer habits with a robust social media presence that engages Oakland residents and keeps Zero Waste goals at the forefront of public discourse. Facebook, YouTube, and Twitter will be used to connect Zero Waste goals to everyday life and habit changes, while providing information in an engaging way. Social media can be used to reinforce habits with virtual team-building.

## **User-Created Media**

Contests or other means of spurring user-created media will further engage the public in taking advantage of recycling services and reducing the waste stream, and help consumers educate themselves and each other. Examples of this may include user-created videos, sharable Internet graphics, informational handouts, creative recycling bins, and other appropriate tools and materials to expand awareness and drive behavior change.

## ***“Countdown to Zero Waste”/“Dialing up Diversion” campaign***

The connection between new waste services and the community’s waste-reduction goals can be made by launching an Oakland “Race to Zero Waste” campaign or a project with similar branding. One tool to create and maintain a high-profile Zero Waste countdown would be a “Countdown to Zero Waste” clock, similar to the national debt clock in Times Square, which could be implemented jointly online and with a visible, public presence in Oakland. A variation could be “Dialing up Diversion” or a “Recycling Calculator” highlighting the amount of waste diverted from the landfill. This type of overarching campaign theme will reinforce the community nature of recycling habits, helping to change consumer habits because “peer pressure,” carefully applied, remains an extremely effective means of behavior change. This program would enjoy great synergies with recycling services, as well.

***New Public Waste Bins & Possible Design Competition***

To raise visibility and reward the community for participation in the new recycling services, the team will partner with a local community arts organization, such as The Crucible, to create and install several new public waste bins in each City Council district of Oakland. To maximize visibility and convey that these bins are a “reward” for good waste-reduction behavior, the sites of the new bins will be determined by crowd-sourced input from Oakland residents via an online platform and promoted through the media. The bins will be distributed equitably across the city. To further associate waste reduction with community values, the team will run a community design competition for the new bins. These competitions could be held among students or be open to anyone in the community.

**Compost Giveaways: Farm-To-Fork-To-Farm**

To draw attention to the benefits of separating organics so that these materials can be composted, the team will occasionally give away gardening products created from compost. This would reassure the public that their organic separation efforts are making a difference, while presenting them with a tangible reward for their behavior. These markers of success are vital to driving widespread consumer behavior changes.

Tapping into the popularity of urban agriculture is not only an effective outreach tool but also an opportunity to earn media coverage. In addition, the outreach team would partner with community-based organizations around farming and food security, as well as with Oakland’s community gardens to further evangelize composting in the agricultural context. The messaging will allow consumers, who are already educated about farm-fork sourcing of foods, to participate in this system by returning their foodstuffs to the farm in the form of compost: “farm-to-fork-to-farm.”



## **Web**

A high-quality, easy to find web presence will be developed during the transitional period. The site will be accessible to the disabled and mobile devices, and will provide critical information in Spanish, Chinese, and Vietnamese. The site will include an abundance of information on services, the nature of recycling, the waste stream, and how one can contribute to Zero Waste goals through small habit changes.

The accessible and multi-lingual CWS website will be updated throughout the program to maintain a single source of information for customers. Tips, campaigns and events, and educational material on recyclables processing will also be available online. An interactive feature will collect comments and questions to be shared with City Representatives for response by CWS on the site. Periodic surveys conducted online will take advantage of the interactive medium to collect richer information based on responses, as well as provide messages about recycling and waste reduction customized to the user. The website will utilize best practices of Search Engine Optimization to be highly findable, and integrate with social media platforms to encourage sharing.

The site will be easily shared on social media platforms. This will help residents to prepare for the transition and access important customer service information during transition and throughout the program.

## **Videos**

Short videos will guide consumers to best practices in the most relatable way. Collaboration with community-based organizations, schools, and art centers will help CWS achieve



multiple objectives, including broadening awareness, engaging key communities, enhancing cultural relevancy, and providing useful tricks and tips through short, engaging videos. These videos can be shared and promoted on a variety of platforms and could be a part of a cable television paid media effort, as well.

### **Potential Mobile App**

Smartphone apps have proven to be effective tools for accomplishing behavior change. The public education team will explore the creation of a useful and behavior-changing Smartphone app based on data gathered during the transition. A complementary text message-based service would be developed in parallel for customers, and an interactive voicemail system would be provided for those who do not have cell phones.

### **Print and Broadcast Media**

Media outreach to promote Oakland's zero waste goal is a key component of the transitional and ongoing outreach program because it is very cost-effective and has a wide reach, while also offering opportunities for targeting specific communities, such as non-English speakers. As discussed above, cost-effectiveness and cultural relevancy are vital to driving the new consumer habits that will make a significant difference to Oakland's waste stream.

Effective media outreach will build on program branding, inspiring civic pride and a shared commitment to the Zero Waste goal. CWS will begin outreach with a press release when the franchise is awarded, highlighting local job opportunities, a community-based approach to public education, and innovation in waste processing. A media event may be coordinated, where key civic speakers address Oakland's zero waste goals and CWS staff provides an overview of the new services program and the transitional outreach

plan. In conjunction with this event, CWS may invite key media, especially local television news, to join on test-drives of new collection vehicles.

Spokespeople in Spanish, Chinese, and Vietnamese will be available to attract a variety of media.

The outreach team may also work with the City to develop a Media Transition Kit, which would be an education packet for local reporters for print, television, and radio.

### **Annual Mailer**

Each year, CWS will prepare and distribute approved notices to all customers entitled or mandated to receive waste services. These notices will include:

- Approved rates for collection services
- Rates for other services
- CWS annual holiday schedule
- General summary of mandated and optional services required under the Franchise Agreement
- Messages regarding recycling and waste diversion

### **Neighborhood Bandwagon & District-level Competition**

*Your Neighbors are Composting: Get on Board!*

The neighborhood or district-level bandwagon approach uses both the example of a consumer's peers as well as the desire to be a part of a strong community to create and reinforce good waste-reduction habits. With this approach, we may send letters to Oakland residents to say that their neighbors have increased their recycling habits, and that their neighborhood or street is

approaching the status of having one of the highest diversion rates in the city.

A district-level competition to increase recycling provides an opportunity for earned media, participation from community leaders and officials, and reinforces the community pride at a district level. Done equitably, the resulting awards could be in the form of district-wide grants to support sustainable projects or local schools. This type of competition also provides a variety of complimentary online and social media activities to raise awareness and further education and diversion goals.

Notifying residents that they live in a community or district where many people recycle will increase diversion rates with community reinforcement. These positive reinforcement messages use “peer pressure” to create changes in behavior, and are similar to techniques used successfully by the 2012 Obama campaign to increase voter turnout.

### **Customer Service Coordination**

Customer Service Representatives (CSRs) are at the front line of customer engagement which provides a special interface opportunity that can add to the success of the program. Not only will our CSRs be trained to treat customer calls with the utmost professionalism and accommodation to resolve issues, they will be provided with special education messages to convey to callers.

During Transition, CWS will enhance the capabilities of its Oakland-based customer call center to best serve its new customers in the City. During transition, customer service staff will be regularly updated and trained on the public education aspects of the transition plan and proper related information to provide callers.

## **Community Educators**

Partnerships and educational training opportunities with community organizations and institutions are essential to maximizing outreach, amplifying messages, and ensuring cultural relevancy. Partnerships offer the opportunity to target outreach to communities identified by data as key opportunities for increasing diversion, and to improve the cost-effectiveness of the educational program.

The outreach team would develop and train a team of volunteer and/or paid CWS educators who would become well-versed on recycling and waste reduction. Partnerships could be pursued with other public agencies interested in conservation to provide a single community leader, for and from each council district, who can provide information and training opportunities about conservation in waste, water, energy, and other areas of conservation.

## **Oakland Sports Teams**

Our public education team would approach local sports franchises like the Oakland A's, Raiders, and Warriors, to participate with the City to raise visibility of the recycling program while at the same time educating fans.

## **Community-Based Organizations, Environmental and Sustainability Groups**

The team will partner with a variety of established community-based organizations and institutions to maximize access to the community and minimize outlays on paid media. These community-based organizations enjoy a high level of trust and access to communities they serve, amplifying and extending the reach of messaging about recycling and waste diversion. These partnerships will diversify outreach efforts, ensure culturally relevant messages are propagated, and

connect waste services with the broadly popular environmental movement. These efforts will also drive earned media coverage.

Example partnerships include:

- Oakland Zoo: using recycling and/or yard scraps to feed the animals, drawing attention to diversion of organic materials
- Urban farmers: “farm to fork to farm” habit-creation and compost usage
- Creek to Bay Day participants: highlight the impact of waste on environment during clean-ups
- Earth Day activists: An opportunity to bring Earth Day back to Oakland with a key message about conserving and reusing resources
- Bay Area “Stop Junk Mail” promoters: Campaign, leverage publicity and pursue pro bono advertising to educate residents on how to remove their names from direct mail lists
- Artistic community: Local artists in Oakland would be encouraged to create large sculptures from recycled material. Rather than invite a single artist to work on-site, the outreach team would work with a variety of arts organizations and local artists to integrate waste reduction and recycling messaging into art projects

Engaging the community through existing arts organizations will maximize the reach of our messaging around the synergy between art and recycled materials, presenting a uniquely tactile example of waste diversion.

## **Schools**

Oakland schools present a unique opportunity to reach the next generation and disseminate detailed, in-depth information about composting and waste reduction. Using techniques similar to

anti-smoking efforts in California, outreach to schools will focus on children as key drivers of familial behavior. The program will teach children to compost and otherwise divert waste, as well as encourage them to act as “ambassadors” to their household. This strategy transforms children from passive receivers of information to active members of the household decision-making process. Examples of outreach activities to schools and educational centers include the following:

- Conduct of school group facility tours; develop a curriculum for in-school education, and provide uniquely pedagogical bins for in-school student use
- Organize and conduct contests and in-school activities to tap into student creativity and unique perspective
- Develop a poster contest for 4th or 5th grade elementary school children in the District, to create a poster encouraging diversion behaviors
- Organize and run a short film competition for youth, that seeks films demonstrating recycling techniques or drawing attention to aspects of the Zero Waste “story” that the outreach team will be emphasizing throughout all efforts

### **Public Education Center**

The CWS Oakland Gateway Facility design includes a 6,000 square foot education area that offers public meeting and classroom space, and an enclosed and conditioned walkway and viewing area that allows safe overhead viewing of recyclables deliveries and processing. The design and functionality will allow for ongoing promotion of public awareness and environmental consciousness through real-time observation. This setting provides guests with a unique overhead view enabling the survey of all phases of material separation, recovery and solid waste diversion – from receipt of materials to generation of product for recycling. On-site messaging will emphasize environmental stewardship and conservation.



## **Driver Contact and Visibility**

CWS drivers are a key communication link with customers. Drivers will be trained to provide education where possible, but will also be provided with a variety of tools to reinforce proper recycling and diversion techniques. Tools will include informational handouts, cards, brochures and “correctional” notices when improper sorting is witnessed, while also reporting this information back to headquarters.

CWS may also develop a visibility campaign built around collection vehicle drivers, featuring actual drivers. City-approved posters with photo of driver to be attached to trucks with personal statements of their pride in their job and requests for help from residents with reducing litter, complying with universal and hazardous waste requirements, etc. CWS will work with the City to design attractive informational signage for collection vehicles, displaying City Zero Waste program contact information and web resource links.

## **Media Outreach**

Media outreach to promote Oakland’s zero waste goal is a key component of the transitional outreach program because it is very cost-effective and has a wide reach, while also offering opportunities for targeting specific communities, such as non-English speakers. As discussed above, cost-effectiveness and cultural relevancy are vital to driving the new consumer habits that will make a significant difference to Oakland’s waste stream.

Effective media outreach will build on program branding, inspiring civic pride and a shared commitment to the Zero Waste goal. CWS will begin outreach with a press release when the franchise (s) is awarded, highlighting local job opportunities, a community-based approach to public education, and innovation in waste processing. A media event may be coordinated where key civic speakers address Oakland’s zero



waste goals and CWS staff provides an overview of the new services program and the transitional outreach plan. In conjunction with this event, CWS might invite key media, especially local television news, to tour the newly upgraded 10th Street MRF and join on test-drives of new collection vehicles. Spokespeople in Spanish, Chinese, and Vietnamese will be available to attract a variety of media.

*The outreach team might also work with the City to develop a Media Transition Kit, which would be an education packet for local reporters for print, television, and radio. The Transition Kit would provide facts on the recycling collection program; proper manner and time by which to place materials out; information about CWS' diversion initiatives, and the contact information for residents to call if there are any problems. Throughout the transition period, Circlepoint and The Next Generation will identify and use opportunities – such as the holiday season - to pitch this story of a new approach to waste to the media, helping to earn publicity and introduce Oaklanders to the upcoming changes.*

### **Paid Media**

Visibility is important to the success of a broad community effort, and complements direct and directed outreach. The outreach plan will look at all available media to spread tested messages, and outlays will be cost-effective and data-driven. Paid media would be creative, culturally-relevant to Oakland, and take advantage of “hooks,” or seasonal opportunities to increase attention. Media opportunities will be based on data gathered to ensure maximum cost-effectiveness. Media options include:

- Buses & BART
- Billboards
- Local and Public Access TV and Radio
- Newspapers / Media Partnerships
- Online Advertising

## **Community Spokespeople**

Oaklanders could be the best program-promotional spokespeople, so rather than use celebrities like is done in many advertisements, to make the media buys most habit-changing, the team would use ordinary Oaklanders as spokespeople. The audience would identify with their fellow citizens as spokespeople, and hearing about successful recycling efforts improves the efficacy of advertising in driving real consumer habit changes.

Here are a few concepts:

- A tree-planting activist could talk about reducing pollution and letting new trees thrive
- A restaurateur could talk about composting being part of a sustainable agricultural environment
- A teacher could talk about how to make compost
- An urban farmer could discuss growing with composted materials

## **Public Events**

As it has always done, CWS will participate in a multitude of community events in Oakland. Company team members will be present at large community events, particularly in areas of the city determined by analysis to be most in need of reinforcement of recycling habits.

Diversion-specific educational handouts, and a common, customizable and portable booth design would be used at local street fairs, art festivals, concerts, and the like to highlight local environmental initiatives. CWS' diversion/education team would be responsible for setting up and staffing each event and working with the City on publicity to increase awareness and foot traffic.

CWS will continue to use its costumed character “Curby” to motivate, educate, and reach out to its customers at events and through public education programs. Curby has been a successful character in promoting CWS’ recycling collection programs in Oakland and throughout its California operations as an entertaining element in event-based community education programs and can carry over to other media.

**Events may include:**

- Earth Day, April 2015 and subsequent years: Each year, CWS will develop a theme based on Earth Day, to increase awareness of and participation in diversion activities
  - The campaign will include publicity, advertising and truck signage, and can be tied to the children’s poster contest
  - The issue of electronic waste/recycling can be addressed by including in the Earth Day campaign elements of Pass It On Week and/or 100 Percent Day, an outreach effort to collect 100,000 personal computers throughout the US
- America Recycles Day, November 2015, and subsequent years – each year, CWS will develop a theme for America Recycles day, to motivate participation specifically for reusable items
  - This campaign could be to encourage pre-holiday giving of textiles, reusable items that can be accepted by the members of the Reusable Advisory Board (see Solid Waste Work Plan, above)
  - A media event that includes members of the Reusable Advisory Board, Mayor and City Council of the City of Oakland and OPWA would kick off the drive, which would culminate in another event at which the total collected for re-use will be announced

- As discussed above, identification of organics leadership and highlighting of successes help encourage significant behavior changes in consumers should be introduced at this event
- Staff an information table/kiosk at street fairs, fiestas, parades, other community events to distribute informational materials that are relevant to the community attended the event

## **TRANSITION**

A well-managed transition is critical to establishing the foundation for a successful franchise. In this phase, commitment to the program is developed and the groundwork for a successful program is laid. During transition, the people, systems, procedures, and resource application crucial for a smooth running franchise will be put in place. Baseline data, including service needs, attitudes and barriers will be measured and used to guide development and complement implementation of a comprehensive public education and outreach program.

With Oakland's Zero Waste program goals, customers will be encouraged to add additional materials to recycling carts. CWS will inform customers of these new opportunities and deliver customer communications and education through mailings, web and social media outreach and events throughout the City, while making efforts to ensure that all customers receive the service configuration that best suits their needs and attitudes, many as defined through data collection.

The CWS Transition Manager and public education team members will work closely with the City to establish accountability throughout the transition effort. Regular check-in meetings will be established between the two parties, ensuring fluid communication

and maximum efficiency. This period will also provide an opportunity for the two parties to clarify the PEP, CWS approach, budget, and scope of work. Information gathered from our data collection activities will be shared with the City so officials can fully participate in this data-driven and highly responsive outreach approach.

Goals of Transition Education and Communications Program include:

- Prepare customers for changes in the new program and franchise, such as different trucks and/or multiple collection vehicles on their route, as well as other operational changes such as pickup times, etc.
- Educate customers about simple ways to move toward Zero Waste and create a personal connection to citywide goals
- Develop look and feel for materials and key messages
- Provide key news media with background on CWS team and approach
- Develop partnerships with organizations, corporations, etc. for full implementation of outreach programs during contract
- Establish database of national collection communications Best Practices
- Finalize outreach details and budgets

### **Direct Outreach**

During the transition period, CWS will establish contact with new customers to introduce them to the new service program and begin the educational campaign. These communications will be coordinated with the messaging, branding and targeting that will inform the program, based on the waste stream audit, polling, and focus group data. As

with all direct outreach, opportunities for gathering information will be seized to provide as much information as possible to inform this data-driven marketing program.

An introductory mailer to customers notifying them of the new collection service and container options, and requesting a response about cart choice, address verification and service levels at residences where this information needs to be updated. Customers will have the option of returning the survey by mail or completing the online version that will incorporate messages about waste diversion.

Residents and commercial tenants will receive an information packet with an overview of services, such as pickup times and different collection vehicles on their route, tips for proper disposal, and a survey of initial attitudes toward composting and recycling that will inform the data-driven transitional outreach program. The packet will also provide contact information for CWS and opportunities for direct consultation. A questionnaire will also be included to again inquire about appropriately-sized bins for each location and inform the design of a new collection schedule.

Commercial customers will receive an educational packet that includes information addressing their particular waste stream, i.e. additional information on food waste disposal for Oakland restaurants. These materials will include an introduction to the waste-diversion branding.

The information packet, and all CWS customer communications, will prominently display the customer call-in number 1-510-OAKLAND, that CWS has reserved.

Educational materials detailing, in multi-lingual text and universal images, acceptable and non-acceptable materials for the compost bin

will be distributed. Certain of these materials may be delivered in tandem with delivery of new containers to all customers. The initial educational packet will also contain CWS contact information as well as information on other waste services, including new programs to manage recycling of hazardous materials and sharps.

Informative decals embedded in all new carts and bins that illustrate acceptable and non-acceptable waste and recycling items in English, Spanish, Chinese, and Vietnamese. In later stages of the program, decals in other languages spoken in Oakland, such as Hmong, may be developed and distributed based on data about composting habits in different communities.

## **SPECIALIZED EDUCATION**

### **Multi-family Dwellings**

CWS will maintain open communication with MFD property managers and updates profiles to best identify and support their solid and green waste service needs and opportunities, and develop creative and social ways to impart program information to increase awareness and maximize participation.

CWS has a considerable and successful track record in MFD servicing and support that will continue once awarded the new franchise. For existing multi-family customers, CWS will continue to work with property managers and residents to reemphasize program standards and the role each resident plays in helping Oakland achieve Zero Waste by 2030. CWS will further continue to support MFD residents by providing recycling news/tips onsite at community/resident meetings and via online communication resources.



For new MFD residents, CWS will initiate contact with property managers to provide program details for inclusion in sales presentations and move-in packets, review the Property Manager Resource kit, and provide program signage and posters for use in the sales/leasing office. CWS also began placing new, long lasting vinyl signs at the recycling carts/roll-offs/chutes in MFDs to emphasize proper recycling habits at the point of disposal.

MFD outreach efforts will continue and grow with the addition of more focused community events, new collection truck signage and social messaging related to the MFD collection program, and on-site presentations at MFDs. CWS will work with the City of Oakland to launch MFD programs at diverse developments that have recently transitioned into the City's program. CWS is focused on increased multi-lingual education to reduce contamination, increase participation, and achieve diversion goals.

### **Commercial Outreach**

CWS is committed to developing creative, compelling commercial outreach tools and implementing effective communications programs that promote recycling, waste reduction, reuse and resource conservation. Our strategy is to serve as a "green" educational resource to our commercial customers, in order to motivate them to embrace environmental stewardship and to learn how they can easily adopt and maximize recycling and other sustainable practices as part of their standard business operating procedures.

CWS will utilize a variety of methods to convey service and recycling messages to its customers, including bill inserts, direct mail, container deliveries, posters, paid advertising, media relations, special events,

co-marketing and community sponsorships, reply and opt-in emails, website, and other methods as appropriate. We have set up a program of email alerts and news worthy items for our commercial customers for educational matters of importance. As noted above, data collection will enable us to provide the most efficacious outreach program, with continuous adjustments based on demonstrated efficacy. CWS proposed commercial education materials and programs will include, but not be limited, to the following business specific outreach tools.

*For All Commercial Customers:*

**Waste and Recycling Information:** CWS will distribute informational materials detailing, in text and through universal images, acceptable and non-acceptable solid waste, recyclable and organic materials in tandem with delivery of the new solid waste, recycling and organics carts, bins and roll-off boxes available to all commercial customers. Prior to container delivery, CWS will mail information to all commercial customers, along with a service requirement questionnaire, delivery date and process.

**“Dos & Don’t” Decals:** CWS will work with the City of Oakland to create decals for adhering to all new carts, bins and roll off containers as part of the container assembly process. These decals will also illustrate acceptable and non-acceptable waste and recycling items and be produced in English, Spanish, and Vietnamese. CWS proposes refining and extending its successful Courtesy and Non-collection notice program that it successfully uses in the communities that it serves.

**Bill Inserts:** CWS will collaborate with the City of Oakland on a minimum of nine (9), and up to 12, monthly bill inserts for all of its commercial customers. Inserts can include information regarding:

- Service options
- Annual commercial recycling awards notice

- Setout correction notice for each service sector
- Recycling surveys and program improvement suggestions.
- Correction Notices: When appropriate, and after being noted in the truck manifest and communicated to Customer Service, CWS drivers will be responsible for distributing set out correction notifications to all commercial customers as needed.

General Customer Notifications: CWS will prepare and distribute approved notices to all commercial customers entitled or mandated to receive waste services. These notices will outline:

- Approved commercial rates for collection services.
- Rates for other services.
- CWS annual holiday schedule
- General summary of mandated and optional services required under the Franchise Agreement.

CWS has been very effective and successful at encouraging recycling behaviors in the City of Oakland through the development and distribution of public education materials. CWS will continue developing creative and compelling educational materials that will increase participation and adoption of the new environmental and recycling initiatives. CWS' team of commercial recycling coordinators will continue to focus educational efforts on high-volume waste generators by SIC code, and work directly with facilities and property managers to develop customized recycling plans and outreach tools to meet individual company needs.

CWS will support these efforts with quarterly direct mail highlighting commercial recycling incentives, as well as through the development of marketing partnerships and co-sponsorships with local business organizations, including chambers of commerce, area Rotary Clubs, and other service organizations. CWS will also hold on a regular basis, evening meetings with commercial customers. For customer convenience, these meetings will be held throughout the City and will be industry specific. Meetings will include:

- Presentation on new commercial service options
- Recycling Program handout information
- Question and answer period
- Signup Sheet and post card mailer request form for customers who want an on-site visit by CWS and/or onsite training.

In addition to the sector-specific programs outlined above, other CWS public education resources include:

*Commercial Recycling Promotion Program*

CWS' approach to commercial recycling promotion follows CWS, local, and state government guidance.

CWS will create educational materials designed to increase participation and adoption of new environmental and recycling initiatives, including organics recycling. Core messages of this material include:

- Waste Diversion: waste prevention, reuse, and recycling.
- Waste Minimization: reducing or eliminating and recycling.
- Waste Prevention: actions or choices that prevent the generation of waste.

CWS' team of City-specific Commercial Recycling Coordinators plus a supervisor is critical to perpetuating these messages. The team will continue to focus its direct educational efforts on high-volume waste generators identified by the SIC code, and will work directly with facilities and property managers in their jurisdictions, as well as City representatives, to develop customized recycling plans and outreach tools to meet individual company and venue needs.

CWS will support these efforts with quarterly direct mail, which will highlight commercial recycling incentives available at the local, state, and national levels, as well as through the development of marketing partnerships, and co-sponsorships with local business and professional organizations, and service groups, including chambers of commerce, Rotary Clubs, and others.

Other CWS approaches to ensuring the highest levels of commercial customer education, awareness and satisfaction include:

- Commercial audits, whereby CWS is able to provide source reduction and waste diversion opportunities, research markets for specialized materials generated by local businesses, and provide guidance on internal collection methods and training.
- On a twice-annual basis (at least), CWS will invite representatives from segments of the largest, medium, and smallest companies in the City to join a hosted commercial recycling workshop, to outline program strategies, target recyclable materials, and distribute commercial recycling information and tools to attendees.
  - These workshops will be designed separately for each service sector
  - The goal of the workshop will be to exchange information about building effective, successful, and sustaining diversion programs.

CWS will also focus attention on separately educating janitorial firms and food service workers and firms, because they are two enterprises that can contribute greatly to the success of recycling programs if properly included and educated about program goals

CWS will prepare specific education information about program participation and compliance in multiple languages.

## **Commercial Outreach Staffing**

The staffing structure for the City of Oakland Commercial Services is outlined below:

**Outreach:** This position is key to developing and growing commercial customer education required for the new collection system surrounding new single-stream and organics recycling initiatives. This position provides the leadership, support, and expertise to recruit and manage the Commercial Recycling Coordinators including determining strategic objectives, training, and program quality.

**Commercial Recycling and Organics Coordinators:** CWS Public Education Team will identify companies to visit for outreach education, to manage data collected and to set up commercial recycling and food waste diversion programs. As part of their responsibilities, Coordinators will prepare and deliver presentations to businesses, including educational workshops on ways to recycle and reduce.

**Neighborhood Outreach Coordinators:** CWS Public Education Team will call upon property managers of both multi-family and commercial properties with recycling programs established to reinforce program requirements.

CWS continually seeks opportunities to improve its Outreach and Education programs and embraces the opportunity to prevent or overcome operational challenges. The inherent industry challenges that exist at serving commercial customers generally involve the initial orientation and implementation of a solid waste and recycling program. CWS believes that proper program preparation and communication ensures few operating challenges and results in:



- Increased customer satisfaction with CWS and City program.
- Greater customer participation in recycling and diversion.
- Lower overall service costs for CWS and the Customer.

CWS believes that if it continually identifies and answers opportunities, its challenges diminish.

Opportunities exist to:

- Develop a service valued by business customers
- Understand what is important to different customers
- Know what service will inspire customers to participate
- Deliver a service that uses existing resources of the customers
- Communicate those services that complement the customer's business
- Implement a fast and simple service that minimizes the customer's effort
- Continue exceptional service that is appreciated as a component of success by customers

CWS understands that it must address time, space, energy, and benefit – four essential factors for each commercial customer in order to ensure and sustain overall commercial program success.

CWS has learned to increase communication with its customers and groups of similar customers. Program improvements with good preparation and proactive communication turn challenges into opportunities. CWS has successfully implemented commercial recycling programs in Oakland and San José and have gained understanding from generators that participating was not onerous. Many businesses thought that separating materials normally going into the solid waste container into the recycling container would take extra time and effort and be a nuisance. CWS overcame this challenge by making participation take little time, space, and energy. CWS



showed that convenient collection (such as through providing bins and/or simplifying sorting) provides benefits through lower rates for garbage collection.

CWS has implemented specific steps and actions for contacting and implementing commercial solid waste and recycling programs. This process is performed for every prospective and existing customer. The high level of organization and discipline within CWS ensures that the customer will be satisfied, and in turn, the customer will require less effort and expense from CWS.

These specific steps include CWS' opportunity to:

- Propose the right program for the customer.
- Communicate the program features and benefits in the appropriate language or languages preferred by the owner and employees.
- Show photographs and diagrams of how the service will be provided.
- Educate the customer about expectations, correct, and incorrect actions.
- Guide and observe the implementation of the program for the customer.
- Confirm that the program is being properly used and that the customer is satisfied.
- Report program progress and accomplishment to the customer.

Other important Technical Assistance features CWS has provided include:

- Good signage.
- Clean containers.
- Locking containers.
- Scheduling service collection.
- Prompt feedback to the customer about any obstacle.
- Volunteering suggestions to improve service.
- Establishing a relationship between customer, diver and our Customer Service Representatives.

## **Overall Outreach Program as Framework**

Overall, the public education and outreach program will build from an established history of Oakland pride, taking advantage of the rich cultural and environmental consciousness of residents as well as specific pride in and identification with Oakland's various and strong neighborhoods. The program will provide individualized information on demand, encourage good waste diversion habits through example and influence, and link recycling and waste diversion to broader environmental and civic goals. In addition to the aspects noted above, the overall outreach program will provide creative and compelling

educational materials that will increase participation and adoption of the new environmental and diversion initiatives.

By focusing on how engagement and outreach work within the larger framework of service delivery, outreach and customer service staff will work in tandem towards our common goals. We are excited about the opportunity to move Oakland toward a zero waste future.

## **BENEFITS FROM COMBINING RR and MM&O**

Substantial economies of scale can be realized by combining RR and MM&O public education programs. These include:

- Data collection that gathers information on all components of solid waste management, green waste composting and recycling.
- A seamless and coordinated message that embraces the full life cycle and all aspects of waste reduction and diversion.

- Better pricing on purchases through buying in greater bulk, including printing, collateral, potential media buys, etc.
- Savings on dedicated public education staff and consultants through a combined effort.
- More efficient use of City staff time as there will be no need to work with different franchisees on public education initiatives.

## **PUBLIC EDUCATION TEAM MEMBERS**

### **Circlepoint**

Established in 1987 as Public Affairs Management, Circlepoint has grown over the years to meet clients' ever-expanding needs, from environmental planning to social media strategy. For more than two decades, Circlepoint has been a guiding force in helping government agencies, private businesses and communities think strategically, communicate effectively, and find solutions to bring resolution on a wide range of issues and opinions. Circlepoint provides strategic communications counsel that informs and educates stakeholders, and has a focused environmental planning practice that integrates environmental assessment, design, and community outreach to produce streamlined environmental documents. The creative services team delivers a wide range of design and production services, from identity development to websites and printed collateral.

Circlepoint is a city of Oakland certified local business.

### **The Next Generation (TNG)**

TNG is a full-service campaign consulting and management, and issue advocacy firm, specializing in the environmental and progressive issues in the Bay Area and across California. TNG helps clients to craft a smart political and outreach strategy, organize operation of information programs, and develop clear, directed, and effective messages.

### **Kneal Resource System (KRS)**

KRS, founded in 1989, is well versed in solid waste issues and related public education initiatives, as the company president, Kathy Neal, served on the former California Integrated Waste Management Board and created and chaired its Public Education and Legislation Committee. KRS has extensive experience with project planning, management and staffing; process improvement; public affairs, public education and governmental affairs strategy and outreach; statewide permitting and regulation of solid waste facilities and programs; and creation and implementation of public education and outreach initiatives.

KRS is a city of Oakland certified small local business.

### CWS Answer to Question #3.:

This language replaces CWS's SG2 section 5.5 Community Outreach Strategy from its original proposal which responds to section 3.3.2.5.5 of the RFP. Transition plan element will be included in the City's response due on June 30, 2014.

CWS is proposing a comprehensive public and customer outreach and engagement program that, working in partnership with City staff, we achieve Oakland's goal of zero-waste. Our proposal is organized to reflect our public education foundation, drivers, scope and nature of work as we progress from concept, coordination and kick-off with the City, through the transition period, extensive customer engagement and broad public outreach.

We herein provide an overview and detail of our proposed work in relation to community and customer engagement.

The program will build from a strong history of Oakland pride, taking advantage of the rich cultural and environmental consciousness of residents. The program will provide individualized information on demand, encourage good overall waste diversion and recycling habits through example, and influence and link overall diversion to broader environmental and civic goals in a way that resonates personally to Oakland residents.

CWS has been very effective and successful at encouraging diversion and recycling behaviors in the Cities of San José and Oakland through the development and distribution of public education materials and creative communication techniques. CWS will continue developing creative and compelling educational materials that will increase participation and adoption of the new environmental and diversion initiatives. The strategies described herein will utilize a breadth of available media, including ethnic media advertisements, outdoor advertisements, social media, online advertising, and retail tie-ins, in the major languages spoken in Oakland (as well as less spoken languages as needed).

**Highlights of our program and team include:**

- All Oakland-based public education team, with City of Oakland business certifications, who individually and collectively have delivered effective communications and outreach programs specifically in Oakland
- Specialized firms that provide a combined 60 years of public education campaign experience in California, locally and Oakland specifically, including significant experience in waste reduction and diversion programs.

- Creative services delivered by our team members who specialize in public education campaigns aimed at diverse populations with long records of success.
- Application of a data-driven approach
- Full use of cutting edge technology
- Creative and considerable use of social media
- Unique approaches to citizen involvement
- A diversion program focused on changing the way that the public thinks about the waste stream and takes the recycling process a big step forward.
- Specially designed Public Education Center
- Specialized staff specifically dedicated to public education

Fundamentally, behavior modification is about real change. Merely delivering or increasing knowledge typically will not result in the type of meaningful and consistent behavior that accomplishes and sustains the stated goals. Ultimately, improving responsible waste behavior to accomplish the Zero Waste goal requires a true commitment to focus on and improve behavior on the part of individual citizens.

Our approach does not rely on cookie-cutter, trial and error pilot programs that may initially be generic in nature to see what works, or the dissemination of materials and collateral merely for the sake of saying that public education was done. Recognizing that if we want to replace the vagaries of intuition with something more reliable, data must first be gathered. Therefore, we will incorporate a data defined and driven methodology to help direct specifics of the public education program. This will allow the City and CWS together to have a targeted focus on the variety of touchpoints with the public and customers where we can most effectively educate, engage and influence individual habits and actions to meaningfully achieve zero waste over the long term.

### **Winning and Expert Oakland-based and Committed Team**

CWS will partner with local firms Circlepoint, The Next Generation, Kneal Resource System and the City to develop public education and outreach materials and campaigns. In consultation with City staff, a Public Education Plan (PEP) will be developed during the transition planning period and presented to the City for approval. Additional information on these team members is provided below.

## **PROGRAM GEOGRAPHIC ORIENTATION**

CWS will work with each City Council member to assure that public education delivery is tailored to and appropriate for each Council District. At the same time, Oakland is a city of neighborhoods with very distinct personalities and several of these “personalities” may reside within one Council District. For example, District 2 includes Chinatown, San Antonio and part of the Lake Merritt area; or District 6 runs from the flats to the hills. Just as these each have varying personalities, they also have different cultures, economics and often different languages. For this reason, our approach to public education will work with and respect Council Districts and their representatives as well as, based on the data-driven approach described below, will be specifically designed and organized for success in Oakland’s diverse communities.

## **DATA DRIVEN APPROACH**

To achieve Oakland’s Zero Waste goals, our team proposes a data-driven, highly visual, and innovative outreach program to ensure significant behavior changes and real-world success of diversion programs. Based on the results of early data gathering, CWS will begin to focus outreach efforts on areas where the greatest benefits



are possible. This will continue and adjust as new data becomes available or unexpected changes are seen in the waste stream.

This data approach will be complemented by an innovative and highly strategic outreach program that takes advantage of all available media and builds a connection to neighborhoods and communities in Oakland. Using motivational and culturally relevant techniques that prompt consumers to take action, the outreach program will utilize the latest research in behavioral economics to create lasting changes on the habits of Oakland residents and business owners. We will weave in messages designed to prompt behavioral changes, using both cutting edge and traditional media elements that will earn consumer attention. While it may be contemplated to distribute information and messages through traditional methods such as mailers, flyers and branded collateral, we will also be better equipped to identify which delivery mechanisms and items are best received by which components of Oakland's population.

In order to maximize the benefit of outreach, the team will conduct an initial assessment of Oakland residents' waste and recycling habits through polling, focus groups and a materials stream audit. This initial effort will help to identify communities in Oakland that have the greatest opportunity for improvement in their recycling and disposal habits. Based on the results of early data gathering, CWS will begin to focus outreach efforts on areas where the greatest benefits are possible, using the delivery methodologies and mechanisms that have the greater opportunity to grab attention as indicated by the data. These efforts will continue and periodically adjust as new data becomes available or unexpected changes are seen in recycled materials and/or behavior.

Combined with a comprehensive front-end materials stream audit, early data gathering will establish the baseline for improvement, identify target areas for tailored outreach and help guide the most

effective delivery mechanisms. In-person focus groups and telephone polling will identify individuals' attitudes, test consumer habits, reveal patterns of thinking about recycling and waste, and determine cultural factors relevant to Oakland's highly diverse population that play into City and CWS objectives.

Once this information has been collected, directed outreach can address specific information needs or incentive programs that would be beneficial to these communities. Information from multiple sources, outlined below, will be combined to provide a comprehensive, detailed, and multi-dimensional picture of waste behavior and its improvement in Oakland. This "map" will provide a baseline for measuring progress and adjusting programs as outreach continues beyond the transitional period.

Baseline data on actual waste and composting perspectives, motivation and habits will support ongoing evaluation of outreach tactics employed during the program. Ongoing audits and surveys will measure waste diversion and recycling, and monitor the efficacy of outreach programs, allowing the team to continuously adjust programs and messages for maximum impact. Follow-up audits and surveys will further refine goals and benchmarks, and outreach will be designed with flexibility to take advantage of this real-time, changing information.

This initial effort will help to identify communities in Oakland that have the greatest opportunity for improvement in their waste and recycling habits. Once this information has been collected, directed outreach can address specific information needs or incentive programs that would be beneficial to these communities.

## **Polling**

A series of telephone polls will build our dataset on the attitudes of Oakland residents, towards waste diversion and recycling. Well-crafted polls provide a scientific basis of attitudinal information and allow us to add dimension to the information, by cross-referencing demographics with geographically-based waste stream information, all the while being able to test specific messages and analyze attitudes. Combined with market research, a series of consumer profiles will be developed in concert with geographic distribution of the Oakland population to allow for micro-targeting and robust information-gathering at the street level. This level of information is vital to success in significantly increasing local waste reduction and recycling rates.

### **Focus Groups**

Based on the results of polling, and combined with the waste stream audit, focus groups will allow the team to focus on target communities and demographics and ensure the efficacy of brands and messages. Focus groups provide additional data to drive education around waste diversion and recycling in the most effective manner. One goal of the focus groups is to understand how different communities within Oakland think about waste and recycling so that the team can develop culturally-relevant and effective outreach strategies and messages.

### **Waste Stream Audit**

Prior to the start of services and coordination of cart and vehicle purchases, CWS proposes to initiate an investigatory materials composition study in the franchise area to better understand the potential for increased recyclable materials diversion from the waste stream. This will allow CWS to better tailor education programs to target diversion of specific recyclable materials present in the waste stream.

### **Ongoing Survey, Evaluation, and Program Refinement**

To continue the data-driven nature of outreach on recycling and Zero Waste, the team will conduct additional materials audits periodically to identify successes. The targeting and messaging of the outreach program will be refined based on demographics and knowledge gained from focus groups, and ongoing audits and surveys. All interactive outreach efforts will include some level of data-gathering to provide a depth of information about consumers and the effectiveness of the programs. A database of best practices will be established and maintained to ensure a systematic approach to the campaign.

At a minimum, CWS will survey users twice a year at key times. Surveys will be offered in online and interactive form, allowing the survey itself to provide advice and behavior reinforcement to the survey taker based on responses. Enticements, such as contests with awards will be promoted to motivate survey participation and responses. Other media for surveys, such as distribution of printed copies in well populated locations with clear and easy response directions, will be provided to ensure the “digital divide” does not preclude a response from anyone who is interested or hamper accurate collection of information.

## **DELIVERY MECHANISMS**

### **Branding**

The public education team, in close collaboration with the City, will collaborate on a “brand” for Zero Waste Oakland, informed by focus groups, polling, and other data. This brand will be included on all future project materials to support program continuity and name recognition. Branding will be guided by collected data, as well as Oakland pride and environmentalism.

Example taglines include:

- *Reduce Your Waste-Line*
- *Oakland Greens Oakland*
- *Feed the Green Economy*

This campaign will be branded with a strong dose of Oakland pride. We will convey the idea that Oakland can become known nationally as a model for reducing waste. In addition, branding will be tested in multiple cultural contexts to ensure relevancy to every Oakland waste consumer.

### **Community Partnerships**

CWS will establish contact with key community groups during the transitional period to prepare for collaborative programming in the next phase of outreach. In order to conduct this outreach, the team will develop a package with an overview of benefits to potential partners (e.g. supermarket, drug store and convenience store chains; newspapers and radio stations, including Spanish, Chinese and Vietnamese outlets; outdoor advertising companies). The team may also establish contact with local schools to introduce the educational outreach program.

### **Social Media**

The public education team will further change consumer habits with a robust social media presence that engages Oakland residents and keeps Zero Waste goals at the forefront of public discourse. Facebook, YouTube, and Twitter will be used to connect Zero Waste goals to everyday life and habit changes, while providing information in an engaging way. Social media can be used to reinforce habits with virtual team-building.

### **User-Created Media**

Contests or other means of spurring user-created media will further engage the public in taking advantage of recycling services and reducing the waste stream, and help consumers educate themselves and each other. Examples of this may include user-created videos, sharable Internet graphics, informational handouts, creative recycling bins, and other appropriate tools and materials to expand awareness and drive behavior change.

### ***“Countdown to Zero Waste”/“Dialing up Diversion” campaign***

The connection between new waste services and the community’s waste-reduction goals can be made by launching an Oakland “Race to Zero Waste” campaign or a project with similar branding. One tool to create and maintain a high-profile Zero Waste countdown would be a “Countdown to Zero Waste” clock, similar to the national debt clock in Times Square, which could be implemented jointly online and with a visible, public presence in Oakland. A variation could be “Dialing up Diversion” or a “Recycling Calculator” highlighting the amount of waste diverted from the landfill. This type of overarching campaign theme will reinforce the community nature of recycling habits, helping to change consumer habits because “peer pressure,” carefully applied, remains an extremely effective means of behavior change. This program would enjoy great synergies with recycling services, as well.

### ***New Public Waste Bins & Possible Design Competition***

To raise visibility and reward the community for participation in the new recycling services, the team will partner with a local community arts organization, such as The Crucible, to create and install several new public recycling bins in each City Council district of Oakland. To maximize visibility and convey that these bins are a “reward” for good waste-reduction behavior, the sites of the new bins will be determined by crowd-sourced input from Oakland residents via an online platform and promoted through the media. The bins will be distributed equitably across the city. To further associate waste reduction with community values, the team will run a community



design competition for the new bins. These competitions could be held among students or be open to anyone in the community.

## **Web**

A high-quality, easy to find web presence will be developed during the transitional period. The site will be accessible to the disabled and mobile devices, and will provide critical information in Spanish, Chinese, and Vietnamese. The site will include an abundance of information on services, the nature of recycling, the waste stream, and how one can contribute to Zero Waste goals through small habit changes.

The accessible and multi-lingual CWS website will be updated throughout the program to maintain a single source of information for customers. Tips, campaigns and events, and educational material on recyclables processing will also be available online. An interactive feature will collect comments and questions to be shared with City Representatives for response by CWS on the site. Periodic surveys conducted online will take advantage of the interactive medium to collect richer information based on responses, as well as provide messages about recycling and waste reduction customized to the user. The website will utilize best practices of Search Engine Optimization to be highly findable, and integrate with social media platforms to encourage sharing.

The site will be easily shared on social media platforms. This will help residents to prepare for the transition and access important customer service information during transition and throughout the program.

## **Videos**



Short videos will guide consumers to best practices in the most relatable way. Collaboration with community-based organizations, schools, and art centers will help CWS achieve multiple objectives, including broadening awareness, engaging key communities, enhancing cultural relevancy, and providing useful tricks and tips through short, engaging videos. These videos can be shared and promoted on a variety of platforms and could be a part of a cable television paid media effort, as well.

### **Potential Mobile App**

Smartphone apps have proven to be effective tools for accomplishing behavior change. The public education team will explore the creation of a useful and behavior-changing Smartphone app based on data gathered during the transition. A complementary text message-based service would be developed in parallel for customers, and an interactive voicemail system would be provided for those who do not have cell phones.

### **Print and Broadcast Media**

Media outreach to promote Oakland's zero waste goal is a key component of the transitional and ongoing outreach program because it is very cost-effective and has a wide reach, while also offering opportunities for targeting specific communities, such as non-English speakers. As discussed above, cost-effectiveness and cultural relevancy are vital to driving the new consumer habits that will make a significant difference to Oakland's waste stream.

Effective media outreach will build on program branding, inspiring civic pride and a shared commitment to the Zero Waste goal. CWS will begin outreach with a press release when the franchise is awarded, highlighting local job opportunities, a community-based approach to public education, and innovation in waste processing. A media event may be coordinated, where key civic speakers address Oakland's zero

waste goals and CWS staff provides an overview of the new services program and the transitional outreach plan. In conjunction with this event, CWS may invite key media, especially local television news, to join on test-drives of new collection vehicles.

Spokespeople in Spanish, Chinese, and Vietnamese will be available to attract a variety of media.

The outreach team may also work with the City to develop a Media Transition Kit, which would be an education packet for local reporters for print, television, and radio.

### **Annual Mailer**

Each year, CWS will prepare and distribute approved notices to all customers entitled or mandated to receive waste services. These notices will include:

- Approved rates for collection services
- Rates for other services
- CWS annual holiday schedule
- General summary of mandated and optional services required under the Franchise Agreement
- Messages regarding recycling and waste diversion

### **Neighborhood Bandwagon & District-level Competition**

The neighborhood or district-level bandwagon approach uses both the example of a consumer's peers as well as the desire to be a part of a strong community to create and reinforce good waste-reduction habits. With this approach, we might send letters to Oakland residents to say that their neighbors have increased their recycling habits, and that their neighborhood or street is

approaching the status of having one of the highest diversion rates in the city.

A district-level competition to increase recycling provides an opportunity for earned media, participation from community leaders and officials, and reinforces the community pride at a district level. Done equitably, the resulting awards could be in the form of district-wide grants to support sustainable projects or local schools. This type of competition also provides a variety of complimentary online and social media activities to raise awareness and further education and diversion goals.

Notifying residents that they live in a community or district where many people recycle will increase diversion rates with community reinforcement. These positive reinforcement messages use “peer pressure” to create changes in behavior, and are similar to techniques used successfully by the 2012 Obama campaign to increase voter turnout.

### **Customer Service Representatives**

Customer Service Representatives (CSRs) are at the front line of customer engagement which provides a special interface opportunity that can add to the success of the program. Not only will our CSRs be trained to treat customer calls with the utmost professionalism and accommodation to resolve issues, they will be provided with special education messages to convey to callers.

### **Community Educators**

Partnerships and educational training opportunities with community organizations and institutions are essential to maximizing outreach, amplifying messages, and ensuring cultural relevancy. Partnerships offer the opportunity to target

outreach to communities identified by data as key opportunities for increasing diversion, and to improve the cost-effectiveness of the educational program.

The outreach team would develop and train a team of volunteer and/or paid CWS educators who would become well-versed on recycling and waste reduction. Partnerships could be pursued with other public agencies interested in conservation to provide a single community leader, for and from each council district, who can provide information and training opportunities about conservation in waste, water, energy, and other areas of conservation.

### **Oakland Sports Teams**

Our public education team would approach local sports franchises like the Oakland A's, Raiders, and Warriors, to participate with the City to raise visibility of the recycling program while at the same time educating fans.

### **Community-Based Organizations, Environmental and Sustainability Groups**

The team will partner with a variety of established community-based organizations and institutions to maximize access to the community and minimize outlays on paid media. These community-based organizations enjoy a high level of trust and access to communities they serve, amplifying and extending the reach of messaging about recycling and waste diversion. These partnerships will diversify outreach efforts, ensure culturally relevant messages are propagated, and connect waste services with the broadly popular environmental movement. These efforts will also drive earned media coverage.

Example partnerships include:

- Oakland Zoo: using recycling and/or yard scraps to feed the animals, drawing attention to diversion of organic materials
- Urban farmers: “farm to fork to farm” habit-creation and compost usage
- Creek to Bay Day participants: highlight the impact of waste on environment during clean-ups
- Earth Day activists: An opportunity to bring Earth Day back to Oakland with a key message about conserving and reusing resources
- Bay Area “Stop Junk Mail” promoters: Campaign, leverage publicity and pursue pro bono advertising to educate residents on how to remove their names from direct mail lists
- Artistic community: Local artists in Oakland would be encouraged to create large sculptures from recycled material. Rather than invite a single artist to work on-site, the outreach team would work with a variety of arts organizations and local artists to integrate waste reduction and recycling messaging into art projects

Engaging the community through existing arts organizations will maximize the reach of our messaging around the synergy between art and recycled materials, presenting a uniquely tactile example of waste diversion.

## **Schools**

Oakland schools present a unique opportunity to reach the next generation and disseminate detailed, in-depth information about recycling. Using techniques similar to anti-smoking efforts in California, outreach to schools will focus on children as key drivers of familial behavior. The program will teach children to recycle, as well as encourage them to act as “ambassadors” to their household. This strategy transforms children from passive receivers of information to active

members of the household decision-making process. Examples of outreach activities to schools and educational centers include the following:

- Conduct of school group facility tours; develop a curriculum for in-school education, and provide uniquely pedagogical bins for in-school student use
- Organize and conduct contests and in-school activities to tap into student creativity and unique perspective
- Develop a poster contest for 4th or 5th grade elementary school children in the District, to create a poster encouraging diversion behaviors
- Organize and run a short film competition for youth, that seeks films demonstrating recycling techniques or drawing attention to aspects of the Zero Waste “story” that the outreach team will be emphasizing throughout all efforts

### **Public Education Center**

The CWS Oakland Gateway Facility design includes a 6,000 square foot education area that offers public meeting and classroom space, and an enclosed and conditioned walkway and viewing area that allows safe overhead viewing of recyclables deliveries and processing. The design and functionality will allow for ongoing promotion of public awareness and environmental consciousness through real-time observation. This setting provides guests with a unique overhead view enabling the survey of all phases of material separation, recovery and solid waste diversion – from receipt of materials to generation of product for recycling. On-site messaging will emphasize environmental stewardship and conservation.

### **Driver Contact and Visibility**



CWS drivers are a key communication link with customers. Drivers will be trained to provide education where possible, but will also be provided with a variety of tools to reinforce proper recycling and diversion techniques. Tools will include informational handouts, cards, brochures and “correctional” notices when improper sorting is witnessed, while also reporting this information back to headquarters.

CWS may also develop a visibility campaign built around collection vehicle drivers, featuring actual drivers. City-approved posters with photo of driver to be attached to trucks with personal statements of their pride in their job and requests for help from residents with reducing litter, complying with universal and hazardous waste requirements, etc. CWS will work with the City to design attractive informational signage for collection vehicles, displaying City recycling program contact information and web resource links.

### ***Paid Media***

Visibility is important to the success of a broad community effort, and complements direct and directed outreach. The outreach plan will look at all available media to spread tested messages, and outlays will be cost-effective and data-driven. Paid media would be creative, culturally-relevant to Oakland, and take advantage of “hooks,” or seasonal opportunities to increase attention. Media opportunities will be based on data gathered to ensure maximum cost-effectiveness. Media options include:

- Buses & BART
- Billboards
- Local and Public Access TV and Radio
- Newspapers / Media Partnerships
- Online Advertising

### **Community Spokespeople**



Oaklanders could be the best program-promotional spokespeople, so rather than use celebrities like is done in many advertisements, to make the media buys most habit-changing, the team would use ordinary Oaklanders as spokespeople. The audience would identify with their fellow citizens as spokespeople, and hearing about successful recycling efforts improves the efficacy of advertising in driving real consumer habit changes.

Here are a few concepts:

- A tree-planting activist could talk about reducing pollution and letting new trees thrive
- A restaurateur could talk about recycling being part of a sustainable agricultural environment
- A teacher could talk about using recycled paper and cutting material costs for schools
- An artist could discuss using recycled materials

### **Public Events**

As it has always done, CWS will participate in a multitude of community events in Oakland. Company team members will be present at large community events, particularly in areas of the city determined by analysis to be most in need of reinforcement of recycling habits.

Diversion-specific educational handouts, and a common, customizable and portable booth design would be used at local street fairs, art festivals, concerts, and the like to highlight local environmental initiatives. CWS' diversion/education team would be responsible for setting up and staffing each event and working with the City on publicity to increase awareness and foot traffic.

CWS will continue to use its costumed character "Curby" to motivate, educate, and reach out to its customers at events and through public

education programs. Curby has been a successful character in promoting CWS' recycling collection programs in Oakland and throughout its California operations as an entertaining element in event-based community education programs and can carry over to other media.

We would also partner with local event venues to get recycling bins placed in prominent locations, thus "normalizing" the services and providing fans and event-goers with additional opportunities to form good recycling habits.

## **TRANSITION**

A well-managed transition is critical to establishing the foundation for a successful franchise. In this phase, commitment to the program is developed and the groundwork for a successful program is laid. During transition, the people, systems, procedures, and resource application crucial for a smooth running franchise will be put in place. Baseline data, including service needs, attitudes and barriers will be measured and used to guide development and complement implementation of a comprehensive public education and outreach program.

With Oakland's Zero Waste program goals, customers will be able to add additional materials to

recycling carts. CWS will inform customers of these new opportunities and deliver customer

communications and education through mailings, web and social media outreach and events throughout the City, while making efforts to ensure that all customers receive the service configuration that best

suits their needs and attitudes, many as defined through data collection.

The CWS Transition Manager and public education team members will work closely with the City to establish accountability throughout the transition effort. Regular check-in meetings will be established between the two parties, ensuring fluid communication and maximum efficiency. This period will also provide an opportunity for the two parties to clarify the PEP, CWS approach, budget, and scope of work. Information gathered from our data collection activities will be shared with the City so officials can fully participate in this data-driven and highly responsive outreach approach.

Goals of Transition Education and Communications Program include:

- Prepare customers for changes in the new program and franchise, such as different trucks and/or multiple collection vehicles on their route, as well as other operational changes such as pickup times, etc.
- Educate customers about simple ways to move toward Zero Waste and create a personal connection to citywide goals
- Develop look and feel for materials and key messages
- Provide key news media with background on CWS team and approach
- Develop partnerships with organizations, corporations, etc. for full implementation of outreach programs during contract
- Establish database of national collection communications Best Practices
- Finalize outreach details and budgets

During the transition period, CWS will establish contact with new customers to introduce them to the new service program and begin the educational campaign. These communications will be coordinated with the messaging, branding and targeting that will inform the program, based on the waste stream audit, polling, and focus group data. As with all direct outreach, opportunities for gathering information will be seized to provide as much information as possible to inform this data-driven marketing program.

An introductory mailer to customers notifying them of the new collection service and container options, and requesting a response about cart choice, address verification and service levels at residences where this information needs to be updated. Customers will have the option of returning the survey by mail or completing the online version that will incorporate messages about waste diversion.

Residents and commercial tenants will receive an information packet with an overview of services, such as pickup times and different collection vehicles on their route, tips for proper disposal, and a survey of initial attitudes toward recycling that will inform the data-driven transitional outreach program. The packet will also provide contact information for CWS and opportunities for direct consultation. A questionnaire will also be included to again inquire about appropriately-sized bins for each location and inform the design of a new collection schedule.

Commercial customers will receive an educational packet that includes information addressing their particular waste stream, i.e. additional information on food waste disposal for Oakland restaurants. These materials will include an introduction to the waste-diversion branding.

The information packet, and all CWS customer communications, will prominently display the customer call-in number 1-510-OAKLAND, that CWS has reserved.

Educational materials detailing, in multi-lingual text and universal images, acceptable and non-acceptable materials for the compost bin will be distributed. Certain of these materials may be delivered in tandem with delivery of new containers to all customers. The initial educational packet will also contain CWS contact information as well as information on other waste services, including new programs to manage recycling of hazardous materials and sharps.

Informative decals embedded in all new carts and bins that illustrate acceptable and non-acceptable recycling items in English, Spanish, Chinese, and Vietnamese. In later stages of the program, decals in other languages spoken in Oakland, such as Hmong, may be developed and distributed based on data about composting habits in different communities.

## **SPECIALIZED EDUCATION**

### **Multi-family Dwellings**

CWS will maintain open communication with MFD property managers and updates profiles to best identify and support their recycling service needs and opportunities, and develop creative and social ways to impart program information to increase awareness and maximize participation.

CWS has a considerable and successful track record in MFD servicing and support that will continue once awarded the new franchise. For existing multi-family customers, CWS will continue to work with property managers and residents to reemphasize program standards and the role each resident plays in helping Oakland achieve Zero

Waste by 2030. CWS will further continue to support MFD residents by providing recycling news/tips onsite at community/resident meetings and via online communication resources.

For new MFD residents, CWS will initiate contact with property managers to provide program details for inclusion in sales presentations and move-in packets, review the Property Manager Resource kit, and provide program signage and posters for use in the sales/leasing office. CWS also began placing new, long lasting vinyl signs at the recycling carts/roll-offs/chutes in MFDs to emphasize proper recycling habits at the point of disposal.

MFD outreach efforts will continue and grow with the addition of more focused community events, new collection truck signage and social messaging related to the MFD recycling program, and on-site presentations at MFDs. CWS will work with the City of Oakland to launch MFD programs at diverse developments that have recently transitioned into the City's program. CWS is focused on increased multi-lingual education to reduce contamination, increase participation, and achieve diversion goals.

### **Commercial Customers**

CWS is committed to developing creative, compelling commercial outreach tools and implementing effective communications programs that promote recycling, waste reduction, reuse and resource conservation. Our strategy is to serve as a "green" educational resource to our commercial customers, in order to motivate them to embrace environmental stewardship and to learn how they can easily adopt and maximize recycling and other sustainable practices as part of their standard business operating procedures.



CWS believes that if it continually identifies and responds to opportunities, then challenges diminish. Opportunities exist to:

- Develop a service valued by business customers
- Understand what is important to different customers
- Know what service will inspire customers to participate
- Deliver a service that uses existing resources of the customers
- Communicate those services that complement the customer's business
- Implement a fast and simple service that minimizes the customer's effort
- Continue exceptional service that is appreciated as a component of success by customers

CWS understands that it must address time, space, energy, and benefit – four essential factors for each commercial customer in order to ensure and sustain overall commercial program success and have learned to increase communication with individual and groups of similar customers. Program improvements with good preparation and proactive communication turn challenges into opportunities. CWS has successfully implemented commercial recycling programs in Oakland and San José and instilled understanding with generators that participating is not onerous. Many businesses thought that separating materials normally going into the solid waste container into the recycling container would take extra time and effort and be a nuisance. CWS overcame this challenge by assuring that participation took little time, space, and energy. CWS showed that by establishing convenient collection, such as providing bins and/or simplifying sorting, results in benefits such as lower rates for garbage collection.

CWS has implemented specific steps and actions for contacting and implementing commercial recycling programs. This process is performed for every prospective and existing customer. The high level of organization and discipline within CWS ensures that the customer will be satisfied, and in turn, the customer will require less effort and expense from CWS. These specific steps include CWS' opportunity to:



- Propose the right program for the customer
- Communicate the program features and benefits in the appropriate language or languages preferred by the owner and employees
- Show photographs and diagrams of how the service will be provided
- Educate the customer about expectations, correct, and incorrect actions
- Guide and observe the implementation of the program for the customer
- Confirm that the program is being properly used and that the customer is satisfied
- Report program progress and accomplishment to the customer

CWS will utilize a variety of methods to convey service and recycling messages to its commercial customers, including bill inserts, direct mail, container deliveries, posters, paid advertising, media relations, special events, co-marketing and community sponsorships, reply and opt-in emails, website, and other methods as appropriate. We have set up a program of email alerts and news worthy items for our commercial customers for educational matters of importance. As noted above, data collection will enable us to provide the most efficacious outreach program, with continuous adjustments based on demonstrated efficacy.

Proposed commercial education materials and programs will include, but not be limited, to the following business specific outreach tools:

- Waste and Recycling Information: CWS will distribute informational materials detailing, in text and through universal images, acceptable and non-acceptable solid waste, recyclable and organic materials in tandem with delivery of the new solid waste, recycling and organics carts, bins and roll-off boxes available to all commercial customers. Prior to container delivery, CWS will mail information to all commercial

customers, along with a service requirement questionnaire, delivery date and process.

- “Dos & Don’t” Decals: CWS will work with the City of Oakland to create decals for adhering to all new carts, bins and roll off containers as part of the container assembly process. These decals will also illustrate acceptable and non-acceptable waste and recycling items and be produced in English, Spanish, and Vietnamese. CWS proposes refining and extending its successful Courtesy and Non-collection notice program that it successfully uses in the communities that it serves.
- Bill Inserts: CWS will collaborate with the City of Oakland on a minimum of nine (9), and up to 12, monthly bill inserts for all of its commercial customers. Examples of information contained within are:
  - Service options
  - Annual commercial recycling awards notice
  - Setout correction notice for each service sector
  - Recycling surveys and program improvement suggestions
  - Correction Notices: When appropriate, and after being noted in the truck manifest and communicated to Customer Service, CWS drivers will be responsible for distributing set out correction notifications to all commercial customers as needed.
- General Customer Notifications: CWS will prepare and distribute approved notices to all commercial customers entitled or mandated to receive waste services. These notices will outline:
  - Approved commercial rates for collection services
  - Rates for other services
  - CWS annual holiday schedule
  - General summary of mandated and optional services required under the Franchise Agreement

Our team of commercial recycling coordinators will continue to focus educational efforts on high-volume waste generators by SIC code, and work directly with facilities and property managers to develop customized recycling plans and outreach tools to meet individual

company needs. CWS will support these efforts with quarterly direct mail highlighting commercial recycling incentives, as well as through the development of marketing partnerships and co-sponsorships with local business organizations and service groups, including chambers of commerce, area Rotary Clubs, and other service organizations.

CWS will also hold on a regular basis, evening meetings with commercial customers. For customer convenience, these meetings will be held throughout the City and will be industry specific. Meetings will include:

- Presentation on new commercial service options
- Recycling Program handout information
- Question and answer period
- Signup Sheet and post card mailer request form for customers who want an on-site visit by CWS and/or onsite training

Other CWS approaches to ensuring the highest levels of commercial customer education, awareness and satisfaction include:

- Commercial audits, through which CWS identifies source reduction and waste diversion opportunities, researches markets for specialized materials generated by local businesses, and provides guidance on internal collection methods and training.
- Commercial recycling workshops on at least a twice-annual basis, with invited representatives from segments of the largest, medium, and smallest companies in the City, to outline program strategies, target recyclable materials, and distribute commercial recycling information and tools to attendees. These workshops will be designed separately for each service sector. The goal of the workshop will be to exchange information about building effective, successful, and sustaining diversion programs.
- Tailored education for janitorial firms and food service workers and firms, as these are two enterprises that can contribute greatly to the success of recycling programs if properly included and educated about program goals. CWS will prepare specific

education information about program participation and compliance in multiple languages.

### **Commercial Outreach Staffing**

The staffing structure for the City of Oakland Commercial Services is outlined below:

- **Outreach:** This position is key to developing and growing commercial customer education required for the new collection system surrounding new single-stream recycling. This position provides the leadership, support, and expertise to recruit and manage the Commercial Recycling Coordinators including determining strategic objectives, training, and program quality.
- **Commercial Recycling Coordinators:** Companies will be identified to visit for outreach education, manage data collected and set up commercial recycling programs. As part of their responsibilities, Coordinators will prepare and deliver presentations and educational workshops to businesses, including topics such as ways to recycle and reduce waste.
- **Neighborhood Outreach Coordinators:** These coordinators will call upon property managers of both multi-family and commercial properties with established recycling programs to reinforce program requirements.

### **Overall Outreach Program as Framework**

Overall, the public education and outreach program will build from an established history of Oakland pride, taking advantage of the rich cultural and environmental consciousness of residents as well as specific pride in and identification with Oakland's various and strong neighborhoods. The program will provide individualized information on demand, encourage good waste diversion habits through example and influence, and link recycling and waste diversion to broader environmental and civic goals. In addition to the aspects noted above, the overall outreach program will provide creative and compelling educational materials that will increase

participation and adoption of the new environmental and diversion initiatives.

By focusing on how engagement and outreach work within the larger framework of service delivery, outreach and customer service staff will work in tandem towards our common goals. We are excited about the opportunity to move Oakland toward a zero waste future.

### **BENEFITS FROM COMBINING RR and MM&O**

Substantial economies of scale can be realized by combining RR and MM&O public education programs. These include:

- Data collection that gathers information on all components of solid waste management, green waste composting and recycling.
- A seamless and coordinated message that embraces the full life cycle and all aspects of waste reduction and diversion.
- Better pricing on purchases through buying in greater bulk, including printing, collateral, potential media buys, etc.
- Savings on dedicated public education staff and consultants through a combined effort.
- More efficient use of City staff time as there will be no need to work with different franchisees on public education initiatives.

### **PUBLIC EDUCATION TEAM MEMBERS**

## **Circlepoint**

Established in 1987 as Public Affairs Management, Circlepoint has grown over the years to meet clients' ever-expanding needs, from environmental planning to social media strategy. For more than two decades, Circlepoint has been a guiding force in helping government agencies, private businesses and communities think strategically, communicate effectively, and find solutions to bring resolution on a wide range of issues and opinions. Circlepoint provides strategic communications counsel that informs and educates stakeholders, and has a focused environmental planning practice that integrates environmental assessment, design, and community outreach to produce streamlined environmental documents. The creative services team delivers a wide range of design and production services, from identity development to websites and printed collateral.

Circlepoint is a city of Oakland certified local business.

## **The Next Generation (TNG)**

TNG is a full-service campaign consulting and management, and issue advocacy firm, specializing in the environmental and progressive issues in the Bay Area and across California. TNG helps clients to craft a smart political and outreach strategy, organize operation of information programs, and develop clear, directed, and effective messages.

## **Kneal Resource System (KRS)**

KRS, founded in 1989, is well versed in solid waste issues and related public education initiatives, as the company president, Kathy Neal, served on the former California Integrated Waste Management Board and created and chaired its Public Education and Legislation



Committee. KRS has extensive experience with project planning, management and staffing; process improvement; public affairs, public education and governmental affairs strategy and outreach; statewide permitting and regulation of solid waste facilities and programs; and creation and implementation of public education and outreach initiatives.

KRS is a city of Oakland certified small local business.

4. *Page 15 of the CWS combined SG1 and SG2 proposal states “Each MFD customer will receive one (1) bulky collection each year...”. Please define “customer” in the above referenced proposal statement, and if applicable, distinguish from “Customer” as defined in Section 1.35 of the MM&O contract.*

CWS Answer to Question #4.:

“Customer” is define as the resident of each dwelling unit or tenant. CWS’ customer enables the dwelling unit tenant to arrange annual bulky collection.

5. *Please complete and submit MM&O Form 12C Organic Materials Processing Facility for the EBMUD facility.*

CWS Answer to Question #5.:

Completed MM&O Form 12C Organic Material Processing Facility for the EBMUD facility is attached.

6. *Please complete and submit MM&O Form 12C Organic Materials Processing Facility for the Recology facility.*

CWS Answer to Question #6.:

Completed MM&O Form 12C Organic Material Processing Facility for the Recology facility is attached.



7. *Please complete and submit MM&O Forms 12A Material Recovery Facility, 12B Mixed Materials Processing Facility, 12C Organic Materials Processing Facility, and 12D Transfer Station Facility for the Interim Transfer Facility.*

CWS Answer to Question #7.:

Completed MM&O Form 12C Organic Material Processing Facility for the Recology facility is attached.



# OMSS

Oakland Maritime Support Services, Inc.

## **Oakland Maritime Support Services Center**

November 15, 2012

### **SENT VIA E-MAIL & U.S. MAIL**

Ms. Kristina Duong  
California Waste Solutions  
1820 10<sup>th</sup> Street  
Oakland, California 94607

Dear Ms. Duong:

Oakland Maritime Support Services (OMSS) is pleased to learn about the progress of your expansion to the Oakland Army Base property near the Port of Oakland. We would be pleased to accommodate your firm with parking for your collection and transport fleet during the transitional period of time before you occupy your new facility in the North Gateway at Wake Avenue and Engineers Road.

Our new OMSS facility will provide 17 acres of premium parking and support service for trucks. Upon completion of the facility, OMSS agrees to lease to California Waste Solutions (CWS) land for the domicile and support for between 50 and 150 collection vehicles, as well as employee parking as needed. We will have more than ample space for your fleet during the period of time that you described -- beginning January 2015 through December 2016, or at such date when the new CWS facility is fully operational at the new North Gateway location.

Services for CWS trucks will include the following in General Terms:

#### OMSS will provide:

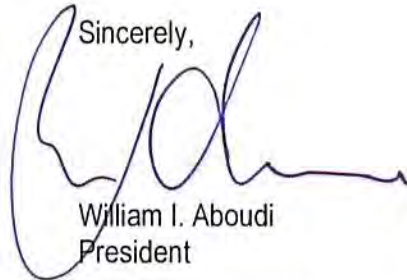
- Fenced & lighted parking spaces
- 24-hour security & camera
- 24-hour access for CWS employees
- Access to Fueling and Service by CWS representative
- Facilities for CWS drivers

#### CWS will provide:

- List of all trucks and trailers to be domiciled with CA & DOT numbers, registration and insurance information
- DTSC list for equipment, Fluid and Fuel in trucks

A formal agreement between OMSS and CWS will follow this Term Sheet to include the terms of parking and leasing amount.

Please call me at (510) 604-0466 if you should have any questions.

Sincerely,  
  
William I. Aboudi  
President

bill@oaklandmss.com | (510) 604-0466

**OMSS**  
Oakland Maritime Support Services, Inc.



June 26, 2014

SENT VIA EMAIL & U.S MAIL

Kristina Duong  
California Waste Solutions  
1820 10<sup>th</sup> Street  
Oakland, California 94607

Dear Ms. Duong:

Viridis Fuels (VF) is pleased to acknowledge our proposed support of California Waste Solutions' (CWS) expansion and operations. We appreciate the opportunity to work with your team as your reputation is exemplary.

As you are aware, our company has site control of a 6 acre parcel in the North Gateway Area of the former Army Base. The site is fully CEQA approved and would provide a complimentary co-location of our development with your operations. We clearly understand your needs and concur with your request to secure a portion of this site. VF is willing to provide to you adequate land to accommodate at least 130 collection trucks; employee rest, meals, meetings, locker room and bath and wash room areas; and, operational offices. Further, the subject site is fully capable of accommodating maintenance and compressed natural gas (CNG) fuelling stations for up to nine (9) trucks at the time and related compressor and storage tanks. Finally adequate space is available to provide storage for the containers that will be required. The site would be a fully secure location with armed guard service 24 hours per day, 7 days per week. Access to the site would be subject to our agreed upon security protocols.

As we shared, our project construction will be done under an already in-place Community Benefits Agreement with the Building and Construction Trades of Alameda County. Any construction activities would require adherence to the terms of that agreement.

Attached is a conceptual layout clearly demonstrating and confirming the ability of the subject area to more than adequately accommodate your parking, operations and storage requirements.

CWS project will complement of the environmental and sustainable ecosystem of new developments in the EBMUD / OAB area. This collaboration greatly benefits the City of Oakland and its citizens by bringing good union jobs and state-of-art construction, operation and innovation to Oakland.

We look forward to formalizing our agreement and providing CWS with our full support for the period of time that you may require.

In service,

Mario Juarez  
President

P. 510-821-6699 / e. mjuarez@viridisfuels.com

1241 High Street, Oakland, CA 94601  
[www.viridisfuels.com](http://www.viridisfuels.com)

*Date: Monday, June 30, 2014.*

*On June 13, 2014, the City received a Best and Final Offer (BAFO) for Service Group 1 (SG1) and Service Group 2 (SG2) from CWS, responding to the City of Oakland Zero Waste Services RFP and the City Council motion passed on May 29, 2014. The City had previously received CWS' original proposals for SG1 and SG2 on January 9, 2013, which for the purposes of this correspondence, we will refer to as Plan A. During negotiations regarding Plan A, CWS submitted to the City a Plan B proposal, which provided for a delayed implementation of SG1 and SG2 Plan A. The BAFO provided by CWS on June 13, 2014 appears to present a new proposal, which we will refer to as Plan C. The following questions seek clarification and completion of the Plan C submittal from CWS, to help the City fully understand the CWS BAFO.*

**City Question 1:**

*We do not understand the information provided in Tables 1 and 2 (on pages 18 and 20), please clarify, specifically with regards to present versus new employees.*

**CWS Response to City Question 1:**

Table 1 shows the rate impacts due to the wage increases associated with a \$20 ILWU wage rate by 2020 and the benefit changes as requested by City staff under the BAFO. Table 2 shows the rate impacts due to the wage increases associated with a \$22.94 ILWU wage rate by 2019 and the benefit changes as shown in a table in the City Council resolution. The rate impacts are shown for a sampling of SFD, MFD, and Commercial customer rates for the RR contract only, MMO contract only, and both RR and MMO contracts. The rate impacts represent the average cost increases that are to occur each year until 2019. The number of employees included in the rate impact is the 48 present employees plus the 35 new employees for the RR contract only, 47 new employees for the MMO contract only, and 87 new employees for both the RR and MMO contracts.

Please note based on further clarification by ILWU, the wage rate ILWU is looking for is \$20.94 by 2019. CWS believes this rate is consistent with the City Council resolution. CWS's responses to the questions due July 1 will reflect the rate impacts due to a \$20.94 wage rate by 2019.

**City Question 2:**

*Please confirm that Table 1 includes cost for affordable family health care coverage, and a wage of \$20/hour in 2019. Simple addition of the wage increases shown, do not appear to equal \$20 per hour. Please explain your assumptions.*

**CWS Response to City Question 2:**

CWS confirms that Table 1 includes costs for affordable family health care coverage, and a wage of \$20 per hour in 2019. Addition of the increases and previous year wage equal \$20.00 per

hour by 2019. A “Wage” row has been added to the first section of Table 1 to show the resultant wage each year. The costs for affordable family health care coverage are included in the second, third and fourth sections of Table 1.

In Table 1, the ILWU rate begins at \$13.97 on 1/1/15, and increases to \$20 by 2019.

**Table 1 Wage and Benefit Change Rate Impacts - \$20 by 2019**

	01/01/15- 06/30/15	07/01/15- 12/31/15	01/01/16- 12/31/16	01/01/17- 12/31/17	01/01/18- 12/31/18	01/01/19- 12/31/19
Increases		\$ 0.77	\$ 1.18	\$ 1.26	\$ 1.36	\$ 1.46
Wage	\$ 13.97	\$ 14.74	\$ 15.92	\$ 17.18	\$ 18.54	\$ 20.00

**City Question 3:**

*Please confirm that Table 2 includes cost for affordable family health care coverage, and a wage of \$22.94/hour in 2019. Simple addition of the wage increases shown do not appear to equal \$22.94 per hour. Please explain your assumptions.*

**CWS Response to City Question 1:**

CWS confirms that Table 2 includes costs for affordable family health care coverage, and a wage of \$22.94 per hour in 2019. Addition of the increases and previous year wage equal \$22.94 per hour by 2019. A “Wage” row has been added to the first section of Table 2 to show the resultant wage each year. The costs for affordable family health care coverage are included in the second, third and fourth sections of Table 2.

In Table 2, the ILWU rate begins at \$13.97 on 1/1/15, and increases according to the report issued in support of the council resolution.

**Table 2 Wage and Benefit Change Rate Impacts - \$22.94 by 2019**

	01/01/15- 06/30/15	07/01/15- 12/31/15	01/01/16- 12/31/16	01/01/17- 12/31/17	01/01/18- 12/31/18	01/01/19- 12/31/19
Increases		\$ 3.71	\$ 1.18	\$ 1.26	\$ 1.36	\$ 1.46
Wage	\$ 13.97	\$ 17.68	\$ 18.86	\$ 20.12	\$ 21.48	\$ 22.94

**City Question 4:**



*The Memorandum of Agreement between CWS and EBMUD describes use of a 3.8-acre property, identified as Parcel X, for the proposed Interim Transfer Facility. Does the Program/Project Environmental Impact Report for EBMUD's Main Wastewater Treatment Plant Land Use Master Plan address this use, and/or is there any program or project EIR or approved CEQA document that approves the use of Parcel X as a solid waste transfer facility? If so, please identify and provide.*

**CWS Response to City Question 4:**

Many of City Staff's questions (and, in particular, questions 4-9) address the status of agreements for development or use of facilities required for performance of the Zero Waste contracts such as truck parking, fueling, and the like. Neither CWS nor any other non-incumbent bidder is not able to enter into binding contracts for the lease or acquisition of facilities until the contract is awarded. CWS has provided detailed information regarding the agreements that will be entered into after the award of the contracts to CWS. CWS is confident that it will have all necessary facilities up and running when the contract commences – as it has over the course of its history. CWS (and any other non-incumbent operator) cannot reasonably be expected to enter into binding contracts in advance of the award of the contracts. CWS understands that it is financially committed to perform if the contract is awarded and, of course, CWS has a long and positive history with the City of Oakland and will absolutely meet its obligations.

Governmental approvals are a part of virtually every solid waste facility project. When there is a change from an incumbent solid waste operator, new facilities are generally required. CWS understands its obligations with respect to development of facilities and has taken into account necessary governmental approvals. The 2011 EIR for EBMUD's Main Waste Water Treatment Plant Land Use Master Plan, which relies in part on the work completed by the City of Oakland in its 2002 EIR and 2006 AutoMall Supplemental EIR, addressed impacts that are greater than the impacts arising from the development of an interim processing and transfer facility and consistent with the uses studied in previous environmental analysis – especially since it did not apply the reduction in impacts resulting from the City's 2012 revisions to the Army Base Reuse Plan. The Board of Directors of EBMUD will be responsible for certifying CEQA compliance and it is the expectation of CWS and EBMUD staff that the existing environmental documents will sustain findings by EBMUD, subject to the discretion of the EBMUD Board of Directors, to allow for the timely completion of the interim processing and transfer facility before the July 1, 2015 Zero Waste Program start date.

**City Question 5:**

*Employee Parking. The site plan indicates approximately 25 parking spaces for employees. Please state the number of employees that will be working at this site, the number of parking spaces that will be available on-site, the number of employee parking spaces provided for these employees at other locations, the addresses of those locations, and any agreements pertaining to CWS using these properties for parking, including the duration of such agreements.*



**CWS Response to City Question 5:**

CWS will supply sufficient parking for all employees at its interim MM&O facilities at CWS' EBMUD Interim Processing and Transfer Facility. It is anticipated that there will approximately 17 employees at the interim site during the first three years of operation. The 25 spaces provide sufficient employee as well as visitor parking at the facility. There is also enough area to provide for additional spaces if needed in the future. CWS also has contingency parking at other secured neighboring site locations: OMSS as the primary contingent location, and the interim truck corporation yard co-occupying the Viridis property at EBMUD as the secondary contingent location. Letters of understanding from OMSS and Viridis regarding parking are provided as Attachment A (the OMSS letter was provided in CWS' initial SG1 proposal and during subsequent negotiation). Upon award of the contract, CWS will formally negotiate agreements for the two parking areas.

CWS' own properties located at 10th Street and Wood Street are additional interim contingency sites. These sites are secured by either long-term lease memoranda or by current ownership, respectively.

**City Question 6:**

*Fleet Parking. On page 24 of the proposal it states that collection vehicles and transfer trucks will be parked at other locations at night. Please provide the addresses of these other locations, and any agreement pertaining to CWS using these properties for parking, including the duration of such agreements.*

**CWS Response to City Question 6:**

CWS parking will supply sufficient parking for all trucks at either our originally proposed and secured facility at OMSS's interim or permanent properties, or at our recent co-occupied contingency facility at the Viridis property located at 1070 Engineer Road at Wake Avenue (the site is located at the EBMUD property). CWS' own properties located at 10th Street and Wood Street are additional interim contingency sites. These sites are secured by either long-term lease memoranda or by current ownership, respectively.

**City Question 7:**

*Fueling and Maintenance. Provide the locations where maintenance and CNG fueling of CWS trucks will take place and any agreement pertaining to CWS using these properties for parking, including the duration of such agreements. Please describe the CNG fueling system that will be employed.*

**CWS Response to City Question 7:**

Fueling and maintenance will most immediately occur at CWS' interim truck corporation yard located at the OMSS property or contingent interim truck corporation yard co-occupying at the

Viridis property located at 1070 Engineer Road Oakland, at Wake Avenue (the site is located at the EBMUD property). CWS has a secured memorandum for this yard. CWS will employ CNG fueling.

**City Question 8:**

*Provide a project schedule for permitting, construction and commissioning of the Interim Transfer Facility. Please have a qualified independent professional provide a listing of all permits or approvals that may be required to construct and operate the Interim Transfer Facility, from agencies including but not limited to, the Port of Oakland, BAAQMD, County of Alameda, Regional Water Quality Control Board, CalRecycle, etc. Please provide copies of any permits that have already been obtained, and a list of any that have been applied for or are in process.*

**CWS Response to City Question 8:**

Both CWS and EBMUD staff are confident that permitting for the interim processing and transfer facility will be accomplished in time for completion of the interim processing and transfer facility before July 1, 2015. Construction of the facility will require less than five months. EBMUD contemplates completing demolition in accordance with existing environmental documents in advance of completion of permitting for the facility – so the site will be “shovel ready” upon the issuance of permits for construction.

**Table 3 Schedule for Interim Facility**

TASK	COMPLETION DATE
Receive Certification of CEQA Compliance from EBMUD	August 1, 2014
Receive Building Permit from Port of Oakland	November 7, 2014
Facility Included in County Wide Siting Element	August 15, 2014
Solid Waste Facility Permit	January 30, 2015
Detailed Design	November 14, 2014
Demolition of Existing Buildings	December 12, 2014
Purchase and Fabricate Building	November 28, 2014
Building Permits from City of Oakland	January 2, 2015
Construction	May 22, 2015
Facility Start-up	June 26, 2015

In addition to receiving certification of CEQA compliance from the EBMUD, the project will also need to apply for and receive the following approvals and permits:

- Building Permit from Port of Oakland
- Inclusion into the Countywide Non-disposal Facility Siting Element – Alameda County Solid Waste Task Force
- Solid Waste Facility Permit – Alameda County Environmental Health/Cal Recycle
- Building/Fire Department Permit – City of Oakland

- Electrical Permit – City of Oakland
- Plumbing Permit – City of Oakland
- Mechanical Permit – City of Oakland
- Industrial Waste Discharge Permit – City of Oakland
- Storm Water Discharge/Water Quality Management Plan – San Francisco Bay RWQCB

**City Question 9:**

*Provide a revised project schedule for the permitting, construction and commissioning of the Gateway facility. If CWS proceeds with the Interim Transfer Facility, will this result in any modification to the Gateway facility proposed in Plan A.*

**CWS Response to City Question 9:**

The development of the Interim Material Recovery and Transfer Facility will not result in modification to the development and schedule of the Gateway Facility. The schedule for the Gateway facility will be dependent on the anticipated availability of the property to California Waste Solutions. Presented below are two schedules; one with the property acquisition date of June 30, 2015 and the second with an acquisition date of September 16, 2016.

**Table 4 Revised Gateway Schedule**

Task	Completion Date	Completion Date
<b>Property Acquisition</b>	<b>June 30, 2015</b>	<b>September 16, 2016</b>
Facility included in Countywide Siting Element	April 2, 2015	September 21, 2016
Receive Facility Operating Permit	January 19, 2016	April 7, 2017
Prepare Transfer Processing Report	July 30, 2015	October 18, 2016
Solid Waste Facilities Permit (SWFP)	January 19, 2016	April 7, 2017
Detail Design	February 17, 2016	May 8, 2017
Building Permits	March 18, 2016	June 7, 2017
Construction	January 30, 2017	April 19, 2018
<b>Facility Start-up</b>	<b>March 29, 2017</b>	<b>June 18, 2018</b>

**City Question 10:**

*Please confirm whether CWS will process all Mixed Materials collected from Multi-family Dwellings, per RFP Section 3.1.6 Mixed Materials, starting July 1, 2015, and if so, at what facilities.*

**CWS Response to City Question 10:**

CWS will not process all Mixed Materials collected from Multi-family Dwellings starting July 1, 2015, but will delay MFD MM processing for five (5) years. CWS proposed five year delay in the processing of mixed materials from Multi Family Dwellings that will result in a both a lower

consumer rate and comply with City diversion standards. Mixed material processing from MFD properties will occur at the North Gateway facility. Some mixed materials processing from Multi-family Dwelling (MFD) may be performed but is not anticipated or committed to be complete processing until the North Gateway facility is operating.

**City Question 11:**

*Table 4 Diversion compares CWS' annual Diversion requirements submitted with Plan A, and the new Plan C annual Diversion requirements, which shows increased diversion beginning in 2019. On page 29 CWS describes the following improvement: "Moving to the current proposed interim transfer services and more significant involvement of EBMUD... has modified the level of materials that CWS expects to divert." Please describe what would enable CWS to achieve the newly proposed and increased annual Diversion requirements in the years 2019-2025. Is this increase dependant on operating in the Gateway facility, as proposed in Plan A?*

**CWS Response to City Question 11:**

EBMUD has broadened the scope of materials and sources from which it will solicit organic materials, to increase the total level of materials that CWS expects to divert. The larger sources include organic materials from Multi-family Dwellings (MFD) and the Commercial sector and fines from Single Family Dwelling (SFD) mixed materials. EBMUD's commitment to expand the scope and source of organic materials will support CWS in increasing diversion and meeting its stated guarantees. CWS programed the diversion guarantee to meet the City stated goal, and CWS will achieve the diversion it has committed through utilization of the Oakland Gateway Facility, institution of aggressive new programs and services as well as partnerships with local facilities, including EBMUD, for the diversion of organic materials.

**City Question 12:**

*Section 1.01 of the MOA with EBMUD states that there will be a "tipping fee to Recology". Confirm whether this fee is in addition to the \$96/ton (or \$45/ton for Pre-Processed Material) fee that CWS would pay EBMUD.*

**CWS Response to City Question 12:**

The \$96 per ton fee includes both the Recology fee and EBMUD fee for processing organic materials received from CWS.

**City Question 13:**

*Please confirm or clarify our understanding that CWS will: 1) direct haul materials to the CWS Interim Transfer Facility; 2) transfer materials from the Interim transfer Facility to the Recology facility; and 3) direct haul materials to the Recology facility. Describe how SFD Organic material would be delivered to and transferred from the Recology facility, or via CWS' interim transfer facility.*

**CWS Response to City Question 13:**

CWS will direct haul organic materials to Recology and to EBMUD that meet their respective receiving specifications. SFD Organic material will be transferred through the Interim Transfer Facility to CWS' composting contractor's facility. At this time unprocessed SFD materials are not intended to be delivered to Recology or EBMUD. Notwithstanding CWS and EBMUD's local sourcing commitment, CWS remains agile, flexible and able to refine the destination for organic materials based on factors of diversion, efficiency and expense. Alternative organic facilities may include the Waste Management of Alameda County (WMAC) Davis Street Transfer Station and Altamont Landfill. CWS identified and uniquely expressed the desire to collaborate with WMAC for the benefit of the City of Oakland ZeroWaste program and ratepayers.

**City Question 14:**

*How would disputes regarding material quantity or quality delivered to the Pre Processing facility operated by Recology be handled? Does CWS have a contract or MOU with Recology? Confirm if Recology is obligated by the terms of the MOU between CWS and EBMUD, and if not, how does CWS plan to ensure processing of its materials?*

**CWS Response to City Question 14:**

CWS has received express confirmation from EBMUD of its ability and willingness to accept the projected flow of organics through the Recology facility. Recology, EBMUD, and CWS, will be contractually bound to meet material specifications with respect to inflow and processing. CWS presumes that all parties will perform in accordance with the directions set forth by EBMUD.

**City Question 15:**

*MM&O Contract Sections 10.03 (MFD) and 11.05 (Commercial) would require CWS to collect and deliver to an organic material processing facility all Organic Materials as defined in MM&O Section 1.66, of which Food Scraps (defined in MM&O Section 1.45) is one component. Exhibit A of the MOU with EBMUD indicates that CWS would deliver Food Scraps, as defined in the MM&O contract, to EBMUD/Recology directly from its MFD and commercial collection trucks. How does CWS propose to meet the requirement to collect Organic Materials from MFD and Commercial customers, while delivering only Food Scraps from these sectors directly from the routes to EBMUD?*

**CWS Response to City Question 15:**

CWS has committed 23,000 tons of organic materials, which will be from commercial food scrap sources and MFD sources. Organic materials meeting EBMUD specifications will be delivered directly to EBMUD. Organic materials from sources approved by EBMUD but not reaching its direct receipt standards will be handled by CWS and either:

(1) received and processed by CWS' Oakland Interim Material Processing and Transfer Facility by sort and trommel, at EBMUD property, then delivered to EBMUD, and/or

(2) directly delivered to Recology and preprocessed before Recology delivers it to EBMUD.

Note that EMBUD has also approved organics from processed SFD sources, and CWS has continued to retain the original composters we originally proposed. In the response to the following question (#16), EBMUD states its intention to accept and process these materials.

#### City Question 16:

*Exhibit A of the MOU with EBMUD states, "EBMUD would arrange for residual of digested SSO [source separated organics] to be beneficially used under City policy". Please cite the City policy referred to, and provide a description of the expected qualifying uses.*

#### CWS Response to City Question 16:

CWS has received express confirmation from EBMUD of its ability and willingness to accept the projected flow of organics through the Recology facility. Recology, EBMUD, and CWS, will be contractually bound to meet material specifications with respect to inflow and processing. CWS presumes that all parties will perform in accordance with the directions set forth by EBMUD. EBMUD's Jacqueline Kepke wrote the following e-mail to CWS pertaining to SSO residuals:

[CWS]:

At the time we start receiving Oakland organics, EBMUD will begin sending all residuals from our digestion process (digestate) for beneficial reuse through land application as soil amendment. No residual digestate will be sent to landfill, as alternative daily cover or otherwise. Further details regarding our commitments to recycle residuals are contained in the attached exchange of letters with the Alameda County Waste Management Authority. [the substance of the exchange of correspondence follows]

Regards,

Jackie

EBMUD will implement its commitment as follows:

- When EBMUD begins accepting Covered Materials generated in Alameda County for processing, all digestate will be land applied as an agricultural soil amendment. EBMUD will notify the Authority in writing immediately when it begins to accept Covered Materials generated in Alameda County.



- EBMUD will continue to land apply or compost all digestate for as long as EBMUD processes Covered Materials generated in Alameda County. During this period, EBMUD will prohibit its digestate hauling contractors from delivering any digestate or digestate-derived products to landfill.
- In the future, EBMUD may elect to install separate processing trains for Covered Materials and sewage sludge (i.e. construct separate dewatering). If this occurs, the commitment to land apply or compost digestate will apply to all digestate from the train processing Covered Materials.
- In compliance with 40 CFR Part 503 and EBMUD's Environmental Management System, all land application of digestate will occur at agronomic rates for the purpose of fertilizing the soil and growing crops. Such rates will be calculated based on the crops being grown. Crops grown using EBMUD's digestate soil amendment will be sold in competitive markets and will not be deposited in landfill. Land application practices, as well as crop production and sale, will be verifiable by EBMUD and the Authority.
- If, in the future, EBMUD should elect to use its digestate as a feedstock for compost, such composting will occur at facilities that are permitted under applicable regulations found in Title 14 of the California Code of Regulations. EBMUD will ensure that the permit for any selected composting facility explicitly states that the facility can accept the type of digestate EBMUD will send to the facility (i.e. digestate containing biosolids and/or digestate derived from non-biosolids organic wastes). Such compost shall not be deposited in landfill, as ADC or otherwise.
- EBMUD will process only Source Separated organic material containing more than 90% Phase 2 Covered Materials by weight and/or organic material delivered from a High Diversion Mixed Waste Processing Facility certified by the Authority. All discarded food and Compostable paper (Phase 2 Covered Materials under the Ordinance) will be digested. Loads with less than 90% Phase 2 Covered Materials by weight will be rejected, and inspection data will be made available to the Authority upon request.

#### **City Question 17:**

*How many illegal dumping pickups (per day or per year) does CWS propose to provide? Is the number of pickups contingent upon Council adoption of CWS' proposed \$6.67/unit MFD bulky option described in CWS BAFO section 2.1?*

#### **CWS Response to City Question 17:**

CWS estimates that the CWS *On Sight* illegal dumping pick up team will collect 25 illegal pick-up per day. The level of bulky service provided directly to tenants of MFD and the illegal dumping pick-up program are funded by the \$6.67/unit. Adoption of that rate secures the program CWS proposed. If the City desires, CWS is willing to negotiate other prices and programs.

#### **City Question 18:**

*Compost facility. On page 24 of the proposal it states that unprocessed material will be loaded onto trucks for deliver to a compost facility or to the landfill. Please complete and submit MM&O Form 12C Organic Materials Processing Facility for any compost facility that will be used for these materials.*



**CWS Response to City Question 18:**

CWS provided this form for the Napa composting facility in its original SG1 proposal to the City on January 9, 2013. This form was also provided in CWS' response to the City on June 26, 2014. CWS provided this form for the East Bay Municipal Utility District Site/Interim Transfer Station and the East Bay Municipal Utility District Site/Recology Organics Facility in its response to the City on June 26, 2014.

**City Question 19:**

*CWS provided a report from DEI, dated January 30, 2015, assessing the functional capacities of CWS existing recycling facilities, as would be modified by additional processing equipment, for SG2 under Plan B. If there are any changes proposed under Plan C, please provide a description.*

**CWS Response to City Question 19:**

There are no changes to CWS' SG2 proposal under Plan C as compared to Plan B. The additional equipment and other recommended modifications would also be made under Plan C.

**City Question 20:**

*Does CWS intend to provide any processing of recyclables at the Interim Transfer Facility, for an interim period? If so, please describe.*

**CWS Response to City Question 20:**

No, there are no changes to CWS' SG2 proposal under Plan C. CWS does not plan to process recyclables at the Interim Transfer Station, only at its 10<sup>th</sup> St. and Wood St. facilities, as originally proposed.

**City Question 21:**

*Does Plan C propose to provide any new customer services for SG2 that were not contained in Plan A or Plan B? If so, please describe.*

**CWS Response to City Question 21:**

No, there are no changes to CWS' SG2 proposal under Plan C. CWS will bolster its public outreach and educational programming, and will not make any changes to its proposed collection services. A revised Transition Plan, Collection Services Operations Plan, and Customer Service Plan are provided in response to Question 22, providing additional detail about the services CWS proposed in its original proposal.

**City Question 22:**

*Please clarify whether CWS is proposing any changes to the SG1 and SG2 Plan A provisions for the RFP requirements listed below. Provide revised plans listed below for SG1 and SG2 consistent with the Plan C proposal:*

- a. Transition Plan: RFP Sections 3.3.2.5.1 and 4.3.2.5.1*
- b. Collection Services Operations Plan: RFP Sections 3.3.2.5.2 and 4.3.2.5.2*
- c. Customer Service Plan: RFP Sections 3.3.2.5.4 and 4.3.2.5.4*

**CWS Response to City Question 22:**

These three sections of CWS' SG1 and SG2 proposals are provided as attachments to this response. The updated SG1 sections are provided as Attachment B, and the updated SG2 sections are provided as Attachment C.

**City Question 23:**

*Customer Billing (RFP Section 3.1.18). Given the compressed time schedule available for ramp-up of a customer billing system, please describe the schedule and methods of obtaining customer data, and developing and testing the billing system. If CWS intends to proceed with EBMUD providing Customer billing services, please provide a copy of any agreement or commitment from EBMUD top management or Board of Directors, and assurances from EBMUD that their system will be running on July 1, 2015. Specify whether such agreement with EBMUD would provide billing in all service sectors. In this scenario, who would be responsible for resolving customer billing issues?*

**CWS Response to City Question 23:**

CWS continues to represent the customer billing system that it originally proposed. CWS will be performing customer billing services, not EBMUD. The continual dialogue and the advent of the agreement between EBMUD and CWS yielded the collective idea and belief that we may possibly collaborate to benefit the program, City and ratepayer. CWS believes that collaboration among private, public and social agencies for the benefit of the City, ratepayer and program is good. Any collaboration will be developed subsequent to the RFP award and will include the City as a stakeholder and beneficiary.

**City Question 24:**

*Liquidated Damage #34. On page 52 of the proposal, CWS states that it "will not have alternate processing capacity" as required in the contract. We understand this statement to suggest that CWS is not guaranteeing capacity to receive, process, and transfer Mixed Materials, Organic Materials, and Recyclable Materials, should CWS' proposed facilities not be in full operation effective July 1, 2015. Please clarify the intention of this statement, and provide a specific proposal regarding CWS' plan to provide alternate capacity and to guarantee.*

**CWS Response to City Question 24:**

As Page 52 of the BAFO is written in response to the BAFO Terms for SG1 only, this liquidated damage term response applies only to SG1. CWS guarantees capacity to:

- Receive and transfer Mixed Materials,
- Receive, process, and transfer Organic Materials, and
- Receive and process Recyclable Materials,

Effective July 1, 2015.

### 5.1. Transition Plan

The transition for mixed materials and organics collection services in Oakland for all Oakland residents is supported by the fact that CWS has dutifully served half of Oakland's residents since 1997 with recycling collection, greatly reducing potential for disruption in service and ensuring a seamless and smooth transition. In 2007, CWS won public praise and recognition from the City of San José City Council for its leadership in executing the smoothest transition for services that the City and its citizens had ever experienced during the 14-year history of the City's Recycle Plus program.



San José Certificate of Commendation

CWS' local, friendly and successful services will minimize service disruptions, given our company's existing Oakland collections knowledge base. As an experienced, dedicated and successful service provider, CWS combines working knowledge of Oakland's Public Works Agency (OPWA), its operations and program with long-term working knowledge of Oakland collections to ensure that a transition with CWS will be less complex and impactful for customers than might transition with a new contractor that is unfamiliar with the City. Although changes may be required for the current and expanded CWS customer base from the current operations by the CWS crews, they would pale in comparison to the changes experienced with a new contractor.

With Oakland's Zero Waste program goals, customers will be able to add more materials to the diversion programs. CWS will inform customers of these new opportunities and deliver customer communications and education through mailings, web and social media outreach and events throughout the City, while making efforts to ensure that all customers receive the service configuration that best suits their needs.

A well-managed transition is critical to establishing the foundation for a successful franchise. During transition, the people, systems, procedures, and resource applications crucial for a smooth running franchise will be put in place. During the transition period, all aspects of collection will be addressed including customer service, worker health and safety, work quality, staffing, skills, vehicles and equipment. Our team will prioritize the resolution of any start-up issues. CWS will utilize the transition period to identify and make service improvements. Baseline data, including service needs will be measured and used to guide development of and complement a comprehensive public education and outreach program. This data-driven approach will result in greater solid waste diversion. CWS will work diligently with all parties to accomplish a seamless transition.

#### CWS Transition Team

The CWS Transition Team will be a partnership composed of internal CWS staff, Circlepoint, The Next Generation and, for the purposes of transition only, solid waste and associated professionals, Archie Humphrey, Gershman, Brickner & Bratton, Inc., and, Kneal Resource System. The CWS Transition Team will be led and fundamentally directed by CWS President and Executive Director.

Team members will meet as planned and will be in consistent communication to ensure a successful transition. The principal contact for communications with the City will be CWS' Transition Manager.

Information about meetings with City staff and others, updates on transition status, data needs, policy issues, and other pertinent information will be shared electronically as appropriate.

Provided in this section is our proposed and detailed transition plan for provision of the services set forth in the RFP. This transition plan will demonstrate CWS' ability to implement all necessary procedures and ensure a seamless transition for the residents of Oakland.

### ***5.1.1. Timeline***

On Wednesday July 1, 2015, residents and businesses in Oakland will have their waste and organics collected by CWS according to their current schedule. CWS will have implemented the transition seamlessly and in the professional manner expected and required by the City of Oakland.

Key CWS managers will work with the City through all aspects of the transition, which can be categorized as follows:

1. Transition Management
2. Personnel hiring and training
3. Detailed collection routing
4. Education and outreach campaign development and implementation
5. Customer service coordination
6. Customer collection assurance
7. Facility enhancement
8. Carts/bins acquisition and delivery

Beginning in the second quarter of 2014, CWS will begin working closely with the City to review and update the overall service implementation plan, and confirm the transition period public outreach and education program. This will include, but may not be limited to the following:

- Coordinate with the City to finalize the public outreach and education program to be inclusive and consistent across all service areas
- Initiate a branding exercise in close coordination with the City
- Hold kick-off "all hauler" coordination meeting which should continue on at least a quarterly basis
- Conduct early polling and focus groups to better understand community perceptions and begin the process of gathering more granular demographic data
- Develop and deliver new carts to customers
- Work collaboratively with the City to develop highly visual and culturally appropriate informational tools and materials
  - A high-quality website with an abundance of information on the new collection services, tips for appropriate sorting and other opportunities to support Zero Waste goals through changes in habits. The website will be fully accessible to the disabled, mobile devices, with critical information available in Spanish, Chinese and Vietnamese. The site will be easily



**Cart Delivery**

shared on social media platforms. This will help residents to prepare for the transition and access important customer service information during transition.

- An introductory mailer to customers notifying them of the new collection service and container options, and requesting a response about cart choice, address verification and service levels at residences where this information needs to be updated. Customers will have the option of returning the survey by mail or completing the online version that will incorporate messages about waste diversion.
  - A new public education packet to describe available services and identify recyclable items
  - Educational materials detailing, in multi-lingual text and universal images, acceptable and non-acceptable materials for the compost bin. Certain of these materials may be delivered in tandem with delivery of new containers to all customers. The initial educational packet will also contain CWS contact information as well as information on other waste services, including new programs to manage recycling of hazardous materials and sharps.
  - Informative decals embedded in all new carts and bins that illustrate acceptable and non-acceptable waste and recycling items in English, Spanish, Chinese, and Vietnamese. In later stages of the program, decals in other languages spoken in Oakland, such as Hmong, may be developed and distributed based on data about composting habits in different communities.
- Conduct polling and focus groups to acquire additional data to tailor messaging and identify preferred tools and methods to reinforce program goals and reach customers where the greatest improvements can occur
  - Implement other activities to extend the reach of the transitional public outreach and education program

The major tasks in the schedule are described below:

Prior to the start of services and coordination of cart and vehicle purchases, CWS proposes to initiate an investigatory waste composition study in the franchise area to better understand the potential for diversion from the waste stream. This will allow CWS to better tailor education programs to target diversion of specific recyclable materials present in the waste stream, and better prepare CWS' processing and transfer facilities to manage the mixed waste collected in the City, and to process materials in the organics or commercial recyclables stream as a result of increased diversion from the waste stream following directed education programs.

The CWS Transition Manager will work closely with the City to establish accountability throughout the transition effort. Regular check-in meetings will be established between the two parties, ensuring fluid communication and maximum efficiency. Daily conference calls and weekly meetings with City staff will be scheduled for a period two weeks prior to and eight weeks following the start of the franchise. This period will also provide an opportunity for the two parties to clarify the CWS approach, budget, and scope of work.

During the transitional period, the team will establish contact with customers in Oakland, preparing them for the change in service provider, sharing tips for sorting home and commercial waste, and requesting



their participation in a short survey that will inform the data-driven transitional outreach program. The team will also conduct an initial assessment of Oakland residents' waste disposal habits through polling, focus groups, and a waste stream audit. This initial effort will help to identify communities in Oakland that have the greatest opportunity for improvement in their waste disposal habits. Once this information has been collected, directed outreach can address specific information needs or incentive programs that would be beneficial to these communities.

#### **New Collection Services Implementation Tasks**

- RFP Due; January 9, 2013
- Selection of contractor, July 2014
  - CWS will immediately organize opportunities to meet with the City of Oakland at its earliest convenience to discuss the MM&O Collection Agreement.
- City of Oakland conducts and completes negotiations with CWS
  - CWS will complete the MM&O Collection Agreement and provide the required bonding, insurance, and other contractual mandates.
- City of Oakland approves MM&O Collection Agreement
  - CWS proposes coordination meetings twice per month with the City of Oakland to establish continued proactive communications among all stakeholders.
- CWS will initiate a waste composition study and identify service requirements for new customers in the expanded franchise area to ensure that its MRF and services are best tailored to ensure inclusion and maximize diversion from the waste stream
- CWS will continue permitting and begin construction of the new Interim Transfer and processing Facility, continue permitting and development of the Oakland Gateway Facility and begin improvements to the 10th Street MRF
- CWS will work with the City and other contractors to introduce the new collection services to the public
- CWS will collaborate, lead, and/or participate in community and media information events
- CWS will complete customer contact and education materials, including updating its website ([www.calwaste.com/Oakland](http://www.calwaste.com/Oakland))
  - CWS will update its website with information on the new collection services, along with links to relevant City of Oakland web sites. Residents will be able to access CWS' site and obtain information on customer service and other community outreach efforts as well as build service profiles and preferences that help enhance customer service.



- E-mail and social media such as Facebook and Twitter will be used to inform, educate and support customer connectivity to service opportunities and options. These media will provide a range of information including suggestions about parent-student school projects, notification about participation achievement for different neighborhoods, business diversion program support, commercial customer resources, and service holidays.
- CWS and our public education partners will work with Oakland Public Works Agency staff to complete and get approved customer contact and education materials, including introductory electronic and paper mailing communication to customers.
  - CWS will send an introductory mailer to customers notifying them of new collection programs, and provide CWS contact information and links to educational materials regarding CWS services and the City of Oakland Zero Waste program. The introductory mailer will also include a mail-back card that informs the customer of service and container options, and gives the customer the option to change their collection container size. The customer can also call CWS or visit the CWS website to reply. If the customer does not elect to upgrade or downsize their service, or does not respond by mail, phone, or web, they will receive their current cart size. As responses to the customer service mailing are received, customer records will be completed or revised with the selected container size, number, collection frequency, and any corrections to name, address, service or schedules.
  - CWS and our public education partners will work with the City of Oakland to create and distribute educational materials detailing, in text and universal images, acceptable and non-acceptable materials that may be delivered in tandem with delivery of new mixed materials containers to all customers. The launch educational packet will provide a CWS phone, email and website contact as well as information on other CWS services. CWS and our public education partners will work with the City of Oakland to create decals that adhere to new carts and roll-off bins to illustrate acceptable and non-acceptable waste and recycling items in English, Spanish, Chinese and Vietnamese.
- Container mobilization for carts and commercial bins
  - CWS will direct the container manufacturers to ship carts to a central staging area. The local distribution company will deliver containers prior to the determined start-up service date.
- Order trucks
  - CWS will purchase the necessary new trucks. Per the transition schedule, all service trucks will be on-site 30 days before startup.
- Corporation yard and maintenance facility
  - CWS will begin development of its Interim Transfer and Processing Facility, and prepare the office at the 10<sup>th</sup> Street facility for service expansion, as this will be the operational headquarters until the Oakland Gateway Facility is completed. CWS will also ensure that

its vehicle management facilities at the OMSS Site are well established and ready for vehicle parking.

- Driver and support staff training
  - CWS will seek to hire existing drivers knowledgeable of and familiar with the City, and provide training on new service requirements and assignments. Drivers will be trained to use the collection vehicles and equipment. Training will start at least 30 days prior to start-up of the new services. Training will be held on weekends and evenings to ensure driver availability.
- New vehicles and route familiarization
  - CWS will design and print materials for the route work and set up logs, computer data files and report formats. Familiarization runs, using new equipment under simulated adverse conditions, will also be initiated.
- Begin new services

**CWS will launch new mixed materials and organics collection and other services on schedule on July 1, 2015.**

### ***5.1.2. Carts and Bins***

CWS has initiated letters of commitment to acquire the carts and roll-off bins needed to fulfill this contract. CWS officials will place binding orders with manufacturers soon after the City awards the MM&O Collection franchise.

CWS will provide carts equipped with industry best practice RFID technology. The manufacturer, Otto, Shaffer, Rehrig Pacific or a firm of equal or greater quality, will provide firm production and delivery timelines and personnel training. CWS will work with the cart manufacturer, to engage an Oakland-based subcontractor for cart delivery. The initial order will be adequate to distribute containers throughout Oakland, and create a three-month replacement inventory. Benchmark dates for manufacturing, printing and shipping will be agreed to by all participants and submitted to the City for approval. To ensure timely arrival, CWS will conduct weekly update calls with the manufacturer.

Cart and container deliveries to Oakland residents will begin on June 1, 2015 and be completed by June 30, 2015. This schedule ensures complete delivery of containers before collection service begins on July 1, 2015.



**Cart Repair**

CWS will work directly with customers to “right size” their carts by conducting surveys and providing recommendations. This effort will:

- Optimize collection services and minimize expense for each customer
- Maximize solid waste diversion and recycling
- Conserve collection and processing resources

Utilizing RFID technology, CWS will record cart and container distribution with customer name, address, cart or container size, container distribution date, container identification serial number, and container service history, data that CWS will use in reporting and for service monitoring.

RFID technology will ensure account database accuracy, provide detailed service verification and inventory asset tracking, measure participation by residence/landfill diversion, identify specific areas and customers for directed education campaigns, and provide the infrastructure for future collection data tracking programs.

**Table 5.1.2-1 CWS Mixed Materials Container Preferences (Subject to City of Oakland Approval)**

Characteristic	CWS Detail
Size	SFD –32-gallon carts as default size with 96-, 64- and 20-gallon cart options
	MFD –20-, 32-, 64-, and 96--gallon carts depending on customer need; 1, 1.5, 2, 3, 4, 6 or 7 CY Bins, or 6 - 40 CY Roll-Off Boxes. Minimum levels of service will be calculated by multiplying the number of Dwelling Units by 20 gallons to reach the required capacity.
	Commercial –20, 32, 64, or 96-gallon wheeled Carts; or 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or 6 - 40 CY Roll-Off Boxes; or Compactor.
	City –20, 32, 64, or 96-gallon wheeled Carts; or 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or 6 - 40 CY Roll-Off Boxes Collected as determined by the needs of the City
Cart Construction	Injection-molded carts
Color	Mixed materials cart in gray
Signage Identification	Labeled identification and program logos for branding
Public Education	label with a Quick Read code for public education and material descriptions

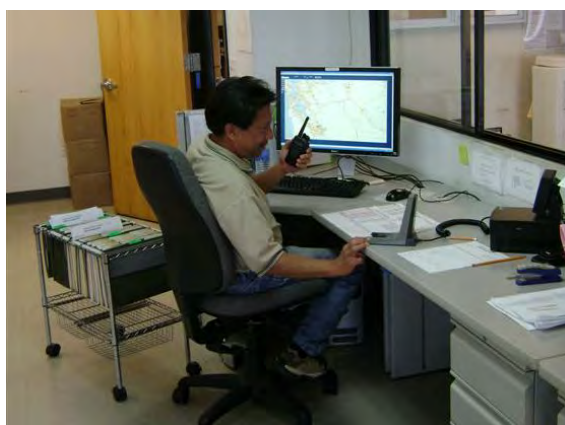
**Table 5.1.2-2 CWS Organics Container Preferences (Subject to City of Oakland Approval)**

Characteristic	CWS Detail
Size	SFD –64-gallon carts as default size with 96-, 32- and 20-gallon cart options
	MFD –32 or 64-gallon wheeled Carts for no additional charge. (Larger or additional Containers may be requested at no additional charge.)
	Commercial –20, 32, 64, or 96-gallon wheeled Carts; or 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or 6 - 40 CY Roll-Off Boxes; or Compactor.
	City –20, 32, 64, or 96-gallon wheeled Carts; or 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or 6 - 40 CY Roll-Off Boxes
Cart Construction	Injection-molded carts
Cart Color	Organics cart in green
Signage Identification	labeled identification and program logos for branding
Public Education	label with a Quick Read code for public education and material descriptions

Cart delivery will begin four weeks prior to the start of collection service, and be completed citywide before service begins. We will coordinate with the waste collection contractors currently serving the city to ensure that all residents receive an appropriate cart for their mixed materials needs. Cart delivery will be performed in all areas to the full satisfaction of every customer.

CWS' Oakland cart repair staff will work closely with the CWS transition team and cart manufacturer to sufficiently train personnel on cart repair, cart inventory and asset control best practices, and work-order protocol.

### ***5.1.3. Vehicles and Routing***



#### **Route Management and Coordination**

CWS will empty carts and bins using new automated McNeilus, Pacific Series Side Loader® vehicles with 31-cubic yard volume bodies on a Peterbilt cab and chassis. Cart contents (20, 32, 64, and 96 gallons in volume) will be loaded into the side loader truck with an automated arm connected to the vehicle. CWS has selected the McNeilus brand of vehicles for specific reasons including equipment efficiencies, low maintenance requirements, and cost-effective servicing options. Roll-off boxes and other commercial service containers will be serviced utilizing Nor Cal Roll off Dead Lift vehicles with a Peterbilt cab and chassis.

In our ongoing commitment to environmental responsibility, all collection trucks in the CWS fleet are currently planned to be fueled by compressed natural gas (CNG) as an

alternative to diesel fueled trucks. Use of this fuel as an alternative to traditional diesel will result in greenhouse gas emissions reduction.

Because CWS is proposing to purchase new collection vehicles that differ from those used by the existing contractor in the half of the City not currently serviced by CWS, different capacities and vehicle characteristics may change routes. CWS' Chief Operations Officer will lead appropriate staff in analyzing existing Oakland routes to validate existing route maps, identify efficiencies that can be achieved through route or schedule alterations. Under no circumstances would efficiencies be made at the expense of changing residents' collection day unless accepted beforehand in writing by the City.

CWS will use RouteSmart™, its Geographic Information System (GIS) based route optimization software, to integrate recent census data and on-site observation to maximize productivity of each collection vehicle, and coordinate for same day collection and minimize disruption to customers. CWS has been using RouteSmart™ successfully since 2006 for its Oakland and San José collection services. Route maps and driving instructions will be developed, and the resulting routes test driven by CWS staff. RouteSmart™ will also be used for point-to-point routing of commercial or ancillary collections. Supervisors and drivers will be trained on these routes during the thirty days prior to July 1, 2015.

The CWS routing team will provide monthly updates to the CWS/City transition team.

#### ***5.1.4. Labor, Management, and Coordination***

CWS will add new staff to meet the new franchise requirements. New employees will include the following:

- Truck drivers
- Supervisors
- Oakland General Manager
- Outreach and customer service Manager
- Customer service representatives
- Accounting, Safety, Environmental, and Human Resources staff
- Truck and Interim Transfer Facility Mechanics
- Interim Transfer Facility operators
- Container delivery and repair staff

CWS does not anticipate any difficulty in hiring experienced employees from the directed local job market, especially given the opportunity to work with CWS, serve this contract, and develop a good career. CWS will work with local job programs, personnel recruiters, ILUW Local 6, International Brotherhood of Teamsters Local 70, and Association of Machinists and Aerospace Workers Union Local 1546 and have initiated discussions with the Oakland Workforce Investment Board on ways to partner to provide job opportunities for Oakland residents.

The City and CWS will conduct a "job fair" during which the CWS Human Resource Manager will meet with prospective employees working under the current contract. During the job fair, CWS will provide company information and collect resumes from prospective employees. Knowing that transition to another

company can be sensitive, CWS will work to make the experience as smooth and positive as possible for all involved.

CWS is committed to hiring Oakland residents and eliminating unnecessary barriers to employment for these residents. Thus, we will place hiring priority related to this franchise on residents of Oakland and our employment application. CWS will not include any question or check box related to prior legal prosecution or conviction. CWS is committed to hiring and training local employees, and will strive to continue to achieve a 50% local hire goal. CWS has consistently had good relationships with local unions and public organizations for public outreach and employment support, and will utilize its City job fairs and events to reach new potential employees.

As a committed community partner, CWS believes in supporting, encouraging and empowering our youth, as well as preparing them for a responsible and productive future. We will be an active and engaged participant in the Mayor's Summer Jobs Program by hiring youth and identifying work activities that are safe, appropriate and constructive for our employed youth.

CWS believes in customer service and our field crews are on the frontline of customer interaction. CWS' Human Resources Manager will work closely with the City of Oakland's Department of Human Resources Management to assure a smooth transition to the CWS family for all qualified and interested employees of the outgoing contractor.

CWS recognizes that the individuals who process Oakland's recyclables provide an essential public service that benefits the City's residents, businesses, and visitors, and are vital to the City's ability to meet zero waste goals.

CWS proposes to meet the goals and policy of the City Council that all workers who provide recycling services to the City of Oakland, its residents, and businesses pursuant to any new City exclusive franchise agreement or renewal/extension of any existing exclusive City franchise agreement be provided wages comparable to those wages recycling workers in Fremont, San Jose, and San Francisco currently earn or are scheduled to earn under existing agreements while maintaining wage differentials. The City Council's goal is to reach a wage of \$21 per hour by 2019, while also ensuring workers receive quality, affordable health coverage for their families.

CWS has determined the impact of this wage and benefit increase to SFD and MFD rates, and the impacts are shown in the following tables.

In Table 5.1.4-1, the ILWU rate begins at \$13.97 on 1/1/15, and increases to \$20 by 2019.

**Table 5.1.4-1 Wage and Benefit Change Rate Impacts - \$20 by 2019**

	01/01/15- 06/30/15	07/01/15- 12/31/15	01/01/16- 12/31/16	01/01/17- 12/31/17	01/01/18- 12/31/18	01/01/19- 12/31/19
Increases		\$ 0.77	\$ 1.18	\$ 1.26	\$ 1.36	\$ 1.46



**Current and MMO**

95 Employees \$ 3,268,144			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	40%	25%	35%
Cost increase per allocation	\$ 1,307,257.40	\$ 817,035.88	\$ 1,143,850.23
Cost Increased per account type per month	\$ 0.24	\$ 0.24	\$ 3.70
Cost Increased per account type per year	\$ 2.84	\$ 2.88	\$ 44.41
Example of cart type	32GAL	32GAL	1 CY 1x/week

**Current plus RR and MMO**

135 Employees \$ 4,644,204			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	35%	25%	40%
Cost increase per allocation	\$ 1,625,471.38	\$ 1,161,050.98	\$ 1,857,681.57
Cost Increased per account type per month	\$ 0.29	\$ 0.34	\$ 6.01
Cost Increased per account type per year	\$ 3.53	\$ 4.10	\$ 72.12
Example of cart type	32GAL	32GAL	1 CY 1x/week

In Table 5.1.4-2, the ILWU rate begins at \$13.97 on 1/1/15, and increases according to the report issued in support of the council resolution.

**Table 5.1.4-3 Wage and Benefit Change Rate Impacts - \$22.94 by 2019**

	01/01/15- 06/30/15	07/01/15- 12/31/15	01/01/16- 12/31/16	01/01/17- 12/31/17	01/01/18- 12/31/18	01/01/19- 12/31/19
Increases		\$ 3.71	\$ 1.18	\$ 1.26	\$ 1.36	\$ 1.46

**Current and MMO**

95 Employees \$ 3,678,715			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	40%	25%	35%
Cost increase per allocation	\$ 1,471,485.80	\$ 919,678.63	\$ 1,287,550.08
Cost Increased per account type per month	\$ 0.27	\$ 0.27	\$ 4.17
Cost Increased per account type per year	\$ 3.20	\$ 3.25	\$ 49.99
Example of cart type	32GAL	32GAL	1 CY 1x/week



Current plus RR and MMO

135 Employees \$ 5,227,647			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	35%	25%	40%
Cost increase per allocation	\$ 1,829,676.43	\$ 1,306,911.73	\$ 2,091,058.77
Cost Increased per account type per month	\$ 0.33	\$ 0.38	\$ 6.77
Cost Increased per account type per year	\$ 3.98	\$ 4.61	\$ 81.18
Example of cart type	32GAL	32GAL	1 CY 1x/week

CiviCorps is a social enterprise organization that is dedicated to training young adult interns with technical, experiential, and life skills that provide a greatest path toward success and contributions. CiviCorps has a high percentage of (85%) of its Interns presently residing in the City of Oakland.

CWS' collaboration with CiviCorps provides CiviCorps interns with a unique opportunity for development of skills and preparation for a career in the solid waste industry in Oakland and other communities. CWS' goal is to maximize local-hire of Oakland residents, as CWS has already done. CWS' local-hire rate is 69%. The collaboration among CWS and CiviCorps involves the important and initial collaboration opportunities for training, development and transition of CiviCorps Interns into CWS' union solid waste sorter, operator, weigh master and driver jobs, as well as, and non-union technical and supervisory jobs.

Among CWS and CiviCorps managers, we identified the following areas of collaboration that benefits our own local organizations, success of local youth, and the contributions all make to the City of Oakland:

The alliance between CWS and CiviCorps is designed and engineered to improve:

- Integration of select CiviCorps Interns into temporary training jobs at CWS, without any impact or displacement of permanent union jobs
- Preparation of select CiviCorps Interns with interviews, safety and operations training at CWS
- Participation of CiviCorps for work in diversion survey teams that operate in the community to optimize diversion performance and ensure compliance program standards.

CWS and CiviCorps alliance will complement the development of union and non-union industrial jobs for the next generation of solid waste men and women workers with no conflict or displacement of union jobs or employees. The alliance continues enabling CWS and CiviCorps to pursue their independent activities and goals.

### ***5.1.5. Facilities***

#### ***5.1.5.1. Material Processing***

CWS strives to align the best possible processing system with the collection system and material stream to maximize solid waste diversion and productivity.

For the first three (3) to five (5) years of Service Group 1 operations, CWS will receive, process, and transfer mixed material and organics at an interim material recovery and transfer station located on approximately 3.8 acres of land leased from EBMUD located immediately adjacent to the proposed North Gateway Facility described in CWS's original proposal.

The facility will process and transfer approximately 660 tons per day of mixed material and 90 tons per day of organic material. It has been designed to safely and efficiently receive process and transfer mixed material and organic material collected and delivered by CWS as part of the City of Oakland's Zero Waste Service program.

CWS is in the process of developing a new materials recovery and processing facility in Oakland. The Oakland Gateway Facility will be a state-of-the-art mixed waste, recycling processing and transfer facility located on Engineer Road at the North Gateway of the former Oakland Army Base. Its increased processing capacity will allow CWS to re-locate all of its Oakland operations to this site. The facility will result in greater recovery of recyclable materials from single family, multi family, business, city, construction and demolition sources, self-haul, and organic wastes. CWS will make best efforts to have this facility ready for this contract on or before July 1, 2015, the start date for this contract.



**10<sup>th</sup> St. MRF Facilities**

CWS will have ample processing capacity for the City at the new Oakland Gateway Facility. CWS' mission is to align the best possible processing system with the collection system and material stream for the purpose of maximizing solid waste diversion and productivity.

CWS currently operates two facilities in the City of Oakland, the 10th Street and at Wood St. MRFs. To best serve Oakland and this contract, CWS will utilize its newest Oakland Gateway Facility, which is under development. Before the CWS Oakland Gateway Facility is operating, CWS will upgrade its successful 10th St recycling facility with state-of-the-art processing equipment that will improve productivity, material quality and diversion. The upgrades will be manufactured and installed by the Bollegraaf Equipment Company, CWS' equipment supplier at the Oakland Gateway Facility. The upgrades will enhance the starting and ending sections of the processing operation, and include the following components:

- Drum Feeder – to enhance the infeed of materials into the processing system
- OCC Screen – to enhance the removal of cardboard and large containers before reaching existing newspaper screens
- TiTech – to enhance the recovery of small containers and fiber with computer optical sorting precision

CWS will move these three components to the Oakland Gateway Facility at the time the full recyclable material processing operation moves to the Gateway Facility.

### ***5.1.5.2. Vehicle Maintenance and Support***

CWS will continue to use its fully equipped and modern 10<sup>th</sup> Street facilities and yard for equipment maintenance and repair for the new collection fleet, as well as other activities. The facility is currently the maintenance facility for our Oakland residential recycling vehicles and is capable of providing all maintenance requirements of the new vehicles and accommodates other activities including:

- Truck maintenance and repair
- Container maintenance and repair

- Vehicle cleaning
- Container cleaning
- Vehicle fueling
- Truck yard
- Dispatch, driver training, routing
- Large and bulky item recycling
- Used motor oil & filter recycling

CWS will utilize existing, excess office space at its current facility located at 1820 10<sup>th</sup> Street, Oakland for management and administrative operations, including outreach and technical assistance, customer service, and billing functions until the new Oakland Gateway Facility becomes operational, at which point all operations will move to that site.

#### ***5.1.5.3. Interim Vehicle Parking***

Until the vehicle yard at the new Oakland Gateway Facility is available for use and all fueling infrastructure is installed on the site, CWS will park and fuel vehicles at a nearby property, 2240 Wake Ave, Oakland 94607, owned by Oakland Maritime Support Services (OMSS). CWS will lease this 17-acre property beginning January 2015, which will allow ample space to park all of CWS' collection vehicles and parking for CWS employees. As part of the site lease, OMSS will provide:

- Fenced and lighted parking spaces
- 24-hour security and cameras
- 24-hour access for CWS employees
- Access to fueling and service by CWS representatives
- Shower and locker facilities for CWS drivers

Starting the lease of this site in January of 2015 will allow CWS ample time for vehicle and cart staging, preliminary maintenance, and driver training activities. CWS will retain use of the site until the new Oakland Gateway Facility is fully operational and construction of all parking and CNG fueling areas is completed.

#### ***5.1.6. SFD and MFD Programs Implementation***

To improve cost-effectiveness as well as efficacy, all communications with customers will include education on recycling and opportunities for feedback, enabling CWS to continuously update and refine outreach based on data collected. In spring 2015, all Oakland residents will receive an information packet with an overview of the new services, tips for sorting materials at home, and may receive a personalized survey of initial attitudes toward recycling and diversion that will inform the data-driven transitional outreach program. A questionnaire will be included to determine appropriately sized bins and design a well-suited collection schedule.

All Oakland residents will receive their cart and a reminder flyer with information about the recyclables collection program in late June 2015. The cart design will contain information on acceptable program materials and other appropriate information as agreed to in consultation with City staff.

Container distribution to multi-family dwellings (MFD) will be planned in conjunction with the City and existing contractors. CWS has experienced greatest success with MFD programs when implementation is

carefully coordinated with property managers. CWS will conduct outreach to property managers to determine the preferred bin size and hauling schedule for the specific needs of the property.

#### ***5.1.7. City Programs Implementation***

City buildings provide a unique opportunity for comprehensive education and outreach in the CWS composting program. Thoughtful engagement through informational materials, online communication, signage and training opportunities can support widespread participation in the new composting program. As staff adopts new habits, they can help to distribute this message to the broader Oakland community, and visitors to City offices can pick up new recyclables diversion habits. CWS will work closely with the City of Oakland to develop engaging and highly visual informational materials for distribution across city offices.

#### ***5.1.8. Commercial Non-Exclusive Recyclable Material Programs Implementation***

CWS currently has a strong presence providing recycling collection to commercial customers throughout Oakland, and intends to continue these services and increase its customer base, with or as a complement to the City's commercial non-exclusive franchise. CWS will also work to offer recyclables processing services to smaller collection firms throughout the City, as it maintains excess capacity at its Oakland facilities.

CWS will work to ensure that all commercial customers within the City receive services that best suit their needs, support proactive planning, including drawing up new routes through the City, and approach all companies and customers with respect, courtesy and patience. During the transition period following award of the non-exclusive franchise, CWS will maintain close communications with the City and request assistance in identifying new customers in order to keep the transition as smooth as possible for the commercial customers. If commercial establishments elect to switch service providers and utilize CWS' services, CWS will communicate with current providers to coordinate container delivery and removal at locations with space constraints.

#### **Collection Supervisors**

CWS will hire experienced collection supervisors for this service area who are well versed in the complexities of commercial collection and routing duties. All collection supervisors will receive further training on the specifics of conducting commercial collection services in Oakland. Routing procedures and methodologies will be established along with the provision of route safety training and establishment of communication practices. CWS will employ the FleetMind GPS software systems to gain real-time response mechanisms to changing route conditions. Collection supervisors will interact with dispatch to address any commercial customer related issues requiring field resolution.

#### **Route Collection Staff**

CWS commercial collection drivers are a main link to the business community. How their daily duties are performed contributes to business community perceptions of CWS. CWS has developed a successful, multifaceted driver education program that stresses safety and commercial customer service. Specific training of route personnel includes:

- Familiarity with CWS company procedures and practices
- Familiarity with the truck equipment
- Use of personal protective gear

- Defensive driving training
- Spill response training
- Hazardous waste material identification
- Injury and illness prevention
- Customer service procedures and practices
- Thorough understanding of new Commercial Collection and Recycling Program

### **Public Outreach**

The transitional Public Education and Outreach Program will be carefully designed to address the specific needs of new commercial customers. CWS will continue to distribute an information packet outlining the new program, including materials for its commercial customers, including potential for cost savings in the procurement process, marketing opportunities for “greening” a business, including opportunities for source reduction. This “how to” will explain the new, revised or optional programs business owners can request. Along with the brochure will be a post card requesting that the business fill out the information requested including the new service levels and frequency. A specialized education program for commercial recycling will provide information to the management team and their employees, supporting high participation and minimizing potential for contamination. This education program can be customized for distinct business types, e.g. restaurants, offices, medical, manufacturing, warehouse, and retail. Written materials could include posters in lunch rooms and at disposal containers within the business property and flyers/brochures. CWS will contact local business associations and make an effort to collect and/or purchase commercial customer databases to further expand its services.

#### ***5.1.9. Public Education and Outreach***

CWS will partner with local firms Circlepoint, The Next Generation, Kneal Resource System and the City to develop public education and outreach materials and campaigns. In consultation with City staff, a Public Education Plan (PEP) will be developed during the transition planning period and presented to the City for approval.

### **Goals of Transition Education and Communications Program**

- Prepare customers for changes in the new program and franchise, such as different trucks and/or multiple collection vehicles on their route, as well as other operational changes such as pickup times, etc.
- Educate customers about simple ways to move toward Zero Waste and create a personal connection to citywide goals
- Develop look and feel for materials and key messages
- Provide key news media with background on CWS team and approach
- Develop partnerships with organizations, corporations, etc. for full implementation of outreach programs during contract
- Establish database of national collection communications Best Practices
- Finalize outreach details and budgets

To achieve these goals, the team proposes a data-driven, highly visual, and innovative outreach program to ensure significant behavior changes and the real-world success of the new organics diversion program.

In-person focus groups and telephone polling will test consumer habits, patterns of thinking about composting and waste, and cultural factors relevant to Oakland's highly diverse population. Combined with a comprehensive waste stream audit, early data gathering will establish the baseline for improvement, and identify target areas for tailored outreach. Ongoing audits and surveys will measure organics diversion and waste reduction and monitor the efficacy of outreach programs, allowing the team to continuously adjust programs and messages for maximum impact.

This data-driven approach will be complemented by an innovative and highly strategic outreach program that takes advantage of all available media and builds a connection to neighborhoods and communities in Oakland. Using motivational and culturally relevant techniques that prompt consumers to take action, the outreach program will utilize the latest research in behavioral economics to create lasting changes on the habits of Oakland residents and business owners. We will weave in messages designed to prompt behavioral changes, using both cutting edge and traditional media elements that will earn consumer attention.

The CWS Transition Manager and public education team members will work closely with the City to establish accountability throughout the transition effort. Regular check-in meetings will be established between the two parties, ensuring fluid communication and maximum efficiency. This period will also provide an opportunity for the two parties to clarify the PEP, CWS approach, budget, and scope of work. Information gathered from polling and focus groups will be shared with the City so officials can fully participate in this data-driven and highly responsive outreach approach.

#### Assessment Period

In order to maximize the benefit of outreach, the team will conduct an initial assessment of Oakland residents' waste disposal habits through polling, focus groups and a waste stream audit. This initial effort will help to identify communities in Oakland that have the greatest opportunity for improvement in their waste disposal habits. Once this information has been collected, directed outreach can address specific information needs or incentive programs that would be beneficial to these communities. Information from multiple sources, outlined below, will be combined to provide a comprehensive, detailed, and multi-dimensional picture of the waste stream in Oakland. This "map" will provide a baseline for measuring progress and adjusting programs as outreach continues beyond the transitional period.

#### Polling

A series of telephone polls will build our dataset on the attitudes of Oakland residents toward composting. Well-crafted polls provide a scientific basis of attitudinal information and allow us to add dimension to the information, by cross-referencing demographics with geographically-based waste stream information, all the while being able to test specific messages and analyze attitudes. Combined with market research, a series of consumer profiles will be developed in concert with geographic distribution of the Oakland population to allow for micro-targeting and robust information-gathering at the street level. This level of information is vital to success in significantly increasing local composting rates.

#### Focus Groups

Based on the results of polling, and combined with the waste stream audit, focus groups will allow the team to focus on target communities and demographics and ensure the efficacy of brands and messages. Focus groups provide additional data to drive education around waste diversion and composting in the most effective manner. One goal of the focus groups is to understand how different communities within



Oakland think about waste and compost so that the team can develop culturally-relevant and effective outreach strategies and messages.

### Program Branding

The outreach team, in close collaboration with the City, would determine a “brand” for Zero Waste Oakland, informed by focus groups, polling, and other data. This brand would be included on all future project materials to support program continuity and name recognition. Branding would be based on collected data, as well as Oakland pride and environmentalism. Example taglines include:

- ❖ *Reduce Your Waste-Line*
- ❖ *Oakland Composts*
- ❖ *Oakland Greens Oakland*
- ❖ *Feed the Green Economy*

A concerted effort will be made to brand this campaign with a strong dose of Oakland pride. We want to convey the idea that Oakland could become known nationally as a model for reducing waste. In addition, branding will be tested in multiple cultural contexts to ensure relevancy to every Oakland waste consumer.

### Waste Stream Audit

This baseline data on actual composting rates and habits will also support ongoing evaluation of outreach tactics employed during the program. Follow-up audits and surveys will further refine goals and benchmarks, and outreach will be designed with flexibility to take advantage of this real-time, changing information.

### Direct Outreach

During the transition period, CWS will establish contact with new customers to introduce them to the new service program and begin the educational campaign. These communications will be coordinated with the messaging, branding and targeting that will inform the program, based on the waste stream audit, polling, and focus group data. As with all direct outreach, opportunities for gathering information will be seized to provide as much information as possible to inform this data-driven marketing program.

Residents and commercial tenants will receive an information packet with an overview of services, such as pickup times and different collection vehicles on their route, tips for proper disposal, and a survey of initial attitudes toward composting and recycling that will inform the data-driven transitional outreach program. The information packet, and all CWS customer communications, will prominently display the customer call-in number **1-510-OAKLAND**, that CWS has reserved. The information packet will provide contact information for CWS and opportunities for direct consultation. A questionnaire will also be included to determine appropriately-sized bins for each location and inform the design of a new collection schedule. Commercial customers will receive an educational packet that includes information addressing their particular waste stream, i.e. additional



**Waste Auditor**

information on food waste disposal for Oakland restaurants. These materials will include an introduction to the waste-diversion branding.

The CWS Oakland Gateway Facility design includes a 6,000 square foot education area that offers public meeting and classroom space, and an enclosed and conditioned walkway and viewing area that allows safe overhead viewing of recyclables deliveries and processing. The design and functionality will allow for ongoing promotion of public awareness and environmental consciousness through real-time observation. This setting provides guests with a unique overhead view enabling the survey of all phases of material separation, recovery and solid waste diversion – from receipt of materials to generation of product for recycling. On-site messaging will emphasize environmental stewardship and conservation.

**Driver Contact and Visibility:** CWS drivers are a key communication link with customers. Drivers will be trained to provide education where possible, but will also be provided with a variety of tools to reinforce proper recycling and diversion techniques. Tools will include informational handouts, cards, brochures and “correctional” notices when improper sorting is witnessed, while also reporting this information back to headquarters.

CWS may also develop a visibility campaign built around collection vehicle drivers, featuring actual drivers. City-approved posters with photo of driver to be attached to trucks with personal statements of their pride in their job and requests for help from residents with reducing litter, complying with universal and hazardous waste requirements, etc. CWS will work with the City to design attractive informational signage for collection vehicles, displaying City recycling program contact information and web resource links.

**Community Partnerships:** CWS will establish contact with key community groups during the transitional period to prepare for collaborative programming in the next phase of outreach. In order to conduct this outreach, the team will develop a package with an overview of benefits to potential partners (e.g. supermarket, drug store and convenience store chains; newspapers and radio stations, including Spanish, Chinese and Vietnamese outlets; outdoor advertising companies). The team may also establish contact with local schools to introduce the educational outreach program.

**Web:** A high-quality website will be developed during the transitional period. The site will be accessible to the disabled and mobile devices, and will provide critical information in Spanish, Chinese, and Vietnamese. The website would provide an abundance of information on services, the nature of recycling, the waste stream, and how one can contribute to Zero Waste goals through small habit changes.

**Focused, Directed Outreach:** Based on the results of early data gathering, CWS will begin to focus outreach efforts on areas where the greatest benefits are possible. This will continue and adjust as new data becomes available or unexpected changes are seen in the waste stream.

### Media Outreach

Media outreach to promote Oakland’s zero waste goal is a key component of the transitional outreach program because it is very cost-effective and has a wide reach, while also offering opportunities for targeting specific communities, such as non-English speakers. As discussed above, cost-effectiveness and cultural relevancy are vital to driving the new consumer habits that will make a significant difference to Oakland’s waste stream.

Effective media outreach will build on program branding, inspiring civic pride and a shared commitment to the Zero Waste goal. CWS will begin outreach with a press release when the franchise is awarded,

highlighting local job opportunities, a community-based approach to public education, and innovation in waste processing. A media event may be coordinated, where key civic speakers address Oakland's zero waste goals and CWS staff provides an overview of the new services program and the transitional outreach plan. In conjunction with this event, CWS might invite key media, especially local television news, to tour the newly upgraded 10th Street MRF and join on test-drives of new collection vehicles. Spokespeople in Spanish, Chinese, and Vietnamese will be available to attract a variety of media.

The outreach team might also work with the City to develop a Media Transition Kit, which would be an education packet for local reporters for print, television, and radio. The Transition Kit would provide facts on the mixed materials and organics collection program; the proper manner and time by which to place materials out; information about CWS' diversion initiatives, and the contact information for residents to call if there are any problems. Throughout the transition period, Circlepoint and The Next Generation will identify and use opportunities – such as the holiday season - to pitch this story of a new approach to waste to the media, helping to earn publicity and introduce Oaklanders to the upcoming changes.

### **Community Outreach Strategy**

Following the period of initial data collection, campaign branding, and introduction of the new service provider, the outreach program will be integrated into the broader delivery effort. The following sections outline an outreach program that, pending City staff approval, could be in place for the first 6 months, July-December 2015, and continually improved through data-driven program evaluation.

This program would focus on establishing new habits for Oakland customers while building connections to civic environmental goals. Micro-targeting will ensure each community in Oakland receives the message that is most likely to produce behavior changes, based on polling, focus groups and updated waste stream data. Directed outreach (information and materials available in multiple languages), broad visibility, community partnerships, special events, media outreach, and paid advertising are all elements that contribute to the success of the recycling program in Oakland.

CWS will utilize a variety of methods to convey service and diversion messages to its customers that could include bill inserts, direct mail, container deliveries, cart tags, bin designs, calendar giveaways, posters, reply and opt-in emails, website, social media, and other methods as appropriate. We will set up a program of email and text message alerts through which we can share news worthy items and tips for diversion to our customers. A crisis communications plan and protocol will be developed to address unlikely but possible events that would adversely affect service delivery, such as a natural disaster.

#### ***5.1.10. Coordination***

The CWS Transition Manager will effectively oversee and manage all work in the transition efforts, establish accountability for quality, work closely with the City through a series of formal/informal communication approaches and conduct meetings in a timely manner.

The methodology for accomplishing these objectives is as follows:

The CWS Transition Manager will plan, coordinate, monitor, and direct all of the transition tasks in concert with other appropriate CWS Transition Team members and review all draft transition reports to ensure consistency of professional quality and performance prior to final submission to the City. An established format for transition reports will be uniformly applied and agreed upon by the City early on in the Transition effort.

Formal and informal communications with the City will be essential components of Transition management. Formal communication will include written monthly progress reports to the City summarizing the percentage of work completed to date and, where applicable, any problems/difficulties encountered as well as a forecast of upcoming activities based on the CWS Transition Schedule. These reports will be generated by the CWS Transition Team using Microsoft Word and delivered to the City by e-mail. The e-mail, with any supporting documents, will be delivered by the tenth day of the month following the reporting period. A hard copy will follow by mail. In addition, because of the type of project and transition timeframe, a series of regularly scheduled meetings between the CWS Transition Manager and selected members of the City of Oakland Transition Team throughout the transition period are suggested and noted in CWS' detailed Transition Schedule.

#### Customer Service Coordination

During Transition, CWS will enhance its Oakland-based customer call center capabilities to best serve new Oakland customers. Our Customer Service staff are trained to treat callers with the utmost courtesy and professionalism.

The Customer Service staff in Oakland and increased to a total of four (4) people to easily handle calls coming in from new customers. During transition, CWS will advertise and conduct interviews for the new customer service representatives. Transitioning from one employer to another can be a difficult process. CWS wants this transition to be as positive as possible for men and women who will service this contract. Staff will be regularly updated and trained on the transition plan and proper information to provide callers. CWS will work with Oakland customer service personnel to assure that information between the City 311 system and the CWS call center is perfectly integrated. CWS has secured **1-510-OAKLAND** as its call-in number, to provide a simple and memorable contact point for all customers.

CWS will upgrade the existing Oakland customer center with an adequate and required number of phone lines, high speed internet access, and any modifications to the CWS customer service software system which allows the interface with city work order information. Training on existing and new customer service staff on the new system will be completed fifteen days before the first collection

The systems will be modified and tested and Customer Service Staff completely trained on their use before the first collection takes place. A redundant back-up system will be in place so that the customer call center can still service residents in the event of an emergency.

#### Customer Collection Assurance

On July 1, 2015, customers will have the collection switched to a new contractor. Trained employees, a solid customer service center and media transition kit will prevent most problems. Some residents currently know exactly when their recycling and garbage collector comes by their house and, despite information on new times may place their carts out just before the previous collection time. When the service transition is complete, the new contractor may complete routes differently, hence the time of the residents' collection may change; resulting in increased calls citing missed collection. CWS will have a Customer Collection Assurance team that will have crews in satellite collection vehicles collecting such incidents during the initial period of the contract until the customers become accustomed to their new collection schedule. CWS understands that customer service response and cart delivery assistance will be greatest in the first few months of the new franchise, so we will hire additional temporary employees over the summer transition period.

### **5.1.11. Combined Services**

Should CWS be awarded the RR and MM&O franchises, a combined strategy for recyclables, organic and mixed materials offers significant, synergistic opportunities. Choosing to recycle is associated with reducing the waste stream and achieving community goals. Additionally, each public education campaign would enjoy the benefits of a considerably larger budget, since distributed materials could incorporate messaging from the two, complementary activities.

As an inducement to award both contracts to CWS, a discount is proposed for MM&O rates. Calculation of this discount is based on specific synergies and efficiencies gained from award of both. These efficiencies would result from the reduction of overhead expense, a combined public outreach effort, a minimization of fleet equipment redundancies, availability of more Oakland hiring tax credits, and realization of a more streamlined work force applied to a larger base of tonnages, etc. An added advantage is that stronger, more consistent and integrated public messaging from a single source will help to assured that the right materials, especially RR and organics, get in the right cart and/or bin. The discount rate is included in Form Multiple Service Discount - 2K.

### **5.2. Collection Services Operations Plan**

CWS will provide the following services to the City of Oakland

<b>Single Family (SFD) Collection Services (1-4 Units)</b>	
SFD Mixed Materials Collection, and Processing or Transfer	Weekly automated/semi-automated Collection with 20, 32 (standard), 64, or 96-gallon wheeled Carts.
SFD Source Separated Organic Materials Collection, and Processing	Weekly automated/semi-automated Collection with 20, 32, 64 (standard) or 96-gallon wheeled Carts.
SFD Bulky Goods Collection, Processing and Transfer	Bulky Goods Collection once per year by appointment and pay-as-you-go as an optional service for an additional fee
On-call HHW Collection, Transfer and Arrangement for Disposal	On-call Collection of HHW as an optional service for an additional fee
On-call Sharps Collection, Transfer and Arrangement for Disposal	On-call Collection of Sharps as an optional service for an additional fee
SFD Temporary Roll-Off Box Collection and Processing	On-call Temporary 6 - 40 CY Roll-Off Box Collection Services for an additional fee

## 5. TECHNICAL PROPOSAL

<b>Multi-Family Collection Services (5+ Units)</b>	
MFD Mixed Material Collection and Processing	At least weekly Collection with 20, 32, 64, or 96-gallon wheeled Carts, 1, 1.5, 2, 3, 4, 6 or 7 CY Bins, or 6 - 40 CY Roll-Off Boxes.
MFD Source Separated Organic Materials Collection and Processing	Once per week Collection with 32, or 64-gallon wheeled Carts for no additional charge. (Larger or additional Containers may be requested at no additional charge.)
MFD Bulky Goods Collection, Processing and Transfer	Bulky Goods Collection once per year by appointment and pay-as-you-go as an optional service for an additional fee
On-call HHW Collection, Transfer and Arrangement for Disposal	On-call Collection of HHW as an optional service for an additional charge
On-call MFD Sharps Collection, Transfer and Arrangement for Disposal	On-call Collection of Sharps as an optional service for an additional charge
MFD Temporary Roll-Off Box Collection and Processing	On-call Temporary 6 - 40 CY Roll-Off Box Collection Services for an additional fee

<b>Commercial Collection Services</b>	
Commercial Mixed Materials Collection, and Processing or Transfer	At least weekly Collection with 20, 32, 64, or 96-gallon wheeled Carts; or At least weekly Collection with 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or At least weekly Collection of 6 - 40 CY Roll-Off Boxes; or Compactor.
Commercial Source Separated Organic Materials Collection, and Processing (Optional Service as Requested by Customer)	At Customers option: At least weekly Collection with 20, 32, 64, or 96-gallon wheeled Carts; or At least weekly Collection with 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or At least weekly Collection of 6 - 40 CY Roll-Off Boxes; or Compactor.
Commercial Non-Exclusive Single Stream Recyclable Materials Collection and Processing	At Customers option: At least weekly Collection with 20, 32, 64, or 96-gallon wheeled Carts; or At least weekly Collection with 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or At least weekly Collection of 6 - 40 CY Roll-Off Boxes; or Compactor.
Commercial Special Event Collection Service	Collection of Mixed Materials, Recyclable Materials and/or Organic Materials using 64 Gallon Carts or 20 and 30 cubic yard Roll-Off Boxes for a charge.
Commercial Temporary Roll-Off Box Collection and Processing	On-call Temporary Roll-Off Box Collection Services for an additional fee



City Facility Collection Services	
City Facility Mixed Materials Collection, and Processing or Transfer	At least weekly Collection with 20, 32, 64, or 96-gallon wheeled Carts; or At least weekly Collection with 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or 6 - 40 CY Roll-Off Boxes Collected as determined by the needs of the City
City Street Litter Container maintenance and replacement	Place, maintain and replace Street Litter Containers throughout the Service Area.
City Street Litter Container Mixed Materials Collection, Processing and Transfer	Daily emptying of street litter Containers including liners and enclosures, and removal of debris atop or around Containers, on Work Days (Monday-Friday), and monitoring and emptying of Containers as directed by City on Saturday and Sunday.
City Council and Mayor Roll-Off Boxes	Twelve (12) 20-CY Roll-Off boxes for each of the eight (8) Council offices and the Mayor, for a total of up to one hundred eight (108) 20-CY Roll-Off Boxes each calendar year.
City Adopt-a-Spot Mixed Materials Collection, Processing and Transfer	Up to 150, 64-gallon Mixed Material or Organic Carts to City volunteers for use in cleaning and greening public spaces in Oakland.
City Sponsored Events	Mixed Materials, Recyclable Materials and Organic Materials Collection, Disposal and Processing services at City sponsored events per full or partial calendar year as requested by City, for up to thirty (30) total Roll-Off Boxes per calendar year.
City Temporary Roll-Off Box Collection and Processing	On-call Temporary 6 - 40 CY Roll-Off Box Collection Services.
City Delivered Materials	Up to 7,500 Tons of material (Tonnage allowance) during the period July 1, 2015 through December 31, 2015. Calendar Year 2016 and beyond, the Tonnage allowance shall be 15,000 Tons.

In addition, CWS will provide Oakland with holiday tree collection, household hazardous waste and sharps management programs, and has the capabilities to provide emergency services in the event of need.

CWS, alongside its dedicated recycling collection, processing, and product marketing will include the following assets to provide SFD, MFD, City, and Commercial Mixed Materials and Organics Collection for the City of Oakland:

- Truck corporation yard and office building
- Truck maintenance and tire repair shop
- Truck fueling

- Truck wash
- Collection dispatch office
- Customer service office
- Public education office and public learning center
- Three material recovery facilities and office buildings
- Greater than 100 collection and service trucks

These resources that CWS will dedicate to serving the City of Oakland collection operations will be instrumental in providing comprehensive, consistent, and dependable services.

#### **Collection Services Management**

CWS will have multiple personnel dedicated to the management and facilitation of collection services. The basic responsibilities and roles of collection supervisors, including the Route Supervisor and Customer Service Supervisor, are to facilitate the most efficient field operations, provide the highest quality customer service and to attain the City's diversion goals.

- **Most Efficient Operations:** CWS drivers operate safely and productively while accommodating City and customer needs
- **Greatest Customer Service:** Customers have the optimal collection service type, container and frequency (right-sizing)
- **Achieve Diversion Growth Goals:** Coordination of appropriate participation, collection, and processing to assure maximum diversion of solid waste

All CWS employees who fill supervisor positions will have demonstrated great awareness of and proficiency in collection and diversion, and have the expertise to enable colleagues and customers to continuously improve diversion outcomes. These specific skills complement mandatory safety, labor, vehicle, and container operating proficiency. The responsibilities that CWS assigns to our collection supervisors are described below.

The Route Supervisor assists the company in meeting its goals and objectives by ensuring that all assigned customer accounts within specific areas are accurately and safely serviced. The Route Supervisor also performs administrative and supervisory duties related to department business needs and will partner with employees, customers, labor representatives, and other stakeholders to maintain an efficient, safe, and healthful work environment. Collection supervisory duties, off-route, at the office, and on-route in the field include:

- Ensuring that customer accounts are properly serviced in assigned areas
- Maintaining route efficiency by completing routes within management expectations
- Ensuring that drivers are in compliance with driver DOT, federal, state, local, and company regulations
- Ensuring the efficient and safe transport of residential, commercial, and roll off materials
- Identifying and establishing corrective actions needed to address opportunities related to route and services
- Training and supporting drivers and helpers in collection activity, vehicle operation, and safety procedures
- Communicating with management regarding customer services and/or employee situations

- Maintaining all required records and reports accurately and in a timely manner
- Preparing, presenting, and distributing statistical and timekeeping reports and documents as required by management
- Completing accident investigations and submitting appropriate documents and reports as required by management
- Conducting safety observations and preparing documentation in accordance with program requirements
- Conducting and documenting regular safety meetings with assigned employees
- Monitoring driver Vehicle Condition Reports and supervising equipment inspections
- Participating in special projects as needed
- Identifying ways to continuously improve and promote exceptional customer service
- Complying with all company safety and operating policies, procedures, plans, and programs while on-route and on-site
- Maintaining all company-issued property in good working order
- Directing, planning, monitoring, and evaluating the work activities of all drivers; including employee training, rewards and discipline, and addressing and satisfactorily resolving problems and conflicts
- Acting as liaison to customers to determine service requirements; including special service needs such as time constraints, noise issues, space constraints, etc.
- Integrating with all other CWS operations to maximize service, safety, and efficiency

Collection supervisors will continually receive any specialized training necessary to provide employee direction and as needed customer assistance related to the city-wide collection system.

### ***5.2.1. Vehicles***

CWS will provide cart and bin service to customers with newly acquired automated McNeilus Side Loader® vehicles that have 31-cubic yard volume bodies on a Peterbilt cab and chassis. Cart containers (20, 32, 64, and 96 gallons in volume) will be emptied into the side loader truck with an automated arm connected to the vehicle. CWS has selected the McNeilus brand of vehicles for a number of reasons including equipment efficiencies, low maintenance, and cost-effective servicing options.

Roll-off and compactor containers (10, 14, 20, 30, and 40 yards in volume) will be serviced by three-axle Nor Cal Roll off Dead Lift trucks with a Peterbilt cab and chassis. They will service all roll-off container types including mixed and organic materials boxes.

### **Alternative Fuel Use**

As emission standards become more stringent, alternative fuels have become increasingly popular. Many proponents of alternative fuel use cite resultant lower maintenance costs, Environmental Protection Agency (EPA) emissions standards compliance, improved air quality, quieter streets, and increased U.S. energy independence compared with traditional petrodiesel fuel use. In its ongoing commitment to environmental responsibility, CWS Oakland collection trucks are currently planned to be fueled by compressed natural gas (CNG).

The City of Seattle has found that CNG refuse fleets are seeing decreased maintenance costs, and cleaner vehicles, as the refuse trucks do not require as many add-ons for emissions control, including DPFs (diesel particulate filters), EGR (exhaust gas recirculation), and urea-based selective catalytic reduction systems. The City has also reported that drivers find trucks easier to operate because they do not have to worry about regeneration as they would with diesel trucks.

Although CNG vehicle acquisition cost is higher than for diesel trucks, the costs are offset by lower and more predictable fuel costs, and lower maintenance costs. The City of Seattle has stated that estimated payback for their vehicle acquisition is less than two years, and less than three years if including infrastructure costs including installation of a fueling station. McNeilus estimates that a minimum fuel savings of \$15,000 per year per vehicle can be achieved by switching from diesel to a CNG powered refuse vehicles, considering conservative estimates for fuel costs and without accounting for additional savings due to tax credits or fuel rebates.<sup>1</sup>

The reductions in environmental impact and emissions achieved by converting fleets from diesel to CNG are significant. CNG vehicles produce less carbon monoxide, fewer volatile organic compounds and lower levels of nitrogen oxide compared to diesel trucks, causing less smog and fewer human health impacts.

The reductions in environmental impact and emissions achieved by converting fleets from diesel to biodiesel or CNG are significant. Vehicles utilizing these alternative fuels produce less carbon monoxide, fewer volatile organic compounds and lower levels of particulate matter and carbon dioxide when compared to traditional diesel trucks, causing less smog and fewer human health impacts. A U.S. Department of Energy study showed that using CNG in refuse vehicles instead of diesel fuels results in an estimated 22 percent fewer greenhouse gas emissions per truck annually.

**Table 5.2.1-1 Emission Reductions for CNG Vehicles Compared to Diesel Vehicles<sup>2</sup>**

Emission	CNG Reduction from Diesel
Carbon Dioxide	20-30%
Carbon Monoxide	70-90%
Sulfur Dioxide	99%
Nitrogen Oxide	75-95%
Particulate Matter	90%
Volatile Organic Compounds	89%

Ancillary benefits to the City of Oakland:

- CNG-powered refuse truck engines are significantly quieter than those of diesel refuse trucks. Diesel-powered refuse trucks can generate noise levels as high as 100 decibels, which is high enough to cause permanent hearing damage – quieter natural gas trucks protect workers from hearing damage<sup>3</sup>
- Natural gas is a domestically abundant fuel and every truck powered by natural gas enhances our energy and economic security by reducing our national reliance on foreign oil

<sup>1</sup> Assumes CNG price of \$2.50/gallon, Diesel price of \$4.00/gallon, fuel usage of 40 gallons/day

<sup>2</sup> 100% Biodiesel = B100; 20% Biodiesel 80% Diesel blend = B20

<sup>3</sup> [www.informinc.org/FS\\_ST\\_NYC\\_Refuse.pdf](http://www.informinc.org/FS_ST_NYC_Refuse.pdf)

- The US Environmental Protection Agency (EPA) estimates that occupational exposure to diesel exhaust increases the risk of lung cancer between 20 and 50 percent

Other cities throughout California and the U.S. have realized significant savings and environmental benefit from conversion to CNG-fueled refuse fleets:

- The City of Los Angeles Bureau of Sanitation recorded a 23 percent reduction in nitrogen oxide emissions through the use of natural gas in its fleet
- Seattle's waste management fleet added 106 CNG vehicles to its fleet of collection vehicles as replacement for older diesel models and saw a 20 percent reduction in greenhouse gas emissions using natural gas trucks over the life of the truck
- Columbus, Ohio saved \$33,600 each year on fuel costs from each of its natural gas refuse trucks

CWS's proposed fleet of McNeilus® CNG-powered trucks offers lower fuel costs and reduced noise pollution, and they are six times cleaner than diesel-powered trucks, making them an economically and environmentally-friendly alternative fuel solution for consumers. As part of CWS's CNG fuel offering, CWS will install its own CNG fueling station. CWS is willing to share its fueling facility with other private or public CNG fuel users to expand the use of this low emission fuel.

CWS is a demonstrated leader in achieving the most environmentally friendly solid waste collection fleet in the history of San José. In 2007, CWS implemented use of alternative low sulfur fuel on all new collection trucks; investing in this new and expensive technology before any other solid waste firm in the United States and two years ahead of US EPA requirements. CWS has continued and will continue this leadership position with regard to advanced and alternative fuel low emission vehicles and equipment in the City of Oakland.

### **Collection Vehicle Standards**

All collection vehicles and equipment that CWS will use in Oakland will have appropriate safety markings including, but not limited to, highway lighting, flashing and warning lights, clearance lights, and warning flags. All safety markings will comply with California Vehicle Code requirements, and all collection vehicles will be equipped with audible back-up warning devices.

In order to provide the best, most modern, safest and most efficient services to Oakland customers, all CWS equipment and vehicles will be high quality, and collection vehicles will be newly manufactured 2014/2015 vehicles. They will be designed and operated so as to prevent collected materials from escaping the vehicles; hoppers will be closed on the top and sides with screening barriers to prevent collected materials from leaking, blowing or falling from the vehicles. All trucks will be watertight and operated such that no liquids spill while recyclables are being collected

## 5. TECHNICAL PROPOSAL

Table 5.2.1-2 Vehicle Equipment Metrics

Truck Type	Application		Manufacturers	Capacity	Total Vehicles	Route Vehicles	Designated Spare Vehicles	Total Vehicles	Route Vehicles	Designated Spare Vehicles
SFD Services										
Satellite Side loader (HTS)	Routed Collection Services	SFD, MFD, Comm	Ford/Heil	10 yd	5	4	1	5	3.8	1
Manual/Automated Side Loader	Routed Collection Services	SFD, MFD, Comm	Peterbilt/McNeilus	31 yd	58	49	9	58	46	9
Standard Rear Loader (REL)	Routed Collection Services	SFD, MFD, Comm	Peterbilt/McNeilus	25 Yd	5	4	1	5	3.8	1
Claw Flat Bed	Collection Services (Bulky)	SFD, MFD, Comm	Peterbilt	22'	3	2	1	3	2	1
Flat Bed with Lift Gate	Cart Delivery	SFD, MFD, Comm	Ford		2	2	0	2	2	0
Service Body with Lift Gate	Service Truck	SFD,	Ford	N/A	2	2	0	2	2	0
		MFD,								
		Comm								
Supervisor Pick up	Collection, Route Management and Customer Service Support	SFD, MFD, Comm	Ford	N/A	4	4	0	4	4	0



## 5. TECHNICAL PROPOSAL

MFD Services										
Roll Off Dead Lift	Roll-Off Collection	MFD, Comm	Peterbilt/Nor Cal	N/A	4	3	1	4	3	1
Container Carrier (Forklift)	<i>included in Commercial</i>									
Long Floor Front Loader (FEL )	Routed Collection Services		Peterbilt/McNeilus	40 yd	11	9	2	11	9	2
Commercial Services										
Roll Off Dead Lift	<i>included in MFD</i>									
Container Carrier (Forklift) - NCC - 4000	Container Delivery	MFD, Comm	Ford/Nor Cal	N/A	2	1	1	2	1	1
Long Floor Front Loader (FEL )	Collection Services		Peterbilt/McNeilus	40 yd	14	12	2	14	12	2
Transfer Services										
Tractor	Material Transfer	TRS	Peterbilt	N/A	13	11	2	13	11	2
Trailer Live Floor	Material Transfer	TRS	Western	135 yd	23	12	11	23	12	11

To be sold in California, new collection vehicles must meet stringent noise emission standards. CWS drivers will be sensitive to compacting and cycling loads within 150 feet of residential properties. All CWS vehicles will be in full compliance with local, state and federal clean air requirements that have been or are proposed to be adopted, including, but not limited to, the California Air Resources Board Heavy Duty Engine Standards as currently proposed to be contained in CCR Title 13, Section 2021 et seq and the Federal EPA's Highway Diesel Fuel Sulfur regulations.

All collection vehicles will have City-approved signage on each side and the rear to clearly state that it is servicing the City of Oakland, provide CWS' name and customer service telephone number (**1-510-OAKLAND**), and display the Oakland Recycles logo and vehicle identification number. The vehicle will also have space for poster advertising to promote the recycling and diversion programs. CWS will repaint all vehicles (including vehicle striping) as frequently as necessary to maintain a positive public image.

All collection vehicle windows, mirrors and cab interiors are cleaned daily by their drivers. Exterior cleaning is performed weekly, and washes will be conducted in a manner that conforms to the California Storm Water Quality Association (CASQA)'s BMP Guidelines for Non-Point Source Pollutants. Painting and signage replacement will be conducted as needed as fading or chipping occurs. Trucks will be inspected both pre and post trip daily by drivers and weekly by maintenance personnel for any damage to the exterior that may require repair. Preventive maintenance service will be performed on all vehicles according to manufacturer specifications. CWS will maintain collection vehicles in a clean condition and in good repair at all times, and ensure that no collected materials, oil, grease or other substances will blow, fall out, escape or leak out of the vehicle.

### Vehicle Maintenance

CWS is proposing to purchase new collection vehicles from Coast Counties Truck and Equipment Co. with a ten-year comprehensive warranty. This warranty covers all major maintenance items. During the warranty these major warranty repairs will be performed at their facility located at 260 Doolittle Drive in San Leandro. This is a large facility with ample room for staging equipment prior to delivery. The service and parts departments are open from 8:00 a.m. to 5:00 p.m. Monday through Friday. During the contract period, CWS will perform oil changes and other preventive maintenance functions according to the schedules provided by equipment manufacturers and Coast Counties. The goal of CWS fleet maintenance is to minimize unscheduled repairs. CWS will keep vehicles maintained on schedule in keeping with fleet operation best practices.



Vehicle Cleaning

Road service will be performed by Coast Counties and CWS estimates a response time of no more than 60 minutes for replacement vehicles to be put into service. The specific time for any replacement will be influenced by breakdown location and traffic conditions at the time. Replacement collection vehicles will be dispatched by CWS from the vehicle storage yard. Should an in-service vehicle breakdown occur, the

operator will notify the CWS Collection Supervisor who will generate a Service Order that is transmitted to fix the vehicle.

CWS will maintain an industry standard reserve spare vehicle ratio to be placed into service in the event regular route trucks experiences breakdowns. At all times, reserve collection equipment, corresponding in size and capacity to the standard fleet and equipment used by CWS for this contract, can be put into



**CWS Collection Fleet**

service and operation within one (1) hour of breakdowns. CWS estimates that Oakland tire service or replacement response time will be a maximum of 60 minutes.

Major component item repair records will be generated and maintained by Coast Counties using automated fleet maintenance software. These repair records will be transmitted to CWS so that the Collection Supervisor has a complete file on each vehicle, can predict availability and anticipate issues.

Per the Agreement, CWS will keep a maintenance log for all collection vehicles, available to City staff upon request, that includes each vehicle's assigned identification number, purchase or initial lease date, routine maintenance performance dates, and additional maintenance dates and descriptions. Each year, CWS will report to the City its record of collection vehicles and major equipment; assigned identification numbers, DMV license numbers, chassis and body ages, type of fuel used, type and vehicle capacities, number of vehicles by type, acquisition date, decibel rating and maintenance status.

### **Financing Method**

CWS will finance collection vehicles and containers through a line of credit from the Industrial and Commercial Bank of China and East West Bank, located in San Francisco, California.

#### ***5.2.2. Containers***

CWS will provide all customers with the appropriate size collection containers for mixed and organic materials.

Single-family residences will receive 32-gallon roll-out mixed materials carts and 64-gallon roll-out organics carts, with 96-, and 20-gallon cart options to best meet customer service needs. Multi-family establishments will receive container sizes according to their current service level. Table 5.2.2-1 and Table 5.2.2-2 show the container sizes CWS will offer to SFD, MFD, Commercial, and City customers.

**Table 5.2.2-1 CWS Mixed Materials Container Preferences (Subject to City of Oakland Approval)**

Customer	Container Size
SFD	Approximate 32-gallon carts as default size with 96-, 32- and 20-gallon cart options
MFD	Approximate 65-gallon carts as default size with 96-, 32- and 20-gallon carts for special circumstances such as single car garage for town homes; 1, 1.5, 2, 3, 4, 6 or 7 CY Bins, or 6 - 40 CY Roll-Off Boxes. Minimum levels of service will be calculated by multiplying the number of Dwelling Units by 20 gallons to reach the required capacity.
Commercial	Approximate 20, 32, 64, or 96-gallon wheeled Carts; or 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or 6 - 40 CY Roll-Off Boxes; or Compactor.
City	Approximate 20, 32, 64, or 96-gallon wheeled Carts; or 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or 6 - 40 CY Roll-Off Boxes Collected as determined by the needs of the City

**Table 5.2.2-2 CWS Organics Container Preferences (Subject to City of Oakland Approval)**

Customer	Container Size
SFD	Approximate 96 or 65-gallon carts as default size with 32 and 20-gallon carts for special circumstances such as single car garage for town homes.
MFD	Approximate 32 or 64-gallon wheeled Carts for no additional charge. (Larger or additional Containers may be requested at no additional charge.)
Commercial	Approximate 20, 32, 64, or 96-gallon wheeled Carts; or 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or 6 - 40 CY Roll-Off Boxes; or Compactor.
City	Approximate 20, 32, 64, or 96-gallon wheeled Carts; or 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; or 6 - 40 CY Roll-Off Boxes

All carts will be injection molded for maximum strength and durability. The mixed materials carts will be gray in color, with a gray lid, and organics carts will be green in color, with a green lid. Signage on each will identify it as part of the City of Oakland's collection program, with Oakland program logos and identification in-mold stamped for durability on the container lid and body. The in-mold label will feature a Quick Read (QR) code that can be scanned by a Smartphone, with information transported to CWS' website and alerts provided on changes in service, collection schedules, and call center information.

Prior to the start of service, CWS will send an introductory mailer to all customers with a mail-back card that informs the customer of service and container options, and gives the customer the option to change their collection container size. The customer can also call CWS or visit the CWS website to reply. If the customer does not elect to upgrade or downsize their service, or does not respond by mail, phone, or web, they will receive their current cart size. As responses to the customer service mailing are received, customer records will be completed or revised with the selected container size, number, collection frequency, and any corrections to name, address, service or schedules.



**Sample QR Code for  
CWS' Website**

Customers will have the opportunity to request reduced or additional mixed materials or organics capacity. CWS will meet these modified service needs by delivering or removing containers no later than

the next scheduled collection day. During the first year that CWS provides collection services, its customers will be eligible for unlimited cart exchanges, within reason. After the first service year, CWS will provide customers with regular opportunities to request replacement carts, once per year for each cart for single-family residences, and two service exchanges (swapping as few as one or as many as all carts at each service location) per year for multi-family residences, per terms of the Agreement. City facilities may receive as many container exchanges as is requested and reasonable. Drivers will be trained to identify containers on each collection route that require repair, and CWS will provide ongoing cart maintenance services as required.

All residents will also be able to purchase extra service tags, through the customer call center, the CWS website, or at locations throughout the City.



**Cart Replacement and Repair**

CWS' multi-family customers at buildings with a high level of demand, businesses, government buildings, commercial customers, and others requiring larger-sized containers will receive metal dumpsters, roll-off boxes, and compactors as appropriate for their needs. CWS will work with customers to select the most appropriate container size for their level of generation and vehicle access to the collection location.

All metal bins, compactors or roll-off boxes furnished by CWS will be either painted or galvanized and display CWS' name and toll free customer service telephone number (**1-510-OAKLAND**), and will be kept in a clean and sanitary condition. Each bin, compactor or roll-off box for a specified material type (organics, mixed materials, etc.) will include a

description of the type of material to be placed within and be painted in a color and manner, approved by the City, which is unique to that type of material.

CWS drivers will be trained to identify and report containers requiring maintenance. A work order will be submitted to maintenance for appropriate work to be performed. Maintenance activities will include graffiti removal, and wheel, lid and leaks repair, painting and decal installation. Prior to customer delivery, containers will be cleaned, inspected and repaired or painted again if necessary, and affixed with appropriate decals and company identification as specified in the Franchise Agreement. Upon request for a maximum of one (1) time per quarter, CWS will clean or replace any bin, compactor or roll-off box marred by graffiti within five (5) work days. For bins not marred by graffiti, CWS will provide once annually, container exchange of CWS owned containers without charge for SFD customers, and twice annually for MFD customers, where requested and appropriate.

Customers requesting to have non CWS owned containers cleaned or CWS owned containers cleaned or exchanged on a more frequent basis can do so for an additional fee.

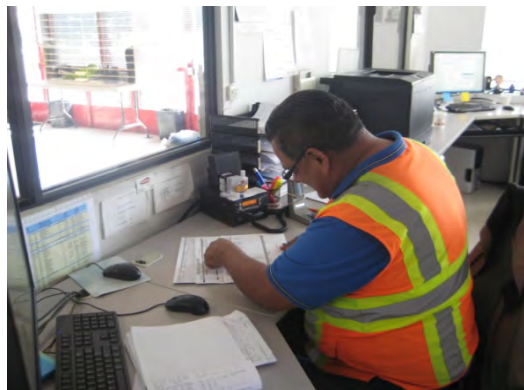
### ***5.2.3. Route Operations***

All collections will occur between the hours of 6 AM and 6 PM, Monday through Friday. CWS plans for on-route and on-board video recording and transmission to broaden the involvement of other colleagues



and quicken our customer response, as thoughtful and quick responses result in higher customer satisfaction levels.

Collection drivers report operational issues to a central dispatcher; who in turn provide instruction or issue an electronic work order to customer service and the appropriate route supervisor. Should immediate action be required, the crewmember can connect with the supervisor directly. All supervisors can monitor communications and communicate directly with collection personnel. All vehicles and personnel will be assigned a mobile communications device and an on-board computer. On route GPS systems allow communication between supervisors, crews, dispatch, customer service, maintenance, and customer outreach personnel on a real-time basis.



**Operations Coordination**



**Mobile Route Audit and Support**

CWS' integration of collecting and processing activities, complemented by its successful operational connectivity program (OC), enable routing changes to be suggested by our processing facility and MRF management teams, which play important roles in evaluating the quality and preservation of collected materials quality. Recommendations from the Interim Processing and Transfer Facility and MRF management teams can enhance material collection, as well as, how the material is tipped at the facilities. OC enhances communication and helps customer-collection continuum improve diversion and efficiency performance.

In concert with its OC initiatives, CWS utilizes FleetMind systems. FleetMind is a technology leader for integrated fleet management solutions, and is field proven to increase customer density, reduce costs, confirm service performance and increase revenue with the only fully integrated Waste-specific fleet management solution supporting all major back-office systems. FleetMind provides in-vehicle integrated GPS and route tracking systems, with connectivity to an in-office technology suite. The FleetMind software and hardware package allows users to:

- Expand the functionality and benefits of existing back office software (dispatch, billing, accounting, etc.)
- Download and upload information between office and vehicles – automatically through audio, video, and text message communication
- Improve outbound planning and route profitability
- Reduce paperwork, phone wait times, and communication costs
- Deliver real-time status updates to customers
- Receive comprehensive reports covering daily driver and vehicle activities
- Identify potential fuel and vehicle maintenance savings
- Track the fleet in real-time or view routes followed on previous days with FleetMap
- Enable informed fleet and operations decisions with FleetMind's powerful and flexible reporting capabilities



FleetMind will help CWS to track the locations of collection stops, automatically associate collection stops with customers, and observe it all with system-managed time stamps. Drivers can easily log the precise activities that account for the full day, as they happen, with the easy-to-use Fleetlink Driver Display Terminal. The system will allow CWS to output end-of-day paperless driver logs that immediately update real route history, by day, week and month - for every customer and every route. All daily operations are managed cleanly from inside the back-office system. Routes are pushed to vehicles using dispatch screens, and at the end of day routes are updated automatically.



### **Areas of On-Board FleetMind Connectivity**

CWS has successfully used RouteSmart™ software for routing its collection services in Oakland and San José since 2006. RouteSmart provides vehicle route optimization software technology for many communities and services, including solid waste collection. Comprised of the leading geospatial technologies from Esri and NAVTEQ, RouteSmart software integrates with client-side systems to form a complete routing solution for meeting the demanding operational needs of solid waste collection fleets. Unlike other vehicle route planning software that can only manage one category of waste or recycling collection, RouteSmart for ArcGIS offers powerful optimization capabilities for residential and commercial service routing all in one seamless environment. CWS will utilize route optimization from RouteSmart to balance all aspects of collection routing, including coordination of residential service collection days and optimizing multiple days of service for different types of customers.

CWS will perform a detailed routing analysis using time and motion models, along with extensive, practical field experience, to ascertain the most efficient collection vehicle movements for recyclables. Routes will be carefully designed so that collection drivers can optimize time in the field, personal safety, and responsiveness to customer needs and concerns.

CWS considers the following factors in designing collection routing systems:

- Urban street design
- Customer density and street geometry
- Early morning and peak traffic patterns
- Projected amounts of mixed materials and organics per collection vehicle for that particular route location
- Distance and time to the processing and disposal facilities

CWS has additionally considered the following special operational conditions:

- One-way streets
- Narrow alley conditions
- Containers placed in hidden or obscured locations
- Automobile parking in business lots or along downtown streets
- Noise Restrictions
- Central Business District and Transit Mall Zone Requirements

CWS will use:

- Highly experienced and committed CWS dispatchers, routing supervisors and drivers, each of whom brings extensive street-by-street knowledge and first-person understanding of routes and customers
- Pre-assigned routes designed to optimize drivers' time in the field, minimizing overtime costs
- Stringent safety training and monitoring, including eliminating unnecessary driver traversing, left hand turns, and backups wherever possible

The number of stops per route depends on the location of routes within the City, street geometry, car parking, geography, and the distance to the processing or disposal facility. Collection methods may be different at each stop, particularly on routes that service small businesses, City buildings, and multi-family complexes, considerations that will be factored into each day's route and customer service load. In developing and modifying routes and collection schedules, CWS will also take into account the City's street sweeping schedule, street closures for City-sanctioned events, road repairs, and City-approved activities and events for which CWS will provide waste and recyclables management services.

Within five (5) work days of receipt of a request from the City, CWS will provide the City with maps precisely defining vehicle collection and travel routes, together with the days and the times at which collection activities will occur on each route. Every three (3) years, CWS will perform a comprehensive audit of SFD, and MFD customer routes and submit to the City a written report on the results. These audits will help to ensure that the routes remain current through changes in customer count, changes in

subscription to service MFD, City, and commercial customers, changes in traffic patterns and other conditions which may shift over time. The report to the City will describe testing protocols, and detail the route audit findings along with recommendations, if any, on how CWS will modify the current routing system to correct any issues noted during the audit.

### **Collection Methodology**

CWS' collection methodology for customers is intended to efficiently materials with as few driver steps as possible, while ensuring utmost employee safety, efficiency, and limited spillage. Using a McNeilus Side Loader with a 31 cubic yard capacity, CWS' cart collection method is as follows:

- CWS driver arrives at address
- Driver approaches cart and begins the lifting process, or when required, driver will exit the vehicle, unlock/open a gate, and position the cart/roll-off for lifting
- Once the cart is properly and safely positioned for lifting, the CWS driver moves the vehicle into location, lifts the container automatically, and deposits the contents in the container into the body of the truck
- CWS driver slowly lowers the cart back to its standing position. When the cart/bin has been properly emptied, the driver either leaves the location or exits the vehicle to physically move the cart/roll-off back into its proper area and, if applicable, closes and relocks the gate
- In all collections, the CWS driver will clean up any litter resulting from the collection activity
- The CWS driver must factor in different collection methods at each stop to accommodate various service requirements

For residential and small business routes, special collection conditions such as nearby parked cars, narrow public parking areas and alleyways may require modified methodologies to efficiently pick up containers. For some stops, the driver may be required to conduct a 3-point turn within a public parking area to maneuver the truck for the best position on the egress side of the street.

In cases of missed collection notifications that are received by 12:00 PM on a collection day, CWS will return to the address and collect missed carts or bins before leaving the service area for the day. For complaints related to missed collections received after 12:00 noon on a collection day, CWS will return the following workday to resolve the complaint. If customers issue complaints or service requests related to carts or bins for new customers, or repair, replacement or exchange of carts or bins for existing customers, the orders will be fulfilled the following collection day.

CWS feels strongly that for optimal and most efficient collection, greatest diversion, and greatest customer confidence, it is in the best interest of both the City and CWS that all mixed materials and organics are collected on the scheduled collection day. Accordingly, missed collections will normally be collected as reported above, on the scheduled or following day, regardless of the reason that the collection was missed. However, in the event a service address reports missed collections more than two (2) times in any consecutive two (2) month period, CWS will work closely with the City to determine an appropriate resolution.

### **Organic Waste Collection Programs**

CWS will provide all SFD, MFD, Commercial, and City customers with or with options to receive at least weekly collection of organic materials. CWS has customized its organics collection programs to best meet the need of each generator type, to help achieve maximum diversion and customer participation.

Food collected from commercial establishments and mixed organic materials from MFD units will be transported to the East Bay Municipal Utility District – Recology Organics Facility. Mixed organic materials from SFD units will be delivered to the Interim Transfer and Processing Facility, where they will be processed to remove any contaminants before being transported to the Napa Recycling Compost facility in Napa, CA. CWS will not only be transporting the organic materials collected from customers in their green carts, but will also transport organic fines to the EBMUD facility from its future Oakland Gateway Facility mixed waste processing operations, reducing the burden of transportation and ensuring that all organic materials are transported to the composting facility as soon as possible, to reduce the risk of odors and other vectors.

#### ***SFD Organics Services***

For SFD customers, CWS will provide weekly collection of organic materials. Residents will receive a green organic materials cart, and will have the option to purchase a one (1) or two (2)-gallon in-home food waste container, similar to the container shown below from CWS for a nominal fee. CWS will provide information on its Oakland website regarding other options for food waste containers, including a list of local retailers where other container types can be purchased inexpensively. Throughout the week, residents can use this food waste container to collect materials in their kitchens, and every few days, they can take the container to their large organic waste cart, and empty the collected food and compostable materials into the larger cart. These plastic containers are easy to clean, can be purchased with deodorizing filters, and can be stored easily under the sink.



**Food Waste Container**

#### ***MFD Organics Services***

Although many multi-family residents do not generate large amounts of yard and plant wastes, all properties will be given the opportunity to subscribe to at least weekly collection services. CWS will work with property managers and property owners to right-size the services to their organic waste generation and needs. In an effort to increase diversion, CWS will be reaching out to these customers to offer educational materials and food waste pails to encourage residents to divert food wastes into their property's organics carts. Like SFD residents, they will be offered the option to purchase these containers for a nominal fee through CWS, but can also use their own container from another source. This will be an area where CWS focuses significant education and outreach resources, as many MFD residents do not currently participate in organics collection services, and participation would help to achieve a significant boost in diversion of organic materials from landfill.

**Council Option** - CWS understands that source-separation is vital to providing the highest-quality organic material to bio-waste to energy facilities, and is prepared to provide third-bin services for organics/compostable material to all Oakland residents, including those in multi-family buildings. This service will:

- Create end-use material that can be used for more than just median and roadside cover
- Provide equal opportunity to all Oakland residents
- Protect workers from sorting organic matter from other contaminated waste
- Advance sustainability education on the importance and impact of sorting our waste and avoid sending conflicting messages
- Adhere to the adopted overall educational goals for composting that Oakland set forth in its ECAP

CWS proposes to adopt the Council-selected option for all residents, SFD and MFD to receive organics bin services. CWS is prepared to provide this option to MFD residents at no additional cost above the default level of service. The difference between the default rate and the Council selected option rate for all service levels is zero. The full rate sheet showing this level of service in the Maximum Service Rate Forms 2B and 2C.

### ***Commercial Organics Services***

All Oakland commercial customers will have the opportunity to receive at least weekly collection of organic waste in a wide variety of cart and container sizes. CWS will also provide a separate collection service for commercial food waste. Many commercial establishments, such as restaurants, supermarkets and other food retail, hotels, hospitals, and educational institutions, generate a large amount of food waste each week, much of which could be easily source-separated. Diverting food waste would help these customers to reduce the amount of mixed waste they need to set out each week, reducing costs and increasing diversion.

For this separate food waste collection, customers will receive multiple options for leak-proof carts, including the possibility of receiving slimline containers for inside their establishments, which can then be brought outside to the larger cart, where two or three can be placed side by side. Food waste is heavy, so CWS will work with customers, making sure they receive support, training, and multi-lingual educational materials to ensure employee safety and safe food waste management.

Materials collected in this dedicated food waste collection will not be brought to the same composting facility as the rest of the CWS-collected organic materials, but rather can be hauled directly to East Bay Municipal Water District (EBMUD) for commingling in their facility.

### ***City Organics Services***

CWS will provide City properties, as requested, with at least weekly collection of organic waste in a wide variety of cart sizes. These customers will, as SFD and MFD customers, have the opportunity to purchase a food waste bin through CWS to help boost diversion from office kitchens and other City locations. CWS will work with the City customers to right-size their collection services, and will identify City-operated institutional kitchens and commissaries where a separate food waste service may be provided. These separate food waste services will be operated in a similar fashion as those for CWS' commercial customers.

In the organic materials containers, customers can place all organic materials generated in and around their home or business, unbagged. Some common food materials that CWS will accept include raw or cooked vegetable, fruit, grain, fish, and other items, including meat, bones, dairy products, cooking fats,



oil or kitchen grease; paper, cardboard, and other compostable items that have been contaminated with food, cooking fats, oil or kitchen grease; compostable paper or plastics associated with food preparation or consumption such as paper towels, paper plates, paper cups, and tissue.

If its customers generate more organic materials than can fit in the cart, or items that are of too large a size to fit (including bundled branches and unpainted/untreated wood), CWS will also collect materials in paper gardening bags, in bundles, or in another container. CWS understands that maximizing diversion of organic materials is of the utmost importance, and will strive to collect anything that is set out. Outreach and education efforts will clearly communicate proper setout methods, and dissuade use of plastic bags.

Each year after the winter holidays, CWS will offer customers a holiday tree collection service, which will run for approximately three weeks, accepting clean trees that it will transport to its Oakland Gateway Facility for processing, at no additional cost to customers.

As a result of its organic materials processing at the Oakland Gateway Facility and subsequent partnership with EBMUD and the Napa composting facility, much of the City's organic materials will be converted into a high-quality compost product. CWS will work with the City and its customers to offer some of this compost for free, at community give-back events.

Although CWS currently plans to bring organic wastes for composting outside the City, CWS is interested to work with the City to investigate the opportunity of building a dry anaerobic digestion facility in Oakland. There, materials would be loaded into an enclosed chamber where materials would decompose, producing high-quality compost and biogas that could be utilized to offset fossil-fuel use in the City.

Education and outreach are instrumental to promotion of organics and food waste collection programs. The types of materials that can be included in the cart, the proper way to store materials, and the benefits of participation are all areas where messages to customers need to be clear and outreach is needed to support communication. For each of the City's five collection zones, on each day, CWS will devote at least one part-time employee devoted to food waste collection program outreach.

#### **Other Services**

In addition to regular weekly mixed materials and organic waste collection programs, CWS will offer Oakland customers a number of other opportunities for waste collection and diversion, including:

##### ***Bulky Goods Collection***

CWS will collect bulky items from its customers, including stoves, refrigerators, water heaters, washing machines, clothes dryers, small air conditioning units, appliances containing Freon, furniture, carpets, tires, wood, tires, mattresses, and other bulky items that cannot fit into the customer's mixed materials container. Each SFD and MFD customer will receive one (1) bulky collection each year, which they can schedule by visiting the CWS website or calling the customer call center, where they will be informed about what type and how many items can be setout for collection. Beyond that collection, residents can request additional collections, for a fee.

CWS will bring all collected bulky items to its Interim Processing and Transfer Facility (and in the future to the Oakland Gateway Facility), where they will be sorted and diverted to reuse (for working appliances,



usable wood, and other products), recycling and additional handling (for recyclable materials and items requiring specialty management, including items which have Freon and other refrigerants), and disposal.

CWS recognizes that when multi-family residents are in need of bulky pickup service, their only option is often to schedule appointments through property managers, a process that can be burdensome for both tenants and property owners. The City expressed and understands that the bulky program is not widely used and it has not stopped the problem of illegal dumping which that program sought to solve. CWS proposes providing easier access to bulky pick-up to all multi-family residents (in addition to the property owner and manager) and believes that this enhancement can meaningfully reduce illegal dumping in Oakland.

CWS proposes to provide convenient, accessible curbside bulky waste pickup for all Oakland residents, including tenants residing in multifamily buildings. CWS' collection programs for multifamily buildings include:

- Each MFD customer will receive one (1) bulky collection each year, which they can schedule by visiting the CWS facility, website, or calling the customer call center. They will be informed about what type and how many items can be set out for collection. Beyond that collection, residents can request additional collections for a fee.
- MFD complexes have the option to order a debris box to service the whole complex.
- CWS will collect bulky items from its customers, including stoves, refrigerators, water heaters, washing machines, clothes dryers, small air conditioning units, appliances containing Freon, furniture, carpets, tires, wood, tires, mattresses, and other bulky items that cannot fit into the customer's mixed materials container.
  - CWS will bring all collected bulky items to its material recovery and transfer facility, where they will be sorted and diverted to reuse (for working appliances, usable wood, and other products), recycling and additional handling (for recyclable materials and items requiring specialty management, including items which have Freon and other refrigerants), and disposal.
- CWS will publicize its bulky collection services to MFD residents through several media and communications strategies.
  - CWS will utilize its high-quality website with an abundance of information on the new collection services, and other opportunities to support Zero Waste goals through changes in habits. The website will be fully accessible to those using assistive technology and mobile devices, and critical information will be available in English, Spanish, Chinese, and Vietnamese.
  - In CWS' introductory mailer to MFD customers notifying them of the new collection service and container options will provide information about connecting residents with bulky pickup services.
  - When a large MFD property manager schedules their free annual collection, CWS staff will inquire about how residents will be notified and offer signage for property managers to place by bins and cart enclosures that clearly communicates to MFD residents how they can access bulky pickup services.

Diversion and recycling achievements for the MFD bulky goods collection program will be included in monthly diversion reports to the City of Oakland.

Any surplus funds from underutilized Bulky Services will be rolled into CWS' program for illegal dumping. CWS will dedicate equipment and drivers to promptly identify, report, and collect illegally dumped

materials. An important feature of this CWS program is that all CWS employees will report illegal dumping to the CWS dispatcher. The prompt reporting translates into prompt collection and reduced risk of that spot becoming a habitual dumping area. CWS has observed that areas that are neglected and have a higher probability to become habitual dumping spots, and areas where there is prompt collection have a lower probability. The cost to MFD units to provide bulky waste pickup services, and to support CWS' aggressive illegal dumping abatement program is \$6.67 per unit.

### ***"On-Sight" – CWS' Proactive Illegal Dumping Collection Program***

In FY 2012-2013, City Public Works received 17,624 reports of illegal dumping, causing Public Works to spend hundreds of thousands of dollars on illegal dumping removal annually.

CWS proposes a quick action team comprised of four staff members and two collection vehicles that promptly collects illegal dumped materials "on sight" from public property, and helps report dumping on private commercial property. We will operate in areas of the city with the highest historic record of illegal dumping and our team will patrol areas during a variety of times and routes. CWS collection trucks will be configured with GPS navigation, 360-degree camera, and lighting systems for nighttime operations.

The intent of the CWS On-Sight collection program is to reduce and end illegal dumping in Oakland by changing the behavior of the illegal dumpers. On-Sight can help prevent a property or street from attracting continuous illegal dumping by promptly picking-up illegally dumped materials as soon as they are spotted.

CWS listened and understood the expressed concern from City Council that the Bulky Service program is underutilized by residents and unsuccessful at stopping illegal dumping. CWS knows that much of the illegal dumping in its own west Oakland neighborhoods is perpetrated by people from outside the neighborhood and mainly by people from outside of Oakland.

CWS will continue its proposal for the optional Bulky Goods collection program, and it proposes complementing that Bulky program by applying the unused Bulky program funds toward CWS illegal dumping program. CWS' On-Sight program includes the following important features:



The On-Sight program expansion, refinement, or reduction, is selected by the City and is based on CWS' reported results and achievement. The City and CWS will be proud when we are able to discontinue the illegal dumping pick-ups because we were successful at ending that illegal dumping.

***Temporary Roll-Off Box Collection Service***

All of the City's customers are able to request a temporary roll-off box, for an additional fee for all but City locations. CWS will work with customers to ensure that scheduling and container sizes are best suited to meet the customer's needs.

***Commercial Special Events and City Events Collection Services***

Throughout the City each year, CWS will provide collection of all mixed waste, recyclables, and organic materials at commercial special community events, for an additional fee. For each special event, CWS will set up containers the day before the event, and collect them the day following the event.

At the request of the City, CWS will also provide the City will temporary carts and roll-off boxes, and collection services for mixed waste, recyclables, and/or organic materials for City sponsored events, including for City Adopt-a-Spot beautification events.

***Street Litter Container Service***

CWS will provide daily collection services for mixed materials in street litter containers throughout the City.

***Other Delivered Materials and Emergency Services***

Over the course of each year, CWS will accept additional City Generated and Hauled materials, as outlined in the RFP, not counting source separated divertible materials toward the tonnage limit. In the case of an emergency event, CWS will also, at the City's request provide emergency collection, processing, and materials transportation services.

***Self-Haul***

CWS recognizes that residents, contractors, and other individuals or companies may generate materials that they choose not to have collected by the MM&O contractor. CWS, at its new Oakland Gateway Facility, will have scheduled "Self-Haul" opportunities, so these materials can remain in Oakland, and diversion of recyclables and other materials processed from this stream can county toward the City's diversion goals.

***5.2.4. Commercial Recycling Collection and Processing Services***

CWS proposes to provide recycling collection and processing to Oakland's commercial establishments, as it currently performs these services for many businesses and commercial customers throughout the City. CWS has considerable experience collecting and processing commercial recyclables in the Bay Area, has developed a quality management team, selected the highest quality vendors, and further supplemented internal resources with knowledgeable industry professionals who have specialized expertise in commercial collection and recyclables processing.

CWS will offer and provide source separated recycling services to all commercial customers in the City as part of its merchant collection and processing operations, whether or not designated by the City. CWS believes that this expanded source separated recycling program will enhance the City's diversion of

recyclable materials because CWS has demonstrated unique ability to motivate commercial customers to initiate and sustain such programs through excellent education and support. These programs include:

- Programs and presentations appealing to specific customers
- Education and training in multiple languages
- Analysis of opportunity by recycling
- Reporting of progress from recycling
- Continual communication and support
- Demonstrated value for effort exerted

From day one of the commercial non-exclusive franchise agreement, CWS will deploy the group of new state-of-the-art, front-end loader, side loader, rear loader, and roll-off fleet to provide maximum flexibility in the Commercial Collection program. As with residential and City recyclables collection, all vehicles will be equipped with GPS and on board communications equipment. The greatest level of emissions reduction will be provided with a new, state-of-the-art, highly efficient CNG- powered collection fleet. CWS will purchase new containers that eliminate storm water runoff to meet the highest environmental standards.

Currently as a leading commercial service provider in Oakland, CWS is well-experienced working with businesses in the city, and will continue to provide as many service options alongside commercial education programs as feasible. CWS will minimize transition issues by communicating and negotiating with other contractors currently serving the City to ensure service interruptions do not occur, and businesses receive consistent and improved service moving forward.

The CWS Team will work hand in hand with the City of Oakland to develop and execute Commercial Education and Outreach programs. CWS will meet with the City, business customers, and other interested participants to initiate a highly advanced commercial recycling system. CWS will provide follow-up service and communications to identify any underperforming areas of the program in terms of recycling, and to determine how best to address customer focused education programs.

### ***Advantages of CWS Commercial Service***

The CWS Team has the will, desire, and necessary experience and resources to provide the highest quality services to the commercial customers in Oakland. CWS companies and personnel have a proven reputation as “recyclers”, and CWS is in the best position of all competing companies to enhance the recycling programs for commercial establishments within the City of Oakland. In the final analysis, the ultimate success of the commercial franchise will confirm that CWS is clearly the best choice based on our demonstrated customer satisfaction in the collection, processing, and marketing of commercial recyclable materials. CWS has prepared for this opportunity by securing employees who have gained commercial recycling operating experience in the City of Oakland.

### ***Containers***

The quantities of containers proposed in Section 5.2.2 may be modified by actual commercial customer usage (counts).

Service levels will include 20, 32, 64, and 96 gallon wheeled cart containers; 1, 1.5, 2, 3, 4, 6, and 7-yard metal dumpsters, 14, 20, 30, and 40-yard roll-off boxes; and compactors 1, 1.5, 2, 3, 4, 20, 30, and 40-yards in volume.

**Table 5.2.4-1 Commercial Collection Service Type and Service Levels**

	Cart Volume (gallons)	Metal Dumpsters (cubic yards)	Compactor Volume (cubic yards)	Roll-Off Volume (cubic yards)
Commercial Recycling Services	20, 32, 64, 96	1, 1.5, 2, 3, 4, 6, and 7	1, 1.5, 2, 3, 4, 20, 30, and 40	14, 20, 30, and 40

Since commercial customer usage is dependent on specific needs, companies that aggressively recycle may only need or want containers of a different type or size than other companies of similar size. CWS will work with each customer individually to determine how to best meet recycling service needs. As with SFD, MFD, and City services, CWS will work directly with customers to “right size” collection service needs by conducting surveys and providing recommendations. The effort by CWS will:

- Optimize collection services and expense required by each customer
- Maximize solid waste diversion and recycling
- Conserve collecting and processing resources

CWS is committed to working with commercial customers by assisting them to make the correct choice of container types and size, with emphasis on increasing diversion. This work will be supported by all levels of the CWS Oakland Commercial Collection team, from the drivers to customer service to commercial recycling coordinators. For example, a driver may notice that a businesses’ recycling or organic container contains unacceptable materials (contamination). The driver will make a note in the customer account tracking system (Alpine OnRoute) and the occurrence will be sent to our customer service personnel and recycling coordinators. A subsequent phone call and site visit by CWS if necessary will be made to talk to the business owner and provide technical assistance to mitigate the problem.

### ***Operations Plan***

Commercial routes will be carefully planned so that collection drivers follow assigned routes designed to optimize time in the field, personal safety, and responsiveness to customer needs and concerns.

The numbers of commercial cart, bin, compactor and roll-off box stops per route depend on the location of that route within the City, street geometry, car parking, geography, and distance to the processing or disposal facility. Collection methods may be different at each stop, a circumstance that will be factored into each day’s route and customer service load. Based on future time and motion studies routing studies to be implemented by CWS prior to program roll-out transition, smaller bins (1- to 2-yards) may take slightly longer to service due to their smaller size, low profile, and tendency to be overloaded compared to 3- to 4-yard containers, which are typically located in such a position that the CWS driver can directly access the larger bins and lift and load them more efficiently. While the average time to lift and empty a bin can be as little as 26 seconds, the range of time per commercial stop can range from under a minute to 3-5 minutes, depending on customer access conditions. We will continue to review local commercial benchmark standards in other large Bay Area cities as route planning is performed for the City.

In general, each commercial collection vehicle, whether front loader or roll-off truck, will be operated by one (1) FTE employee driver. Specific routes with difficult access may have a helper with the driver to get out of the truck cab and move a cart or bin into position for more efficient use of time and motion. In all commercial collections, the CWS driver ensures the lid of the cart/bin is closed before leaving the area, and will clean up any litter as a result of the collection activity.

CWS will utilize its FleetMind GPS system for each vehicle, recording driver, route, and collection service data, and respond to on-route disruptions and additional service requests originating from CWS offices, ensuring operational connectivity.

For roll-off box and compactor commercial routes, special collection conditions such as nearby parked cars, narrow public parking areas, and alleyways may occur which require modified approaches to efficiently pick up roll-off box/compactor containers. At commercial stops, a driver may be required to conduct a 3-point turn within a public parking area to maneuver the truck for the best position on the egress side of the street. Due to the nature of drop box collection, a collection vehicle may need to back into a street or public parking area to align pick up of the drop box and position the container for collection.

Cart containers (32, 64, and 96 gallons in volume) will be emptied into new McNeilus, Side-Loader® vehicles with 31-cubic yard volume bodies on an Autocar cab and chassis. These vehicles will service cart and bin recycling containers including compactors up to 8 cubic yards in volume.

Roll-off and compactor containers (10, 14, 20, 30, and 40 yards in volume) will be serviced by three-axle, Norcal brand roll-off trucks. They will service all roll-off container types including solid waste, recycling and organic materials boxes.

As needed, CWS will review the adequacy of container enclosure spaces, noise restrictions and limited accessibility to containers for CWS collection vehicles. A service questionnaire will be provided to commercial customers prior to service initiation to help determine service levels, special requirements and customer training needs. If warranted, a CWS customer service visit by will be conducted. CWS will also provide annual customer satisfaction surveys.

This survey will ascertain the following:

- Adequacy of container enclosure space for the anticipated volume and type of materials.
- Accessibility of the container enclosure space to provide safe and efficient service.
- Noise impacts and experience

### ***5.2.5. Facilities***

#### ***5.2.5.1. 10th St. Maintenance Facility***

CWS will continue to utilize its fully equipped facilities and yard at 1819 10th Street, Oakland, to support equipment maintenance and repair for the new collection fleet, as well as other activities. This facility is currently the maintenance location for our Oakland residential and commercial vehicles and is capable of providing all maintenance requirements of the new vehicles. It accommodates the following:

- Truck maintenance and repair
- Container maintenance and repair



- Vehicle cleaning
- Container cleaning
- Vehicle fueling
- Truck yard
- Dispatch, driver training, and routing
- Large and bulky item recycling
- Household Hazardous Waste and Sharps transfer to processors

Cart painting will be contracted out to a local Oakland company that is properly permitted for this service.

#### ***5.2.5.2. Interim Processing and Transfer Facility***

For the first three (3) to five (5) years of Service Group 1 operations, CWS will receive, process, and transfer mixed material and organics at an interim material recovery and transfer station located on approximately 3.8 acres of land leased from EBMUD located immediately adjacent to the proposed North Gateway Facility described in CWS's original proposal. A site plan of the proposed interim facility is shown in Figure 5.2.5.2-1.

##### **Facility Description**

The facility will process and transfer approximately 660 tons per day of mixed material and 90 tons per day of organic material. It has been designed to safely and efficiently receive process and transfer mixed material and organic material collected and delivered by CWS as part of the City of Oakland's Zero Waste Service program. The facility will consist of the following components:

*Main Building Area* – The proposed interim transfer station would be a newly constructed clear span galvanized steel frame building overlaid with a polyethylene tension fabric. The 69,000 square foot main building will be constructed using steel frames with fabric sidewalls and roof. This type of building has been successfully used in solid waste/recycling applications in California, and the structure technology has been used and refined for decades. The structure and foundation are each design engineered to the specific purpose. The use of this technology will substantially reduce construction time. The structure will be weather tight with no screw or nails penetrating the roof fabric. The fabric can be ordered in various levels of translucency for sustainable energy efficient natural lighting. (See Attachment 5 - Brochure for Interim Transfer Station Building Structure)

The building will be made up of the following operational and staff areas:

*Material receiving, tipping, pre-processing and transfer area.* This is where all material is received, pre-processed and floor separated for delivery by loaders to the organic material and the mixed material areas of the building. From here, material is also directed to the sort line for recovery of recyclable material for beneficial use.

Adjacent to the receiving area are the load out area for organics and non-recyclable material, which includes push walls, and three (3) load out bays for loading non-recyclables and organic material into transfer trucks.

*Sort line area.* Selected mixed and organic material will be directed and loaded into the in-feed of the sort line equipment for manual and mechanical separation of recyclable material for

beneficial use. Non-recyclable material from the sort line area is directed to the load out area for transfer.

*Scale and scale house.* Located on the south-west end of the facility is a single scale and a scale house for the weighing in bound trucks. The scale house will utilize a scale system that will be integrated with the facilities data management system to ensure accurate weights of incoming material and weights of recyclable material and organics going to market or non-recyclable material going to the landfill.

*Employee and Administration Area.* Located on the northeast end of the property is a 1,500 square foot employee and administrative staff area that will consist of an office area and locker areas for on-site workers.

*Parking.* Employee parking will be provided as indicated on the site plan. Collection vehicles and transfer trucks will be parked at other locations at night.

### **Operational Description for Material Receipt and Management**

Presented below is an operational description for the receipt and management of material that will occur at the Facility. Additional detail regarding the functional aspects of the building areas will also be provided. Specific operation description regarding the sorting and recovery of recyclable material using processing equipment is included in the following section of the proposal. The Facility will implement a comprehensive traffic management plan to provide for efficient and safe vehicle movement throughout the Facility.

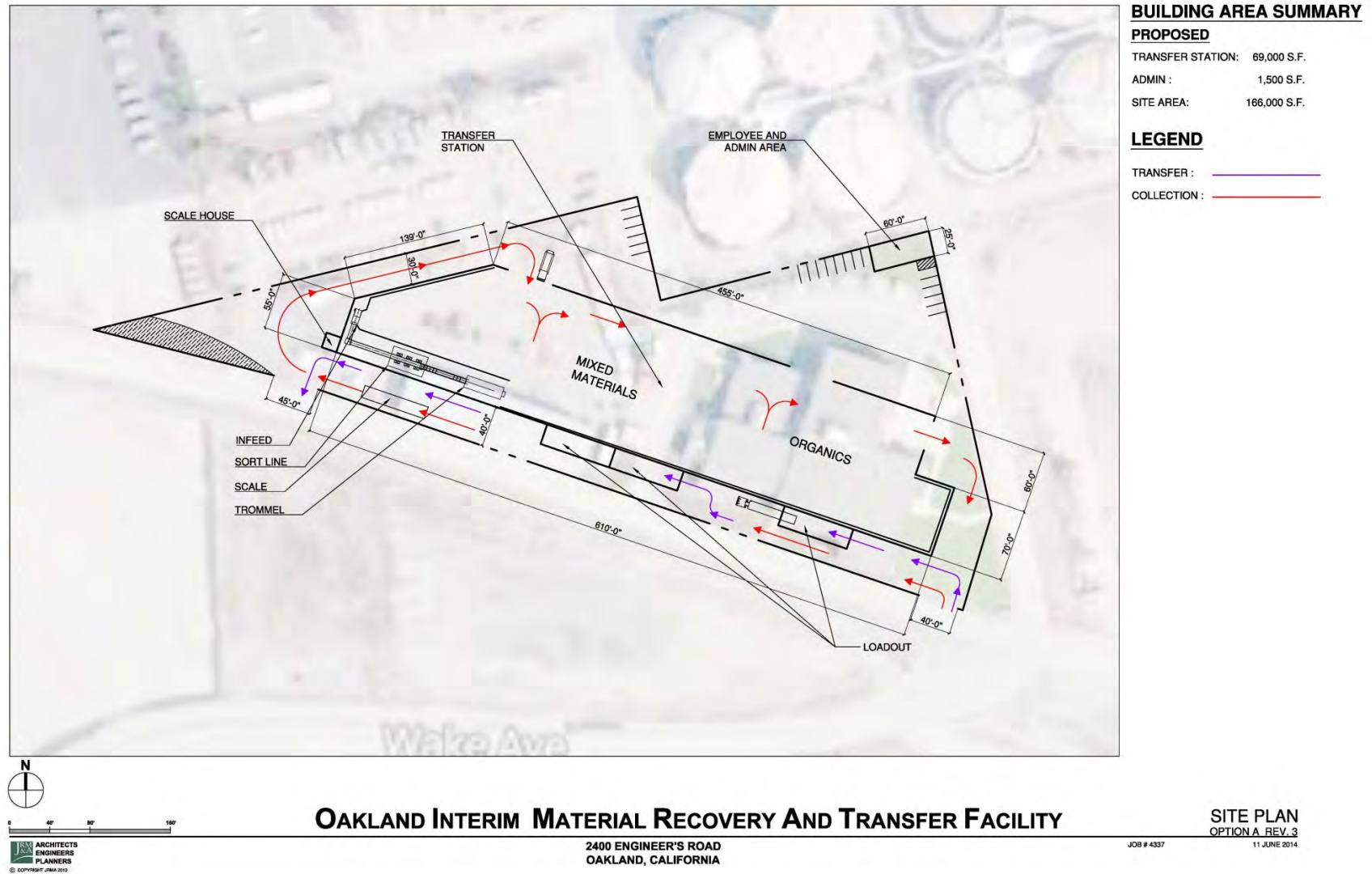
*Material Receipt and Management* – Collection trucks coming in from their routes to deliver material to the facility will enter the site from Engineer Road at Wake Avenue on the southeast side of the site. The trucks will proceed to the in-bound scales that are serviced by a scale house equipped with state of the art programs for weight data management. Here customer and truck information is requested and entered into the data management system prior to the trucks being weighed. After weighing in and recording of the gross truck weight, the truck is directed to proceed to the receiving area located on the North West side of the main building. When safe and directed by a traffic management spotter (“spotter”), the trucks will turn into the building through the overhead roll-up door. Based on the type of material contained in the collection trucks, they will be directed to specific areas of the receiving area for off-loading and management of materials. When completely inside the building, the truck will unload its material and then pull forward to clean any residual material from the truck. Once clean and directed by a spotter, the truck will proceed to the east and exit the building. The truck will then exit the facility at Engineer Road and Wake Avenue.

Selected material will be delivered to the sort line for the removal of recyclable material with any non-recyclable material being delivered to the load out area for transfer to the landfill. Recyclable material will be loaded onto trucks for delivery to market. Organic material will be loaded on trucks and delivered to EBMUD or to the composting facility.

All material not processed on the sort line will be delivered directly to the load out area for loading onto trucks for delivery to a compost facility or to the landfill.

## 5. TECHNICAL PROPOSAL

Figure 5.2.5.2-1 Interim Processing and Transfer Facility Layout



Both CWS and EBMUD staff are confident that permitting for the interim processing and transfer facility will be accomplished in time for completion of the interim processing and transfer facility before July 1, 2015. Construction of the facility will require less than five months. EBMUD contemplates completing demolition in accordance with existing environmental documents in advance of completion of permitting for the facility – so the site will be “shovel ready” upon the issuance of permits for construction.

**Table 5.2.5.2-1 Schedule for Interim Facility**

TASK	COMPLETION DATE
Receive Certification of CEQA Compliance from EBMUD	August 1, 2014
Receive Building Permit from Port of Oakland	November 7, 2014
Facility Included in County Wide Siting Element	August 15, 2014
Solid Waste Facility Permit	January 30, 2015
Detailed Design	November 14, 2014
Demolition of Existing Buildings	December 12, 2014
Purchase and Fabricate Building	November 28, 2014
Building Permits from City of Oakland	January 2, 2015
Construction	May 22, 2015
Facility Start-up	June 26, 2015

In addition to receiving certification of CEQA compliance from the EBMUD, the project will also need to apply for and receive the following approvals and permits:

- Building Permit from Port of Oakland
- Inclusion into the Countywide Non-disposal Facility Siting Element – Alameda County Solid Waste Task Force
- Solid Waste Facility Permit – Alameda County Environmental Health/Cal Recycle
- Building/Fire Department Permit – City of Oakland
- Electrical Permit – City of Oakland
- Plumbing Permit – City of Oakland
- Mechanical Permit – City of Oakland
- Industrial Waste Discharge Permit – City of Oakland
- Storm Water Discharge/Water Quality Management Plan – San Francisco Bay RWQCB

### ***5.2.5.3. Oakland Gateway Facility***

To best serve the customers in the City of Oakland, CWS will develop, build, and operate the Oakland Gateway Facility at the port of Oakland. The Oakland Gateway Facility enables CWS to increase the amount of material it can process and the number of Oakland citizens employed by the company. The Oakland Gateway Facility will be CWS’ fourth commercial enterprise in Oakland, and will enable CWS to consolidate operations from its two West Oakland MRFs. The Oakland Gateway Facility is located on Engineer Road, at the North Gateway of the former Oakland Army Base.

The Facility has been designed to safely and efficiently receive, process, and transfer the full complement of materials identified in the City of Oakland’s Request for Proposals for Zero Waste Services including, Mixed Materials and Organics Collection Services (Service Group 1) and Residential Recycling Collection Services (Service Group 2). The Facility will have sufficient capacity to process additional material collected by CWS from the greater East Bay area. The Facility includes administrative office space,

employee and staff areas, a recyclable material shipping area, parking and all facilities needed to support recyclable, organics and mixed material collection operations.

CWS will equip the Oakland Gateway Facility with state-of-the-art mixed waste and recycling processing and transfer equipment. This facility will receive and process a greater amount of materials from Oakland, as well as the western United States. Importantly for Oakland, this facility will ensure maximum solid waste diversion and recovery of recyclable materials from single family, multi family, commercial, city, construction and demolition, and organic wastes within Oakland. The Oakland Gateway Facility will be an Oakland business that caters to Oakland and Oakland residents. Additionally, this facility is strategically located next to the Port of Oakland, and close to downtown. This strategic location advantageously positions CWS for major export of finished product to global markets; a benefit that helps to position Oakland as a business hub for the growing recyclable material processing, marketing and logistics industry.

*The Gateway Facility would be "OAKLAND'S RECYCLING FACILITY"*

The CWS Oakland Gateway Facility has been designed to maximize the advantages of its high visibility location. While the overall site design is focused on efficient vehicular movement, public safety and material processing and transfer, the architectural treatment has been carefully applied to create a visually stunning exterior that highlights the many "green" features of the project. The elevated portions of Interstate 80, 880, West Grand Avenue, and the Bay Bridge connector ramps all form a triangular vista with great viewpoints of the site. With this in mind, conscientious attention to detail has been given to the first, and the lasting impression, the facility will have on the passing public. We see the architecture of the facility as an opportunity to send a message of environmental leadership from the City of Oakland and our shared Zero Waste Vision.

The artistic renderings in Figure 5.2.5.3-3 show the contemporary style of the building and the careful placement of the "Oakland Recycles" message and logo that will be in view from just about any travelers' direction or route past the facility. Using computer aided three-dimensional modeling, the facility has been virtually "viewed" from a variety of perspectives to simulate, and ensure, a positive perspective of the project from the various possible vantage points surrounding the project site.

Every aspect of the project design has taken into consideration the criteria needed to accommodate a Leadership in Energy and Environmental Design ("LEED") certification at a Silver or possibly higher level. A partial list of the environmental features for the facility includes:

- Extensive roof-top and structure mounted photovoltaic solar panels
- Recycled content building materials
- Skylights & translucent building panels for increased natural lighting
- CNG fueling stations for all collection vehicles
- Two Wind turbines - vertical axis for quiet & more bird-friendly operation capable of generating approximately 10 kilowatts each
- Living green roof features
- Bio retention tree planters
- Rain water collection and storage for landscape irrigation
- Environmental education center
- Collection truck parking under photovoltaic shade canopies



In addition to LEED features, the plan incorporates design features such as raised building panels, variable roof heights, selective glass window placements, visual screening, architectural awnings and distinctive color schemes to create a visually interesting and attractive project. The two-story office section sits one story above ground level to maximize visitor and employee parking space. It incorporates a staggered floor plan design with living green roof and awning structures along with an outdoor patio with attractive landscaping. The overall site landscaping includes green belts around the project and incorporates bioswales for storm water management.

Our intent is to build a facility that is functionally efficient and takes full advantage of our prominent location to create an iconic symbol and daily reminder of the City of Oakland, and California Waste Solutions' shared commitment to environmental.

The site is bound on the North/Northeast by the East Bay Municipal Utility District ("EBMUD") wastewater treatment facility, on the south by Grand Avenue and the eastern approach of the Oakland – San Francisco Bay Bridge, on the east by Route 880 and the west by realigned Wake Avenue.

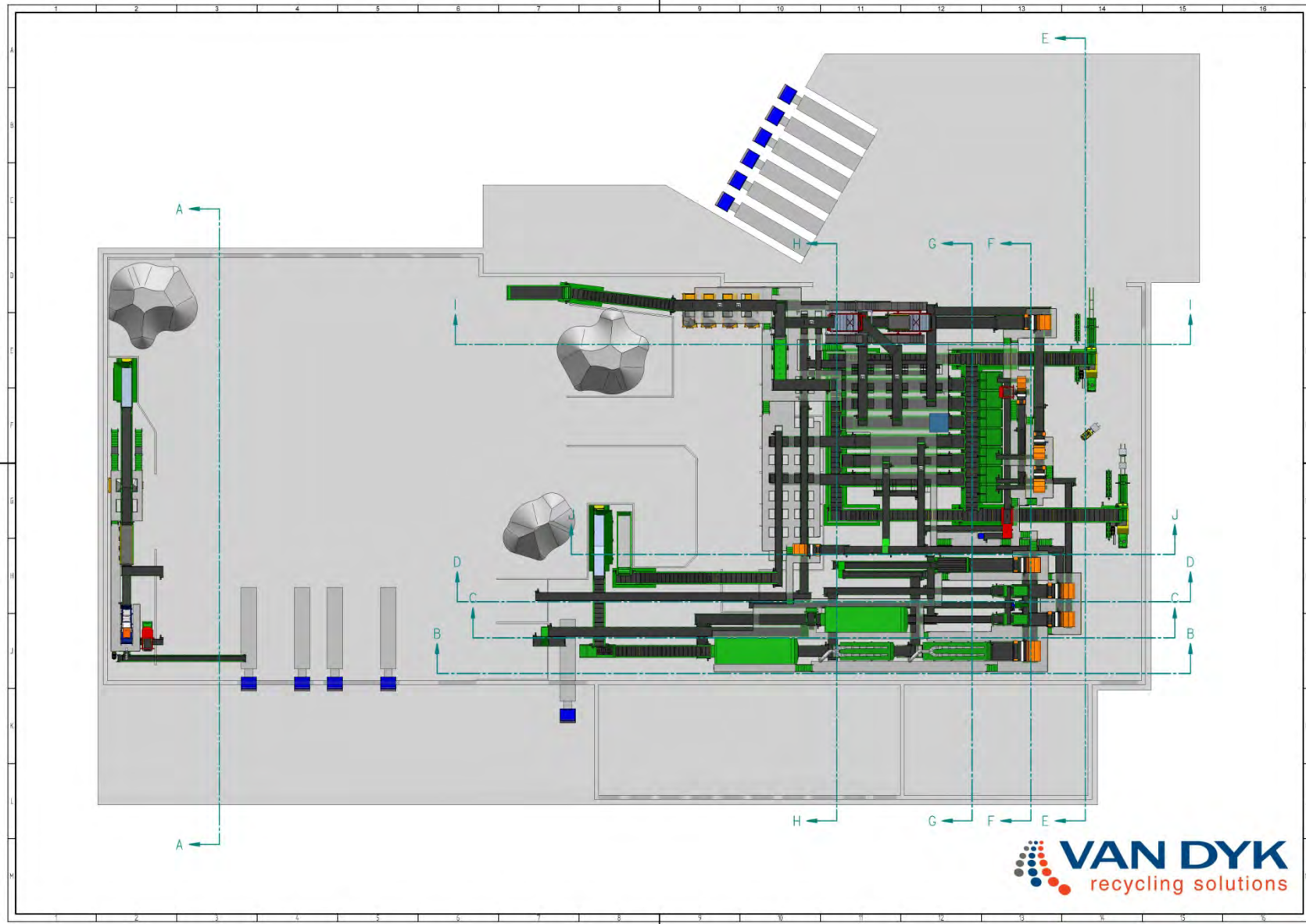
**Office Area** – The 18,300 square foot administrative office area will consist of: a lobby and entrance area; a call center for servicing the City of Oakland and additional collection services offered by CWS; staff and management office space; and an education center with an observation area for viewing the facility operations. The administrative office will be located on the west side of the Facility and have parking for visitors and some office staff. Additional parking may be provided off site with shuttle service provided to the facility.

**Main Building Area** – The 165,585 square foot main building is made up of the following:

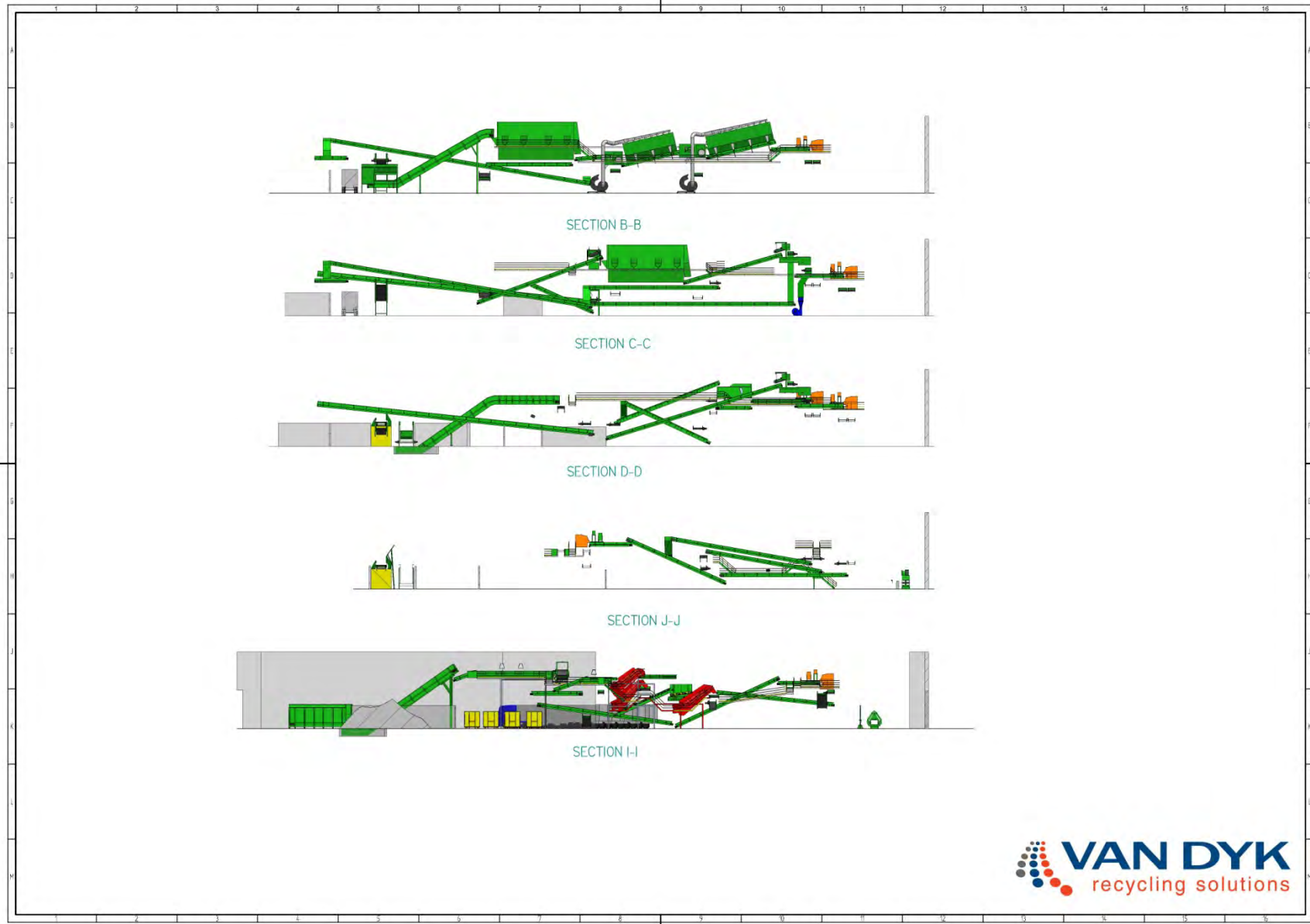
- Material receiving, tipping, pre-processing and transfer area ("Receiving Area") (50,625 sq. ft.). This is where all material is received, pre-processed and floor separated for delivery by loaders to the appropriate organics, residential recycling or mixed material recycling area for recyclable material and organics recovery. This area includes the loadout area for organics and non-recyclable material and includes push walls and pedestals to elevate excavators for loading into transfer trucks. Bulky item receipt and storage will also occur within this area.
- Organics processing area (sq. footage included in above). Area includes equipment designed to process and recycle organic materials from residential and commercial recycling and single family mixed material streams discussed in the material processing section of the proposal.
- Material Recovery Facility ("MRF") staff area (4,500 sq. ft.). This area consists of a break room and male and female bathrooms, showers and locker rooms to support employees working in the receiving, MRF and Bale Storage areas.
- MRF area (68,000 sq. ft.). This area provides space for the temporary storage of material and three of the four material diversion and recovery processing systems. These include the Mixed Material Processing System, the Single-stream Residential recyclable material Processing System and the Bulky Item, Compactor and Debris Bin mixed Material Processing System. Each of these systems is discussed in additional detail in the subsequent sections of this proposal.
- Bale Storage and Loadout Area (23,000 sq. ft.). This area is adjacent to the processing systems described above and will be used to store baled recovered material in preparation for loading into containers for shipment to market for beneficial reuse.
- Zero Waste Observation and Education area (3,860 sq. ft.). This area, located above the MRF staff area, will allow viewing of MRF operations and features a public education center. Access to this area will be provided from the third story of the office area through an elevated walkway on the north side of the main building and from the MRF staff area below.



## 5. TECHNICAL PROPOSAL



## 5. TECHNICAL PROPOSAL



- Maintenance, dispatch and staff area for truck operations (15,600 sq. ft.). This area will be used to maintain collection trucks and provide space for truck dispatch and driver and maintenance staff. The maintenance area will have all necessary equipment, lube and oil systems, air compression systems and parts needed for maintaining collection trucks. A second story mezzanine will also be developed for parts storage and other support needs.
- Photovoltaic solar panels will be installed on the roof of the main building to generate approximately 80 to 90 kilowatts of electricity for on-site consumption.

***Collection Truck Parking Area*** – The collection truck parking area located on the east end of the main building will have sufficient parking for approximately 150 trucks, the estimated number required to service both the mixed material and organics and residential recycling franchises. Also installed in this area will be a CNG compressor and slow fill fueling system to fuel trucks while parked. Photovoltaic solar shade structures have also been incorporated into the design of the collection truck parking area. These panels installed above the truck parking area will generate approximately 50 to 60 kilowatts of electricity.

***Scales and Scale Houses*** – Two in-bound scales and one scale house are located on the east end of the Facility for the weighing in of trucks and one out-bound scale and one scale house on the north west end of the facility for weighing trucks before they exit the site. These scale systems will be connected to each other and the facilities data management system to ensure accurate weights of incoming material and outgoing recyclable material and organics going to market or non-recyclable material going to the landfill.

***Rail Spur*** – A rail spur may be install on the north side of the Facility for receipt of incoming material for processing and transport of recyclable material to market.

***Site Ingress, Egress and Road Infrastructure*** – Trucks using the Facility will enter from Wake Avenue on the south side of the office and main building. Exiting trucks will use the exit at this same point on Wake or will use the Wake exit on the north side of the office and main building. Visitors and employees using the office will use the driveways from Wake directly in front of the office for ingress and egress. MRF and collection employees will enter the site using the south Wake entrance by way of car or shuttle. Car parking for employees and vendors is provided on the north east side of the main building. Necessary gates, clearances and security will be in place at the entrance and exits to the Facility for safety and protection of the site.

Personal vehicles, collection trucks, recyclable trucks and transfer trucks have complete access to the Facility by way of a road system that encircles the south, east and north side of the main building. The Facility has been designed to accommodate the various truck types and includes a traffic plan to provide efficient, safe movement of trucks and vehicles throughout the site.

***Facility Utilities*** – All necessary water, sewer, natural gas, electrical and phone service will be brought into the site from Wake Avenue or closest source possible. Electrical power supply will be fed to primary transformers and then distributed throughout the Facility for yard and building lighting and general power supply and for equipment used to process material. A stand-by generator will be installed to support critical electrical equipment in case of a power outage.

***Building Overview and Architecture*** – The Facility's office and main building will be designed to provide a high quality professional office environment and an enclosure for the receipt and processing of material in an efficient manner while minimizing any impacts of the operation. Provided below is a description of proposed building construction for the office, staff areas and main building.

**Office, Dispatch and Staff Areas** – The office will be a three story, pre-engineered metal/steel structure constructed building that meets all building and fire protection codes. Floors of the building will be metal deck with concrete, walls will be metal framed with dry wall and ceiling will have acoustical panels. The office will incorporate sound and thermal proofing and push wall separation on the MRF side to minimize impacts from the operation. All office, bathroom and other interior improvements will be consistent with a high quality office design and setting. The office will have necessary stairs and elevators and access to all floors to meet ADA requirements. The office will also include conference and education facilities with viewing areas of the MRF operation for training and recycling education purposes. Further to this, the office will also be connected to the Zero Waste Observation and Education Center located above the MRF staff area by way of an elevated walkway and viewing gallery located on the north side of the main building.

**Education Center** – The CWS Oakland Gateway Facility design includes a 6,000 square foot education area that offers public meeting and classroom functionality and an enclosed and conditioned walkway and viewing area that allows safe overhead viewing of recyclables deliveries and the labor and machinery recycling separation equipment. The design and functionality will allow for ongoing promotion of public awareness and environmental consciousness in a hands-on setting. This setting provides guests a unique overhead view enabling the survey of all phases of material separation, recovery and solid waste diversion – from the receipt of materials to generation of product for recycling.

Teaching and resources will emphasize environmental stewardship, conservation and source-reduction. CWS will develop school curriculum that provides grade-appropriate, multi-media teaching lessons that may be used by Oakland schools. That curriculum will involve subjects including mathematics, history, science, and humanities. Teaching will coincide with field trips and lectures for Oakland students, residents, educators, entrepreneurs, community service groups and government guests.

Staff and dispatch areas will be constructed similar to the office and will meet all applicable building, ADA and fire protection codes. As with the office, staff and dispatch areas will utilize sound and thermal separation from the MRF operation including the use of masonry walls. The office, dispatch and staff areas will utilize full heating ventilation and conditioning systems.

**Receiving, MRF and Bale Storage Areas** – The main building consisting of the receiving, MRF and bale storage areas will be pre-engineered, metal/steel constructed building that meets all applicable building, fire and ADA code requirements. The Facility will incorporate steel columns spaced at 25 foot centers and will be clear span across all operational portions of the building. The design will incorporate metal siding with translucent panels to enhance lighting inside the building. The roof will be metal panel and incorporate translucent panels for lighting and smoke vents for fire protection purposes. The roof will also include induced draft ventilation fans to impart a negative pressure across the building through door openings and louvers installed in the side walls. The building will incorporate all necessary fire protection including fire proofing, sprinkler systems and fire extinguishers throughout the Facility. The Facility will also incorporate all necessary odor and dust control systems need to effectively manage on-site odors and dust that could be generated from the receipt and processing of materials.

The inside column height of the building will be approximately 35 feet tall to accommodate installation of processing equipment and Facility operations. The eave height of the building will be approximately forty feet with a ridge height of approximately 48 feet. A parapet will be installed at the edges of the building to approximately 50 feet for architectural affect and to provide a view shed for the ventilation fans on the roof.



## 5. TECHNICAL PROPOSAL

Electric overhead roll up doors will be installed throughout the building for ingress and egress of trucks into and out of the building, for transfer trailers used for the loading of organic and waste materials and for recyclable material trucks taking material to market for reuse. Additional doors will also be installed for maintenance, bin positioning and equipment access.

It is anticipated that building and floor foundations will be supported by driven piles with additional depth of foundation provided for certain pieces of processing equipment. Concrete push walls with steel reinforcement will be utilized in material receiving and storage areas to facilitate stock pile management and protection of the building.

In addition to light coming into the building through the translucent roof and side panels, light fixtures will be provided throughout the building to create an efficient and safe working environment.

CWS will have ample processing capacity for the City at the new Oakland Gateway Facility. On a contingency basis, CWS can also transfer materials through this facility. CWS' mission is to align the best possible processing system with the collection system and material stream for the purpose of maximizing solid waste diversion and productivity.

The location of the new Oakland Gateway Facility in Oakland is shown in Figure 5.2.5.3-1, the location of the facility on the North Gateway site is shown in Figure 5.2.5.3-2, and a rendering of the facility as designed by DEL is shown in Figure 5.2.5.3-3.

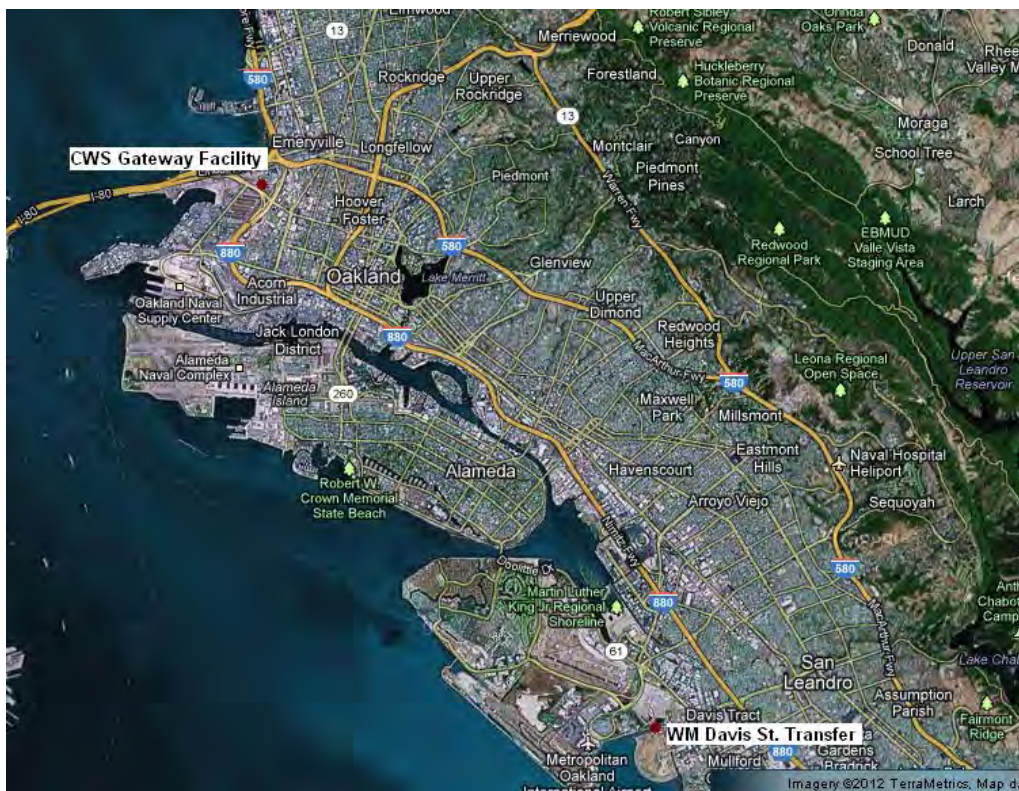
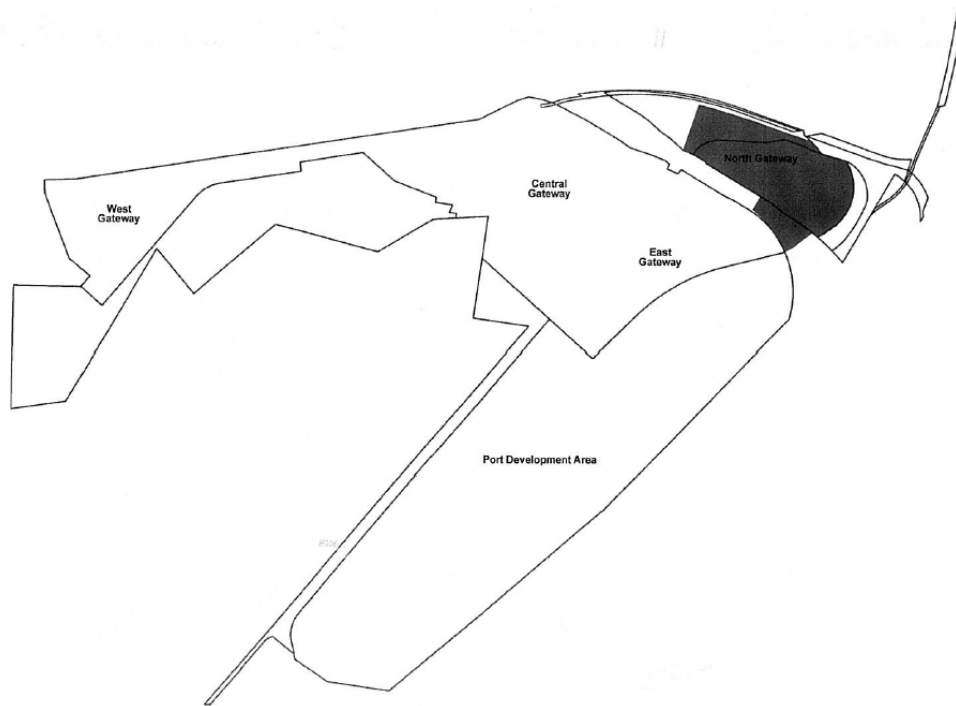


Figure 5.2.5.3-1 Gateway Location in Oakland



**Figure 5.2.5.3-2 Location of CWS Facility on North Gateway Site**



**Southwest View**





Northwest View



Street View

Figure 5.2.5.3-3 Oakland Gateway Facility Renderings

CWS' mission is to align the best possible processing system with the collection system and material stream to maximize solid waste diversion and productivity. CWS will have sufficient capacity to process materials collected from the entire City of Oakland at the new Oakland Gateway Facility. The new CWS Oakland Gateway Facility will be a state-of-the-art processing facility that incorporates proven and efficient systems and design, and will include:

- Volume reducers
- A mechanical screen
- Optical and computer aided screens
- Air and computerized screens
- Magnetic and eddy systems
- Conventional conveyors
- High capacity balers

CWS and Bollegraaf evaluated a variety of factors that resulted in the basic MRF design. These factors included:

- Solid waste system design
- Diversion goals for the City
- Volume and tons of inbound materials
- Market expectations and options for finished products



**Sorted Material Bales**

Required permit and operational entitlements have been confirmed and those components of the development process will be led by David Edwards and his firm of David Edwards, Inc., in partnership with J.R. Miller & Associates, both California-based firms. Both firms have great experience and accomplishment track records with facility planning and permitting in California combined with knowledge about the solid waste and recycling industry. Both firms have been assisting CWS with its development and permitting efforts to implement the new Oakland Gateway Facility.

### **Facility Development**

CWS' experience has proven that adherence to the above best practices result in the highest quality end product with the lowest contamination. Our experience retrofitting the site at the San José Timothy Drive MRF in 2002 and 2007 confirms that CWS has the resources and ability to successfully follow through with its plans. Since CWS differentiates itself as an excellent solid waste material processing company, our expertise in developing facility infrastructure and processing materials cost effectively and efficiently has long been a hallmark of our company. The timeline and projected schedule for the development of the Oakland Gateway Facility is dependent on timely CWS site acquisition progress with the City of Oakland and subsequent City-action dependent and other work of team firms, including DEI, JRMA, and Bollegraaf.

### ***Land Acquisition, Zone Change and Environmental Review***

CWS is in the process of purchasing the North Gateway property described in this proposal from the City of Oakland. Prior to entering into a purchase agreement, the City of Oakland prepared a master plan for the development of the property that formally made up the Oakland Army Base which was dedicated and is now owned by the City. As part of the development of the master plan, an



environmental review was conducted under the provisions of the California Environmental Quality Act and certified by the City of Oakland. As part of this review, the Facility, including its operation, was briefly described. To further entitle the North Gateway property and the Facility for its intended use, additional project specific environmental review will be conducted and certified by the City of Oakland. A general plan amendment and zone change will be performed on the property to provide consistency with the City's land use and zoning regulations.

#### ***Facility Operating Permits***

Concurrent with the environmental review process discussed above, CWS will work with the Alameda County's solid waste task force to process an application for inclusion of the Facility into the Countywide Non-disposal Facility Siting Element. This will identify the Facility as part of the County's overall waste management system which is necessary for the processing of a Solid Waste Facility Permit discussed below.

Following the purchase of property and environmental approvals from the City of Oakland and inclusion of the Facility into the Non-disposal Facility Siting Element, CWS will secure a Solid Waste Facility Permit (SWFP) jointly from the County of Alameda, Department of Environmental Health (LEA) and Cal Recycle for the operation of the Facility. This approval process will include the following activities:

- Preparation of a Transfer, Processing Report (TPR) that completely describes the physical features and all operational components of the Facility
- Meetings with the LEA and Cal Recycle to review the Facility and the permitting process that will be undertaken to receive a SWFP
- Completion and submittal of an application package that includes the above mentioned TPR
- The LEA will conduct an informational meeting to inform interested parties of the permitting process that will be followed for review and approval of the SWFP
- Following their initial review of the application package, the LEA will deem the application complete and write the SWFP
- After written, the LEA will forward the SWFP to Cal Recycle for their review and concurrence with the issuance of the permit

Following this review and concurrence by Cal Recycle, the LEA will issue the permit and assign the Facility a Solid Waste Facility Permit Number.

#### ***Design and Construction***

During the process of receiving its operating permits, CWS will complete the detailed design for the Facility including:

- Geotechnical investigations
- Utility studies and design
- Civil design
- Building design
- Structural design
- Mechanical design
- Electrical design
- Processing equipment design
- Preparation of construction specifications and bid packages

When complete the design package will be used to solicit proposals to local to the City of Oakland general contractors for the construction of the Facility. CWS's goal is to utilize, to the extent possible, local contractors and sub-contractors to provide economic benefits to the City of Oakland and Alameda County. The design plans will also be used to secure waste discharge, utility interconnection and facility building permits.

During this project time frame, CWS will also be working with its process equipment vendor to complete design and start fabrication of equipment. The equipment design information will be used to complete the design of Facility. The complete installation of the equipment will be performed by the equipment vendor in coordination with the general contractor.

The selected general contractor and its sub-contractors will use to design plans and specifications to complete the construction of the Facility. A brief list of construction components include:

- Site preparation and grading
- Installation of building slabs and foundations
- Building fabrication and installation
- Mechanical and electrical construction
- Coordination with the equipment vendor for the installation of process equipment
- Site paving and parking area preparation
- Site lighting and fencing
- Office and staff area improvements
- Installation of data, communication and security systems
- Landscaping
- Installation of "green" facility features

#### ***Facility Start-up and Operation***

As construction nears completion, the Facility will go through an extensive start-up and staff training program of each operational component to ensure that it is ready for the receipt and processing of the City of Oakland material. Once complete, the Facility will begin receiving small amounts of material to test and refine equipment processing and then gradually ramp up to full material throughput and continuous operation.

#### ***Schedule Summary***

The schedule for the Gateway facility will be dependent on the anticipated availability of the property to California Waste Solutions. Presented below are two schedules; one with the property acquisition date of June 30, 2015 and the second with an acquisition date of September 16, 2016, working through the property acquisition, permitting, construction and facility start-up phases of the project to be ready for continuous operation and receipt of the City of Oakland's material.

**Table 5.2.5.3-1 Projected Oakland Gateway Facility Development Schedule**

Task	Completion Date	Completion Date
<b>Property Acquisition</b>	<b>June 30, 2015</b>	<b>September 16, 2016</b>
Facility included in Countywide Siting Element	April 2, 2015	September 21, 2016
Receive Facility Operating Permit	January 19, 2016	April 7, 2017
Prepare Transfer Processing Report	July 30, 2015	October 18, 2016
Solid Waste Facilities Permit (SWFP)	January 19, 2016	April 7, 2017
Detail Design	February 17, 2016	May 8, 2017
Building Permits	March 18, 2016	June 7, 2017
Construction	January 30, 2017	April 19, 2018
<b>Facility Start-up</b>	<b>March 29, 2017</b>	<b>June 18, 2018</b>

CWS will continue to have discussions with the City of Oakland Planning Department regarding the proposed scope for physical site improvements, nature of planned operations, facility tonnage input and total daily vehicle trips.

CWS plans to relocate 72 Oakland employees and to add approximately 143 new employees at this facility. CWS currently has collective bargaining agreements with the International Longshore and Warehouse Union Local 6, Teamsters Industrial Union Local 70, and International Association of Machinists and Aerospace Workers Union Local 1546. Each of these agreements is expected to be extended for this facility and all wage categories therein either conform to or exceed prevailing wages, if any. At the facility, equipment and employees will separate all types of current City program recyclable material from the mixed waste stream, including paper, plastic, aluminum, other metals, glass, and textiles and prepare them for marketing. These operations employ a combination of mechanical processes and human sorting to maximize the recovery of material for remanufacturing. The facility is designed to sort and process mixed materials and recyclables collected through residential (i.e., single and multi-family), City, small business, and commercial collection programs.

CWS expects to recover and divert the following products from the Facility:

- Newspaper (6-8)
- Telephone books (#1)
- Mixed paper (1)
- NCR computer paper
- Carbon computer paper
- Laser computer paper
- Laser-free computer paper
- White ledger paper
- Colored ledger paper
- Card stock
- Boxboard furnish
- Coated white overruns
- News scrap
- Glass bottles and jars in three colors
- Aluminum cans

- Aluminum foil
- Non-ferrous scrap
- Tin, steel, bi-metal cans
- Ferrous scrap
- PET clear
- PET colored
- HDPE natural
- HDPE colored
- Mixed plastics 3-7
- Injection molded HDPE
- LDPE natural film
- LLDPE films
- HDPE films
- Specialty polymers
- Wood
- Textiles
- Lead acid batteries
- Tires
- Compressed gas cylinders
- Carpet and carpet pads
- Integrated circuit boards
- Inerts (glass fines for ADC, asphalt, concrete, dirt, rock, brick)
- White goods and small appliances
- E-waste including CRTs and integrated circuit boards
- Used motor oil
- Used motor oil filters



**Sorted Material Bales**

### ***5.2.5.3.1. Facility Schedule and Labor***

CWS will deliver materials to the Interim Processing and Transfer Facility from the City of Oakland franchise daily, Monday through Friday. CWS will deliver Oakland residential materials Monday through Friday, and commercial materials Monday through Saturday and periodically on Sundays for special circumstances, such as emergencies and servicing of City events. The facility will be open for receiving and processing materials from 6 AM until 6 PM, or as otherwise dictated by operating permit limitations. The facility closes for three holidays during each year: Thanksgiving, Christmas and New Years Day. Operating hours and days of operation may be negotiated between CWS and the City. The facility will have sufficient storage capacity to support the proposed schedule.

Based on need and permit limitations, the facility may also be opened for processing, administrative activities and outbound materials transport only during earlier or later hours on Monday through Friday, or on designated weekend days.

Materials receiving and processing related activities will generally be conducted in one work shift. From time to time it may be necessary to extend shift operations. In such instances, a work schedule and staffing will be defined according to need and required duration. The Plant Manager will determine overtime and supplemental shift construction. Staffing the work shift, along with primary job responsibilities, are shown in Table 5.2.5.3.1-1.



Table 5.2.5.3.1-1 Staffing at CWS' Oakland Gateway Facility

Labor Categories		Gateway Facility Employees
	Facility Manager	1
	Project Engineer	1
	Maintenance Manager	1
	Administrative Assistant	1
	Safety	1
	Scale House Attendant	2
	Shift Supervisors	4
	Control Room Operators	1
	Aux Operators	2
	<b>Sorting Labor</b>	<b>43</b>
	Equipment Operators	9
	Traffic Control	1
	<b>General Laborers</b>	<b>2</b>
	I&E Tech	1
	Maintenance Mechanic	4
	<b>General Laborers</b>	<b>7</b>
<b>Total</b>		<b>81</b>

Work breaks and lunch times will continue to be in accordance with our collective bargaining agreements. The Plant Manager and Supervisors are empowered and responsible for notifying employees of changes in work routine and schedules. A letter referencing the collective bargaining agreement with Teamsters Local 70 is provided in Section 4 of this proposal.

Overtime work will be required to handle receipt of greater amounts of material as a result of greater recycling tonnages from organic, programmed and seasonal growth. Other times overtime work is required for processing materials to compensate for time when the facility may be undergoing scheduled maintenance or capital improvement projects. The Plant Manager determines the use of overtime based on operating conditions and inbound materials.

The opportunity for an employee to work overtime is a feature defined by seniority and job classification and governed by our Collective Bargaining Agreements.

#### ***5.2.5.3.2. Facility Operations***

In a mixed materials processing program, the operator must be able to extract commingled waste and recyclable commingled materials into individual components in order for the recyclable materials to be diverted to market. CWS' approach to design of the Oakland Gateway Facility processing system was to begin with the end of the process and product buyer in mind. CWS is familiar and meets regularly with representatives of all available markets to determine their required quality standards.

Best practices and realizing the most efficient recovery of materials in processing system design depend on the types of materials the mixed waste processing facility processes, requirements of the collection programs served, and the needs and requirements of product buyers. The improved materials handling and sorting equipment at the Oakland Gateway Facility CWS and its equipment vendor (Bollegraaf) have identified to accomplish the following:



**Manual Sorting Line**

- Operate and maintain equipment for safest performance
- Produce the best quality product demanded by available buyers
- Build sufficient capacity and flexibility into the mixed waste processing facility that enables operational agility
- Process at levels of greatest efficiency and economies of scale
- Educate employees at all levels to operate with excellence
- Minimize the handling by employees of non-recyclable waste materials
- Prevent cross- and re-contamination of recyclable materials
- Process materials in a sequence that will maximize the quality of the recovered materials
- Maintain the appropriate burden depth and speed on conveyor lines and screens to ensure quality sorting, while operating the processing system with an adequate number of workers
- Achieve scalability and flexibility so that operations can be modified to keep pace with any tonnage and materials changes that develop from the waste stream.

The facility will feature a sorting line for single stream recyclables, a receiving and processing area for organic materials, and a mixed waste processing line for sorting and separation of the City's SFD, MFD, City, and Commercial mixed materials. Roll-off containers will be processed on this line, along with waste collected from containers throughout the City and hauled to the Oakland Gateway Facility in side-load collection vehicles.

***Material Receipt and Management*** – Collection trucks coming in from their routes to deliver material to the Facility will enter the site from Wake Avenue on the south side of the site. The trucks will proceed to one of two in-bound scales that are serviced by a scale house equipped with state of the art programs for weight data management. Here customer and truck information is requested and entered into the data management system prior to the trucks being weighed.

After weighing in and recording of the gross truck weight, the truck is directed to proceed to the Receiving area located on the North West side of the main building. When safe and directed by a traffic management spotter ("spotter"), the trucks will turn to the north and then back up to the south to enter the building through one of the overhead roll-up doors. Based on the type of material contained in the collection trucks, they will be directed to specific areas of the Receiving area for off-loading and management of materials. When completely inside the building, the truck will unload its material and then pull forward to clean any residual material from the truck.

Once emptied and directed by a spotter, the truck will exit the building and proceed to the out-bound scale serviced by a scale house similarly equipped to the in-bound scale house. Here the tare weight of the empty truck will be recorded and the net weight of the truck's content determined. After the process at the out-bound scale is complete, the truck will then exit the Facility on the north of the Facility to Wake Avenue. For fixed body trucks, once a laden weight has been recorded, these trucks can by-pass the out-bound scale and proceed to the Facility exit. Fixed body trucks will have their tare weights re-recorded once every three months. Non-fixed body trucks, such as roll-offs, will weight out each time they use the Facility.

Vehicle queuing will proceed in a manner to allow for efficient and safe move-in and move-out of the Oakland Gateway Facility. Loads that contain unacceptable materials (hazardous or otherwise) will be noted by the driver, loader operator and sorting personnel and the origin of the vehicle will be noted. The unloading time per vehicle should be 2-5 minutes including safety checks by collection drivers. CWS traffic directors will provide traffic control to the collection vehicles in addition to examining each load for compliance with state mandated load checking procedures to estimate the approximate percentage of contaminants and unacceptable materials received from customers.

***Receipt of Organic and Single-family Mixed Material***

Residential and commercial trucks containing material high in organic material or single family mixed material will enter the building using one of the doors located toward the west side of the Receiving area which is proximate to the Organics Processing area. After tipped onto the concrete floor, front end wheel loaders, such as a CAT 966, will push and manage the material prior to being fed to the Organic Material Processing and Recovery System ("OSFMM"). Push walls will be installed to protect the equipment and building and to provide support and separation for the management and temporary positioning/storage of materials. The material will then be loaded onto the in-feed hopper of the OSFMM for recovery of material. Organic material recovered from the OSFMM will be conveyed directly into transfer trailers located in the material loadout area. Other recyclable material recovered will be managed in bins prior to being prepared for transport to market for beneficial use. Non-recyclable materials from the OSFMM will be delivered by conveyor or bin to the tipping floor for transfer to the landfill for disposal.

***Receipt of Single-stream Residential Recyclable Material*** - Residential and commercial trucks containing single stream recyclable material will enter the building using one of the doors located toward the east side of the Receiving area which is near the Single-stream Residential Recyclable Material Processing System ("SSRR"). Push walls will be designed and installed to protect recycling equipment and the building and to assist in the management of materials. Front end loaders will push and manage the single stream material to provide a continuous stock pile of material for in-feed to the SSRR system. A stationary excavator positioned adjacent to the SSRR system will grab the single stream material from the stock pile and load it into the in-feed for processing. Following processing, non-recyclable material will be conveyed or otherwise transferred to the loadout area for transfer to the landfill.

***Receipt of Multi-family and Commercial Mixed Materials***- Trucks containing multi-family and commercial mixed materials will enter the building using one of the doors located toward the middle of the receiving to facilitate movement of this material to the in-feed of the Mixed Material Processing System ("MFCMM"). Push walls will be installed to protect the recycling equipment and the building and to assist in the management of materials. Front end loaders will push and manage the multi-family and mixed material to maintain a continuous flow of material to the MFCMM equipment. A stationary excavator positioned adjacent to the MFCMM system will grab the mixed material from the stock pile and load it

into the in-feed for processing and recovery of recyclable materials. Non-recyclable material will be returned to the loadout area for transfer to the landfill.

***Recyclable Material Loadout*** - Following processing, recyclable material will be prepared for transportation to market for beneficial. Material will be baled, transferred by transfer trucks as with organic material, or transported in roll-offs or end dumps to market. All trucks being used for transport of recovered material to market will have weight and vehicle information entered into the data information system using the in-bound scales. After being loaded with recyclable material, the truck will be directed to the outbound scale where it will be weighed and other information such as recyclable material type recorded. Using the data management system, all outbound material weights will be determined and recorded for each recyclable material type. An example of this is baled material leaving the site from the Bale Loadout area. The truck first drives to the in-bound scale where truck information and empty weight is taken and recorded. The truck then drives to the Loadout area where it backs into one of the six bays. Over the course of time, the truck is loaded and is ready to leave the Facility. The truck proceeds to the out-bound scale where it's fully loaded weight is taken and recorded along with recyclable material and truck identification information. Using the information gathered at the in-bound scale, the net weight of the recyclable load can be determined. The truck will then exit the Facility to Wake Avenue on the north side of the site.

***Organic and Non-recyclable Material Loadout*** – Transfer trucks used for the transfer of organic or non-recyclable materials will first proceed to the in-bound scale house where truck information and tare weights will be taken and recorded. The truck then exits to Wake Avenue on the North West side of the Facility, re-enters the site on the south side and proceeds to the Loadout area. Here the truck pulls to the south and then backs up to the north into one of four bays positioned on the sides of excavators. Each bay contains a scale to monitor the weight of material being loaded into the trailers. After being filled, the truck is covered and then proceeds east on the south side of the Facility and then west on the north side to get to the out-bound scales. Here the truck information is gathered and loaded weight taken and recorded to determine the net weight of the contents of the trailer. The truck then exits to Wake Avenue on the north side of the Facility.

***Employee, Visitor and Vendor Vehicles*** – MRF employees will access the site from Wake Avenue on the south side of the Facility and park on the north east side of the site. Parking on site is limited and most of the employees will be shuttle to the site. Office employees will be shuttled to the site or part on the west side of the office in parking spaces provided. Visitors will park and enter the Facility through the office. Vendors will sign in with security and be directed to the department that they are doing work for. Formal procedures for employee, visitor and vendor access to the site will be formalized prior to Facility start-up.

***Mobile and Stationary Equipment Requirement for Management of Material*** – The following mobile and stationary equipment is proposed to manage material for in-feed to the recycling equipment, loadout into transfer trailers and bale loadout into trailers:

- Inbound Material Management – Two CAT 966 loaders
- Organic Single Family Mixed Material – One of the two CAT 966 loaders listed above
- Single Stream and Multi-family/Commercial Material – One CAT 938, One CAT IT28, two stationary excavators, one for each operation
- Loadout Material – CAT 966 loaders (same as for inbound material), one stationary excavator and one CAT 320 excavator
- Bale Loadout – Three to five forklifts

### ***5.2.5.3.3. Sorting Process***

CWS strives to process material in the most effective and efficient manner, segregating final marketable product, MSW, and hazardous waste. Material is typically processed on a first-in, first-out basis so that specific material is not on site longer than 24 hours.

The stockpile will average between 2 and -15 feet in height in a safe and orderly manner. CWS loader equipment personnel will selectively load material from stockpiles to processing equipment. CWS does not conduct “manual floor sorting” due to the high risk of that traditional operation.

After loads of recyclable and mixed materials are unloaded in designated areas the mechanical and manual sorting diversion and recovery processes begin. These processing activities include the loading, conveyance and separation of different materials by skilled individuals and sophisticated sizing and extraction equipment. The goal of the activity is to maximize the safe and effective diversion of material that may be recycled, and to minimize the waste that must be disposed at the landfill. The result of this processing activity is to meet and exceed the City of Oakland’s solid waste diversion mandate and goal, and conserve valuable developed and natural resources.

The sources of material streams that CWS will process and recycle include the following origins:

- Single- and multi-family residences
- Commercial and government enterprises, offices and buildings
- City generated and hauled materials

The types of materials that CWS will process from each source include:

- Recyclable materials that are separated and comingled
- Mixed Materials that include recyclable, garbage, organic and bulky goods
- Organic materials from residential and commercial facilities

#### **CWS Recyclable Material Diversion and Recovery Processing Systems**

CWS will install four main material processing and recycling systems at its facility. Those four recycling systems are designed and engineered for the specific types of material they will receive. CWS’ processing and recycling systems will operate to process all incoming materials and maximize diversion to meet and exceed the City of Oakland’s mandate and goals. The four processing and recycling systems include:

1. Mixed Material Processing System. This system is designed to primarily process and recycle materials from two mixed solid waste sources the Multi-family and Commercial Mixed Material (MFCMM). Materials exiting the MFCMM system will be finished products and products selected for subsequent processing by other facility systems for the purpose of achieving greater diversion and marketability.
2. Single Stream Residential Recyclable Material Processing System (SSRR). This system is designed to primarily process and recycle materials from mixed recyclable materials. This system also receives mixed containers and other recyclable materials from preceding processing systems that handle



mixed materials. Those preceding facility processing systems include CWS' MFCMM and BCD processing systems.

3. Organic Processing System. This system is designed to primarily process and recycle organic materials from the Organic residential and commercial recycling streams, and the Single family Mixed Material stream (OSFMM). CWS understands that the processing of the single family mixed material stream is not required by the City but CWS is willing to invest in the capital and labor into processing this stream because it recognizes value in the stream and opportunity to exceed City diversion goals.
4. Bulky Item, Compactor and Debris Box Mixed Material Processing System (BCDMM). This system is designed to primarily process large and bulky items found in Roll Off and City generated streams of mixed materials. Sources of this material are commercial, industrial enterprises and construction and demolition operations.

### Processing Equipment Design, Manufacturing, Fitness and Duty

Each processing and recycling system is designed for particular duty, although, the system has built-in flexibility to adjust to variations in stream type by allowing for the relocation of personnel and adjustment of equipment settings. Processing systems may be operated independently or in unison. All equipment may be expanded, upgraded and integrated to accommodate systemic changes in the character of the material streams, amount of material, market conditions and diversion goals. CWS' engineered, integrated and flexible approach will sufficiently handle the approximately 300,000 tons per year and achieve, then exceed, the solid waste diversion goals of the City. All of CWS processing systems have extra capacity to accommodate growth. All systems will process materials from the City of Oakland material in a single shift during a 5 or 6 days per week operation. The facility and processing systems allow for ample expansion of tons, in the type of materials and operating conditions.

In the next sections CWS will describe each processing system and the approximate type and number of tons that each system processes. Subsequent tables in this proposal describe projections for the annual tons processed and diverted by each system, as well as, the overall diversion by CWS at this facility for the City of Oakland.

CWS' equipment designer and manufacture is Van Dyk Recycling Solutions (VDRS) and Bollegraaf Recycling Machinery (BRM), a world renowned innovator and builder of successful, efficient and quality recycling and diversion equipment. Their product line includes: Bollegraaf Recycling Machinery, Lubo Screening Technology, Walair Separation Systems and TITECH Visual Sorting Technology.

Van Dyk and Bollegraaf's successful waste and recyclable material processing systems are installed and initiated over 600 facilities throughout the North America and world. Approximately 35 of their facilities are comparable in size to the Oakland Gateway Facility.

In 2010, CWS selected Van Dyk and Bollegraaf to design and install its state-of-art processing equipment for its 500 ton per day Da Phuoc Integrated Waste Processing Facility (DPI) in Ho Chi Minh City, Vietnam. Bollegraaf's president and CEO invested time into personally visit and survey the Bollegraaf system at CWS' Vietnam DPI facility.

### Mixed Material Processing System (MFCMM)

This system is designed to primarily process and recycle materials from two mixed solid waste sources the Multi-family and Commercial Mixed Materials (MFCMM). The MFCMM system has capacity to process



approximately 84,000 tons per year during a single shift and five days per week. CWS has the capacity to process more material by increasing either the number of employees, work shifts or days per week operation.

The MFCMM can process 84,000 tons per year from multi-family residential and commercial mixed material sources, with approximately 25,000 tons per year as arriving as the “small” product stream from the from the Bulky item, construction and demolition system.

The MFCMM system will first use automation to liberate large, bulky and compacted materials prior to the material stream being presented to individuals for manual sorting and quality control activity. The initial automated process includes volume reduction and size separation on rotating screens to provide a cleaner, safer and more efficient presentation of materials, then conveyance to individuals who then sort materials from conveyors. The MFCMM system uses size reduction, size separation, air density separators, ballistic separation systems and optical sorting technology, to separate valuable materials by size, weight, moisture, density and type. The system will produce fiber, plastic, metal, glass, organic and inert products from the refined streams. Some smaller sized paper, plastic and metal materials will be processed by subsequent equipment that is interlaced with components of the SSRR processing system. The MFCMM processing system is expandable.



**Trommel Lines**

The series of specifically engineered equipment integrated in the MFCMM processing system includes the following:

**SSI Size Reducer:** The SSI Primax is a high-capacity volume reducer that is ideal for the reduction of relatively difficult compositions of multi-family, commercial & industrial like debris, and MSW containing metals and abrasives and demolition waste. Use of a coarse size reducer increases the capacity of the system downstream and enables more effective manual sorting of the difficult to handle materials such as film plastics that are frequently intermingled with other recyclable materials. The size reducer also easily opens bags and homogenizes the material stream to a size that maximizes recovery by optical sorters.

**3-D Trommel Screens:** A rotary cylindrical drum screen uses tumbling action to liberate the material allowing for different size and density separation. The particular drums (or trommel) used in this application are heavy duty and robust. Each trommel screen opening has a specially designed elbow-eject system that facilitates self-cleaning, virtually eliminating the need for frequent extensive downtime cleaning inherent to conventional screens. Most importantly, the elbow-eject system enables consistent and accurate separation of large, three dimensional (3D) fraction sizes. The objective of the main trommel is to separate the 2 foot and larger manual sortable fraction from the remaining smaller material. A secondary trommel removes all the 2 inch minus fraction for a subsequent cleaning process of the fines prior to anaerobic digestion. The remaining fraction of 2 to 24 inch continues to automated separation.



**Air Separator**

**Walair DrumAir Separator:** The drum air separator consists of a closed loop circulation fan, a separation section with a rotating drum and a connecting expansion chamber. It is a proven separating solution based on density/shape of the material and is capable of handling a high degree of input material variation. The various drum air separators separate a heavy fraction (wood, stones, metals), a medium fraction (such as rigid plastics, Aluminum, books, magazines, small wood) from a light fraction (mainly film plastics and paper) each of the three remaining streams are then processed separately for better material quality results.

**Bulky Item, Compactor and Debris Bin Processing System (BCDMM)**

This system is designed to primarily remove large and bulky items found in compactor and debris bins. CWS has capacity to process approximately 25,000 tons per year during a single shift and five days per week. CWS has the capacity to process more material by increasing either the number of employees, work shifts or days per week operation. Most BCD materials are high in recyclable contents and have a large fraction size. Materials directed to the BCDMM system are first evaluated before entering the system. Large unmanageable items will be removed before entering the system or mixed with MFCMM materials into the size reducer.

Materials entering the BCDMM system will be loaded into the bulk feeding system to be liberated and conveyed to high elevation for a manual sorting process. BCDMM type materials are presented and sorted on a modified oversized material sorting line with ergonomically designed positions and oversized sorting hoppers. After a sort of the easy to separate oversized materials, the remaining items return back to the tipping floor or immediately transfer to the size reducer of the MFCMM processing system to assure size consistency and liberation.

Some amount of BCD material will be diverted from the BCDMM system and redirected to the MFCMM processing system for manual sorting due to its less attractive material makeup.

The purpose of the BCDMM processing system is to recover valuable, easy to sort items before the remaining material is directed to the automated part of the MFCMM system.

Both entry points for the BCDMM and MFCMM processing system are located close to each other and can be fed with the same excavator type material handler. This enables CWS operational staff to quickly adjust the floor sorting and feeding process for any type and variation of the incoming materials. The flexibility to switch instantly for any load has proven to be very effective in day to day operations and sorting of Mixed Material loads.

**Single-stream Residential Recyclable Material Processing System (SSRR)**

The SSRR processing system is designed to primarily process single stream recyclable materials, from residential single-and multi-family sources, and small businesses. The amount of residential recyclables has capacity to grow to 70,000 tons per year during a single shift, five days per week. CWS has the capacity to process more material by increasing either the number of employees, work shifts or days per week operation. The system will also process some selected recyclable materials from commercial sources and it will receive materials from the MFCMM and BCDMM processing systems that precede it.

The SSRR system includes an engineered series of equipment components that separate fiber, film plastic and containers. The SSRR system includes a sophisticated container sorting system that uses computerized optical technology to separate a mixture of high value containers into individual clean material grades.

Enhanced technology design and operation enable CWS to exceed all prior industry standards for diversion and recycling of this material stream.

The series of engineer equipment included in the SSRR processing system includes the following:

**Bollegraaf Drumfeeder Material Metering Bunker:** The drumfeeder material metering bunker consists of a large horizontal rotating drum and belt encased in a steel bunker. Material is loaded into the bunker with an excavator. The material that is loaded into the bunker is conveyed toward the rotating drum. As the material reaches that drum, steel teeth and cleats roll the material up and over the drum and liberating material from bags and evenly distributing it onto the infeed conveyor. The evenly distributed materials improve presentation to individuals, efficiency and work place safety.



**Star Screen**

The even distribution of material on the conveyor facilitates manual presorting of film bags, oversized metals, plastics and trash present in the waste stream on the presort line and helps individuals on that presort line to remove and recover film, large metals, plastics and dispose of remaining garbage. A series of overhead air suction hoods improve the logistics of removing film plastics from the waste stream. Any remaining oversized material on the belt is removed and stored in bunkers for subsequent processing. Any material left of the belt proceeds to the OCC cardboard Screen.

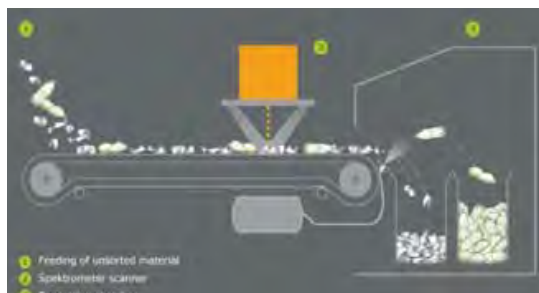
**LUBO Triple Deck OCC star screens:** The OCC cardboard separator is 20-30 foot long screen consisting of a horizontal shaft deck whereby steel shafts with large rubber star discs rotate forward and propel the large, rigid OCC over a fast, forward moving bouncing surface. Large openings in between the stars allow the smaller and less rigid newspaper, mixed paper and mixed rigid containers such as glass, water, soda and soap bottles to fall through the openings resulting in a clean, high quality cardboard floating over the discs and via a manual quality control station into a bunker and baler for sale to market.

**LUBO Double ONP star screens:** The Double ONP newspaper screens are similar in design to the OCC separator, but instead recover Newspaper and large dry mixed fibers. The two stacked screens consist of two 20+ feet long by 10 foot wide screens. A horizontal shaft deck with steel shafts and 9 inch diameter rubber star discs rotate forward and propel the flexible but flat Newspaper up a 40- 50 degree inclined surface by hundreds of rigid rubbers stars. The material is propelled up and forward over a fast, forward moving bouncing surface with openings to remove smaller items. The combination of an inclined angle, traction provided by the stars and the bouncing motion effectively separates the newspaper from the smaller mixed paper and ballistic containers that fall backwards off the screen as they bounce and lose traction. The larger newspaper rolls over the discs and the smaller mixed paper and rigid containers roll back and fall through the discs and travel to a second deck for an identical screening environment but with slightly smaller sized disc openings. The paper that rolls to the overs of that discs becomes a secondary newspaper stream. The smaller mixed paper and containers travel to the next screen.

**LUBO Mixed Paper / Rigid Container Separator:** The Mixed Paper / Rigid container separator functions similarly with very small spaces and many rubber star discs rotating on an axle. A similar action to the OCC and ONP screens drives the remaining mixed paper over the screen while the rigid containers tend to bounce and travel backwards due to the steep inclined angle of the screen. The separation results larger clean paper floating over the discs and conveyance for further manual quality control. The separated containers containing small remnants of paper, large bottle caps, etc. proceed to the container separation

system. Due to the smaller screening surface, any fines that fall through the screen (mostly broken glass) are conveyed to a small particle glass cleanup system.

**LUBO Paper Magnet:** The Paper Magnet is an innovative solution to remove the smaller particles of paper and film from the rigid containers found in the small material fraction of the mixed paper screen. The material is conveyed over a very steep, 60 degree inclined conveyor with thousands of small suction holes imbedded within the belt. An internal suction system causes the adhesion of flat and light materials against the belt while the heavier rigid and flat containers with less surface area, are unable to stick and fall down. Therefore, it received its name because of the visual impression of paper being magnetically attached to the steep conveyor by the air suction. This has proven to be a very effective solution to



**Optical Sorting**

remove the majority of small paper that would otherwise be lost during the commingled container recovery process. The paper magnet increases the recovery of fiber and improves the quality and value of the rigid containers.

**TITECH Optical Sorting Units:** TITECH's innovative and advancing sorting technology fully automates the separation of recyclable materials from a mixture of material. The technology complements CWS' staff. The input stream is analyzed by a computerized scanning sensor that is installed over a conveyor belt. Sensors rapidly identify materials, shapes, textures and colors as well as the object position

needed for precise recovery and attaining a high purity of the desired commodity. These optical sorters are used to remove cardboard, paper, film plastics, rigid plastics, PET, HDPE and 3-7 plastic containers (including California Redemption Value material). A separate, single unit is also present to capture the wood to complement skilled manual sorting. The TITECH component will recognize and eject an item that is as small as 1/2 inch in size.

The combination of state of the art optical sorting technologies, mechanical screening techniques and the implementation of strategic manual quality control operations allows for any waste stream to be effectively mined of any valuable commodity without less impact on individuals and lower maintenance costs. The role of individuals remains essential and is more focused on advanced aspects of product quality control and equipment adjustment of the sophisticated equipment.

The final components on the SSRR processing system is the container recovery system. Although the container recovery system is integrated in the SSRR processing system, it deserves special mention because it processes high diversion value, mixed materials (i.e. containers, three dimensional and rolling fractions) that emigrate from the SSFR, MFCMM and BDCMM processing systems.

The first process in the container system is a high power magnet to recover larger ferrous metals. Remaining material on the sorting line passes through a TITECH Optical PET Sorter where all the #1 PET plastics are identified and ejected.

The ejected PET plastic is inspected by an individual who will monitor and control production quality and remove remaining available contaminants. Contaminants are returned to the mixed plastics stream and continue to a second TITECH optical sorter to eject the natural and color #2 HDPE. The ejected HDPE is conveyed toward CWS staff that sort natural HDPE from the mixed color HDPE and inspect final product quality. Both finished HDPE streams are conveyed to their respective bunkers for baling and contaminants return to the mixed plastics line.



The remaining 3-7 plastic and similar sized materials are sent to a third TITECH optical DV sorter that will separate it into two separate commodities, Aseptic packaging and all remaining 3-7 mixed plastics. The ejected aseptic packaging and 3-7 plastics can be separated as a clean commodity and will not require further quality control. Both are conveyed to their respective storage bunkers for baling. The remaining product pass under a secondary magnet to recover the last bit of ferrous to be combined with the previously ejected ferrous. The entire remaining product is now conveyed to a final sorting line where all commodities can be inspected and finished by CWS personnel.

Near the end of the container recovery module, a final separation of aluminum is done by the Eddy Current. The Eddy current ejects the non-ferrous metals and CRV aluminum cans. A final quality control individual will inspect and hand sort the aluminum for California Redemption Value (CRV) from the bimetal cans and aluminum foil plates to assure the highest possible commodity values. Any remaining materials on the sorting line may now be returned to another appropriate system for reprocessing and maximum diversion through recycling.

#### **Organic Material Processing and Recovery System (OSFMM)**

The OSFMM system is designed to primarily process and recycle organic materials from the organic recycling stream and to process the single-family mixed material stream, separately. The total amount of material that will be processed is approximately 70,000 tons per year during a single work shift, 5 days per week. CWS has the capacity to process more material by increasing the number of work shifts or days per week of operation. Processing and cleaning organic materials into separate products is essential for merchantability and marketability. The amount of organic material is approximately 37,000 tons per year.

Residential and commercial yard waste and food scrap material will be loaded into drum fed metering bunker with de-clumper to break up the high moisture materials. A high speed incline conveyor further opens and distributes material and present it for inspection on the presort line where film plastic bags, metal and other undesirable material will be removed. The organic material is fed into a screen that separates material that is smaller than 2 inches in size. Material smaller than 2 inches continue to the TITECH Xtract with X-ray machine that scan, recognizes and ejects metals, inerts and glass. The machine measures material density and ejection is completed by applying computer controlled high pressure air. A magnetic overhead conveyor removes remaining ferrous metal.

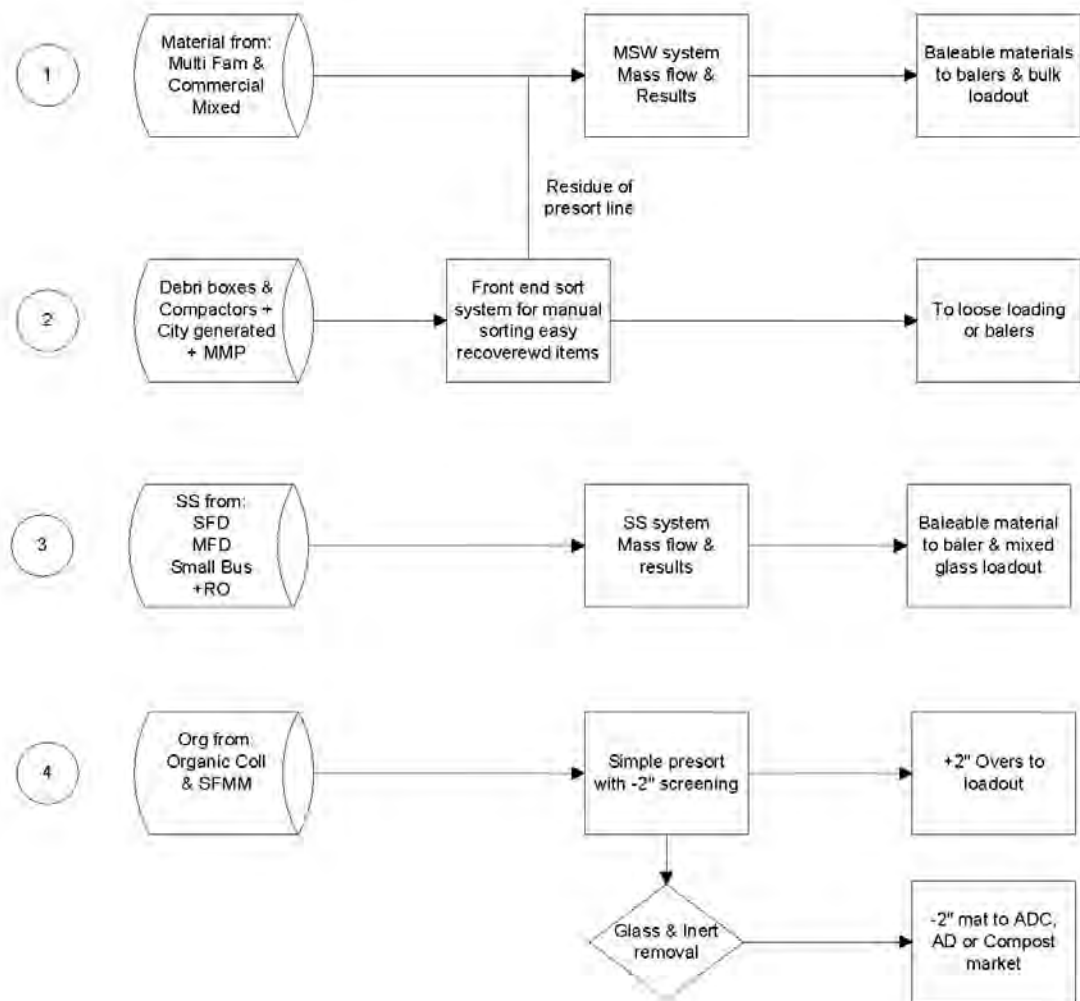
Organic material passing through and then over the screen are mainly medium and large and contain a minimal percentage of contaminants, therefore ready for further size reduction and transport to market for composting and anaerobic digestion.

The OSFMM line also has capacity to process approximately 59,000 tons per year of Single family Mixed Materials for the purpose of passively extracting a high amount of valuable organic material, inert material, metal, glass and plastic from solid waste. CWS understands that the processing the single-family mixed material stream is not required by the City of Oakland but CWS willing to invest in to capital and labor because it recognizes value in the stream and opportunity to exceed City diversion goals. The diversion potential from the single-family mixed material stream will help Oakland exceed its diversion goals.

The OSFMM processing system may be expanded and augmented with more equipment to address produce specifications. The flexibility of the SFMM&O enables it to be used to supplement and complement the Multi-family and Commercial Mixed Material (MFCMM) processing system.

## 5. TECHNICAL PROPOSAL

A simple material flow summary example of the four processing modules shown in below shows the segue between the diverse flow of incoming materials and Oakland Gateway Facility modules.



**Figure 5.2.5.3.3-1 Example Oakland Gateway Facility Material Flow Summary**

Materials identified, segregated and separated will be stored in bunkers, and await either direct load-out or baling and transport to local, regional, and/or global markets. These materials include:

- Recovered Product - for sale to global markets
- Organic material - to Processor
- Residue - to Landfill
- Hazardous or otherwise unacceptable material – to specialized processors

Direct load out is performed by conveyor or loader. Baling and bale handling is performed by loader, baler, and forklift. Baled product is both loaded into containers, trailers, flatbeds, and vans as well as stored inside to await transport.



## End of Day Placement

Unprocessed materials that have not been transported to the pre-sort line remain on the tip floor overnight. The following morning, unprocessed materials are moved from the back of the tipping floor area to the front of the tipping floor area, to ensure that they are processed in a timely fashion (the



### Product Bale Inspection

“front” of the tipping area is defined as the area near the pit conveyers and the “back” is defined as the area towards the loading dock). A concerted effort is made to clear all processing lines belts of materials by the end of the shift. All residual wastes received during an operating day shall be removed from the site within 48 hours of arrival.

During the sorting process, any potentially hazardous or other prohibited wastes will be removed from incoming materials and placed in the designated staging area. As necessary, or at the end of each day’s shift, collected hazardous or prohibited wastes will be moved to the designated outside storage area. Hazardous wastes include those materials deemed hazardous pursuant to federal, state, or local requirements. Typical characteristics of hazardous wastes include toxicity, corrosivity, flammability, and reactivity. Examples may include universal wastes, lead acid batteries, cathode ray tubes, compressed gas containers, used oil and filters, solvents, paints, and pesticides. Containers that meet the regulatory definition of “empty” are not considered hazardous.

The determination of a hazardous waste is based on visual observations of containers and labels. If suspicious odors or reactions are observed, personnel will utilize caution when investigating the material and follow its hazardous waste protocol. Hazardous materials are stored, recorded, reported and dispensed as defined by regulatory law that maximizes solid waste diversion.

## Medical Wastes

Prohibited medical waste includes materials deemed as regulated medical waste and certain non-regulated wastes. Non-regulated medical wastes can include sharps, needles, and other items from sources exempt from regulation such as households. Regulated medical waste could include biohazardous or infectious wastes from the treatment of humans or animals, and materials used in research or testing that contain body fluids or that display temporary radiation.

### 5.2.5.3.4. Storage

CWS strives to store and manage materials as effectively and efficiently as possible.

## Incoming Raw Material

Material is processed according to a first-in, first-out (FIFO) model. Permitted storage areas will be a part of the Oakland Gateway Facility’s Conditional Use Permit, Fire Permits, and the Hazardous Materials Business Plan. Potential nuisances are eliminated or minimized by thoroughly cleaning the storage area, prompt loading of wastes into containers or trailers, transferring the wastes to the landfill

within forty-eight hours, and implementing litter control programs. A dust suppression system is installed in the unloading area. This system also serves to reduce potential odors and may be used in conjunction with an odor suppressant or neutralizer. The processing area is typically cleaned of potentially odorous material on a nightly basis.

### **Outgoing Product and Residue**

Bales of recovered paper, aluminum and other metals, plastic, and other recyclable materials are stored awaiting transport to offsite facilities. Stored bales will be placed so that there is a minimum of three feet clearance from the facility walls. Walkways between bales will be at least 44 inches wide.

Outgoing residue is staged in a designated area of the tipping floor, awaiting pickup. It is then hauled to a landfill or alternative disposal facility that meets all environmental regulations, designated by the City.

### **Hazardous Waste**

Any hazardous materials removed from incoming materials will be stored in the designated area. Materials deemed hazardous waste must be labeled with the contents and accumulation date. Once sufficient quantities are accumulated, CWS will transport these materials or contract with a hauler or a transporter to schedule removal. Removal records will be retained on site for at least three years.

#### ***5.2.5.3.5. Facility Maintenance***

Given the nature of material recovery operations, the presence of certain amounts of debris on the floor is unavoidable. Internal facility maintenance includes keeping the floor and related work areas free of excessive debris with special attention given to keeping walkways clear. At a minimum the floor is swept once at the end of each shift. Beyond this set schedule, additional sweeping may occur when it is determined that the level of debris buildup presents an unsafe situation, in which case operations may be stopped to clear walkways. The floor may also be swept during equipment or other operational downtime.

The facility is equipped with a misting system for dust and odor control. Primary maintenance of this system consists of clearing clogs as needed. Spare nozzles are kept on site for immediate repairs. A contractor is brought in as needed to do overall system cleaning and check-up.

CWS utilizes a company-owned 8-foot Lay-Mor Sweeper to circulate around the plant at a minimum of once daily, no later than the end of the first shift.

CWS strives to prevent litter from migrating off-site through the following actions:

- Regular sweeping inside plant to prevent outdoor migration
- Concrete berms are installed hold litter inside
- The areas surrounding storm drains are included in the regular sweeping schedule. Also, weather conditions direct additional efforts related to litter around storm drains. During the summer, particularly during windy conditions, drains may be covered with drain covers to protect them from litter. Storm drains are cleaned and inspected on the regular basis required by our storm water industrial permit.
- CWS makes ongoing effort to maintain clean and litter-free facility and surrounding yard, and regularly monitors the condition of the building exterior and has contractors immediately available to paint and repair as needed.

**5.2.5.3.6. Disruptions**

CWS facilities maintain sufficient storage and processing capacity to overcome common disruptions. In the event of significant and sustained operational disruptions, CWS will transfer materials to another CWS facility.

CWS managers work diligently to prevent unscheduled disruption and thoughtfully schedule operating downtime to reduce disruptions. CWS recognizes that significant disruptions in processing activity unfavorably affect the company's operations, marketing, labor relations and customer relations. Such disruptions may also cause recyclables to be reduced in value or lost to contamination. CWS takes the threat of operational disruption very seriously, and has well-tested practices in place to ensure that any possible disruptions are resolved effectively with minimal lost time and productivity.

One of the first tasks of the Plant Manager in evaluating a processing disruption is to determine its cause, potential impacts and probable duration. The criteria by which the impact of the disruption is to be judged are as follows:

- Level of associated risk
- Assessment of needed resources to return to safe, full operation
- Assessment of potential, safe, partial operations
- Available space on the tipping floor for material anticipated during the probable disruption duration
- Available outlets for current and anticipated inventories of processed and unprocessed materials during the disruption

Mitigation of the disruption begins immediately upon its discovery. If the situation presents a hazard or potential permit violation, CWS will take all prudent action. The priority steps for handling materials in a processing disruption are as follows:

- If the disruption is significant but partial and processing throughput will be reduced but not ceased, reschedule processing to allow for longer hours at lower throughput sufficient to process all materials
- If the tipping floor has insufficient storage available, ship unprocessed materials for immediate sale as-is
- If markets are not available for as-is material, transport materials to other CWS processing facilities
- If the alternative processing facility is unable to accept the materials, then bale unprocessed materials for later sorting at the plant
- If the plant is unable to bale materials and the three conditions immediately above are also in effect, ship unprocessed materials as-is for baling at another facility for sale or storage and later sorting.

**5.2.5.3.7. Emergencies**

CWS must be prepared in the event of emergency situations. Potential emergency situations would include, but not necessarily be limited to power outages, natural disasters, fire, and hazardous materials releases. Whenever an imminent or actual emergency situation is indicated, the following steps are taken:

- Designated emergency coordinator conducts an assessment of the nature and extent of the emergency
- If determined necessary, emergency communications are activated to instruct employees to evacuate the facility
- Facility shut-down procedures are initiated if necessary
- Emergency response agencies are notified as appropriate and identified in the CWS Emergency Action Plan (EAP)
- Facility emergency personnel take appropriate measures to resolve the situation or minimize the spread to other parts of the facility
- If storm drains might be impacted by any emergency release, specified personnel seal off the potentially impacted drains. Storm Drain emergency response protocols are contained in the Storm water Pollution Prevention Plan (SWPP)

Prior to commencing operations after an emergency situation, designated management personnel will assess the facility to ascertain that the hazard has been mitigated

Designated management personnel will review the incident and determine if any changes to the emergency procedures are necessary.

The following equipment is available for responding to emergency response situations:

- Fire extinguishers are located throughout the facility
- Emergency exit signage
- Emergency eye wash stations
- First aid kits
- Stormwater spill carts containing absorbent, spill pillows, spill boom, personal protective equipment, baking soda-based absorbent for battery storage area, storm drain cover
- Radios for emergency communication
- Personal protective equipment
- Evacuation notification horns

In addition, loaders and other site equipment can assist with emergency response efforts.

### **Emergency Training**

Training for emergency response situations will be commensurate with an employee's responsibility. Employees will be directed that they are not to respond to any emergency situation where they are not comfortable. Training topics will include:

- Evacuation procedures
- Assessment of response situations
- Facility shutdown procedures
- Use of fire extinguishers
- Spill prevention and response

- Personal protective equipment
- Notification of emergency agencies
- Cleanup and mitigation of spills

Employee training records will be documented and maintained.

#### ***5.2.5.3.8. Transportation***

Traffic driving on the property can generally be classified as: incoming truck loads of unprocessed materials, outgoing truck loads of processed materials, and personnel and visitors vehicles arriving and leaving the facility grounds.

##### **Inbound Truck Traffic**

Trucks bringing unprocessed materials to the facility constitute the greatest impact on the facility in terms of traffic, noise and hazard. Once on site, collection trucks proceed to the entrance scale. After being weighed, collection trucks maneuver to the unloading area to discharge materials.

##### **Outbound Truck Traffic**

Trucks arriving empty to remove processed materials are usually 18-wheel tractor-trailer combinations or roll-off trucks. These trucks enter the facility and proceed through the scale to the designated area within the site for loading.

##### **Closing and Notifications**

If for any reason incoming truck staging is overflowing collection vehicles will be turned away and the gate closed. In the unlikely event that such a closing should occur or appears imminent, CWS will notify all drivers immediately and request that they either keep their trucks the routes or park in the CWS truck yard until the jam is cleared. Trucks will not be allowed to park overnight with full loads and if necessary will be redirected to another CWS MRF.

##### **Passenger and Light Commercial Vehicle Traffic**

Personnel, tradesmen and visitors will enter the facility, and remain in designated visitor parking areas unless otherwise directed by CWS (for light commercial vehicles making deliveries, mechanics or other facility support personnel making service visits, etc.).

##### **Hazardous Waste Transport Vehicles**

Only authorized haulers are utilized for removal of any recyclable hazardous, universal, and any other wastes from the facility. CWS will be contractually responsible for arranging the disposal of prohibited wastes. CWS will retain documentation on the removal of these wastes.

#### ***5.2.5.3.9. Permits and Licenses***

A listing of the site and operational permits and licenses that will be achieved by the Oakland Gateway Facility is provided below:

- Solid Waste Facility Permit
- Conditional Use Permit, City of Oakland

- Building Permit, City of Oakland
- Occupancy Permit, City of Oakland
- Environmental Protection Identification Number
- Hazardous Materials Business Plan, City of Oakland, Bureau of Fire Prevention
- Hazardous Waste Generator Permit, Alameda County, Department of Environmental Health
- Combustible Material Storage Permit, City of Oakland, Bureau of Fire Prevention
- Places of Assembly Permit, City of Oakland, Bureau of Fire Prevention
- Liquefied Petroleum Gas (LPG) Permit, City of Oakland, Bureau of Fire Prevention
- Air Pressure Tank Permit, District of Occupational Safety and Health,
- Industrial Storm Water General Permit Order, State Water Resources Control Board,

### Certifications

All facility scales will be certified by Alameda County according to prescribed standards and methodology. The County schedule is to certify annually.

#### ***5.2.6. Training***

CWS has an excellent safety history. As an experienced provider of material processing services, CWS policy is that every employee is entitled to a safe work place. To this end, every reasonable effort is made to provide employees with great information and training. CWS has an excellent safety history and adheres to the highest industry standards and regulatory requirements for personnel training. All CWS personnel will have successfully completed a program specifically tailored to their respective duties to ensure company compliance with all waste management, transport and handling requirements and that is consistent with the high level of customer service to which the company is dedicated.

Safety programs can only be effective if the employees fully understand how to conduct their jobs. CWS has responded to the challenges of implementing a comprehensive safety program for its multilingual workforce. CWS conducts trainings in English, Spanish, and Vietnamese, conveyed in a manner that accommodates all levels of education and literacy. To enhance its multilingual safety programs, CWS empowers key bi-lingual employees as translators.

During the transition period, City of Oakland staff will be offered an opportunity to provide literature and/or to address training sessions to communicate city concerns and policies regarding the importance of good customer service and best job practices.



**Employee Training**



CWS provides a safe and healthful workplace by maintaining a comprehensive operational health and safety plan, including the identification of hazardous waste and use of protective clothing and safety devices. Procedures include periodic (at least weekly) meetings with all personnel that address safety issues and accident prevention. A process exists for the reporting and monitoring of all industrial accidents.

CWS' comprehensive safety program includes an Injury Illness Preventive Program (IIPP). Safety and environmental training programs are intended to ensure that employees fully understand how to conduct their jobs in a safe and productive manner.

CWS provides training to our employees using established human behavior learning methods, including verbal and visual training tools, interactive discussions, small group discussions and review of scenarios, as well as, hands on one-on-one supervisor and driver ride along checkouts. We provide comprehensive equipment checkout rides, driver safety, and prevention training in commercial settings, including:

- Injury and illness prevention
- Personal Protective Equipment
- Lock-out/Tag-out (Hazardous Energy Control)
- Confined space
- Fall protection
- Heat stress
- Slips trips and falls
- Emergency Evacuation
- Pre-planning for the approach route to service sites and CWS facilities
- Operation in and around all CWS collection, maintenance, and processing facilities

Our system incorporates specific elements to address accident prevention training:



**Employee Training**

- Route planning for the safest ingress and egress
- Backing & mirror alignment
- Pedestrians & driving distractions
- Space cushioning
- Construction zones
- Highways/intersections

CWS conducts weekly and monthly safety and training meetings among managers and workers, applying specialized curriculum for collection, processing, office and clerical operations. CWS safety programs include workplace harassment, violence, and drug

abuse.

CWS has low accident and injury rates with all incidents investigated completely. To in part determine the incident root-cause and whether it was preventable. CWS then determines what can be done to continuously improve safety. Conclusions are shared among the entire company to take advantage of a learning opportunity to prevent future accidents or injuries. Employees who have 'near-miss' accidents or injury incidents are counseled and retrained.

CWS has a safety incentive program that measures and ranks safety as a key performance metric. These metrics include participation in training, reporting of hazards, successful inspections and safe operating behaviors. Awards and recognition are provided on a quarterly basis within departmental segments.

CWS and InterWest Insurance partner for delivery of risk management consulting and safety programs. InterWest is engaged and provides the following training and services:

- Workers Compensation claim management
- Supervisor/Management safety training (Safety One-on-One)
- Facility safety audits, participate in investigations and survey of facilities
- Review of new processes for training needs and establish and create IIPP program
- Observation of work methods and procedures to identify hazardous conditions and recommended improvements
- Assistance with preparing regularly scheduled safety meetings and provision of bi-lingual training material
- Assistance for Supervisors to develop skills in evaluating incident root cause and job hazardous analysis

InterWest has provided a letter of support and commitment to continue partnering with CWS, along with CWS' record of DOT Certificate Successful Inspections 2005 – 2012, CWS' 2012 Workers Comp Safety Audit, CWS' 2007-2012 Company-wide TRIR and LWIR Record, CWS' Company-wide Safety Training Calendar and Safety Orientation Checklist.

CWS' safety and environmental resources team will align with the City of Oakland to ensure proper delivery of CWS' "Best Practices Training" on curbside collection and customer relations to all new employees. Training programs that have been implemented for CWS' collection, facilities, and office operations include:

- Injury and illness prevention
- Basic safety introduction
- Personal protective equipment
- Lock-out/Tag-out (Hazardous Energy Control)
- Confined space
- Accident investigation
- Equipment maintenance
- Ergonomics



**Employee Training**

- Handling needles and other medical waste
- Vector and disease awareness
- Emergency evacuation
- Pre- and post-equipment inspection and other vehicle safety requirements
- Defensive driving
- Specific solid waste collection training including using Waste Equipment Technology Association (WASTEC) training materials
- Equipment education
- Hazardous, universal, and other prohibited waste protocols
- Prevention of injury on duty

The CWS Human Resource Manager and safety team leads ongoing substance abuse training. All new personnel will take part in an initial training session and supervisors and managers will be provided further education. It is important to have a substance abuse-free work zone and in developing the partnership between the City of Oakland and CWS, the City representatives will be afforded the opportunity to address each of the sessions. Managers and supervisors will be specifically trained on the following:

- Why it is important to have a substance abuse free work zone
- Statistics on workplace drug abuse
- Identifying workplace drug-use: performance, behavioral, physical, and paraphernalia
- The appropriate and legal manner in which to approach employees suspected of drug abuse
- The appropriate and legal manner in which to drug test based on reasonable suspicion

CWS requires certain physical examinations for employees and prospective employees that are designed to protect the employees and provide assurance to CWS that employees are capable of meeting the strenuous demands of recyclables collection. As CWS maintains a drug-free workplace, there are requirements for periodic drug testing for employees and prospective employees. These are designed to protect the employees, and provide assurance to CWS that its employees are meeting the drug free policy and are capable of meeting the strenuous demands of solid waste collection. Responsibility for managing these requirements rests with the CWS Human Resources Manager, aided by individual supervisors and line managers. CWS policies on physical examinations and drug testing meet all federal and State of California requirements.

CWS will provide training to minimize the risk of work place violence. All employees will be trained in Alternative Dispute Resolution. This will help employees understand that there are alternative methods to resolve disputes when a conflict is identified. CWS will institute a Threat Assessment Team that will work with management to assess the potential for workplace violence.

#### ***5.2.6.1. Driver Training***

CWS collection personnel are continually trained to always operate safely.

CWS drivers are continually trained to always operate safely, proficiently and efficiently. Part of our exemplary worker safety history is based on CWS operating the best and newest equipment available for all of our operations that frequently incorporates the latest in ergonomic design features to help our employees continuously maintain safe operations.

A successful, multi-faceted driver education program has been developed that stresses both safety and service to the customer. CWS is proud of its driver safety record as documented elsewhere in our proposal. All new employees are required to participate in a driver orientation and safety program, which familiarizes the driver with the vehicle, and the importance of providing outstanding service.

Each driver will be required to attend training that involves operation of solid waste collection vehicles. The WASTEC group of the Environmental Industry Associations publishes the Manual of Recommended Safety Practices and training materials designed specifically for the waste industry. These materials will be utilized by CWS as the core of their training program. These will be supplemented by other materials as appropriate.

Specific areas covered include:

- Customer service orientation
- Personal protective equipment
- Defensive driving techniques
- Spill response procedures
- Hazardous material recognition
- Injury and illness prevention
- Truck equipment familiarity
- Recycling Program Goals and Objectives
- Company procedures and benefits

Following successful completion of the training program, a collection driver is assigned to a route and a route trainer spends several hours per day for up to six weeks before the driver is qualified to drive the route alone. During this period, the driver becomes familiar with the unique characteristics of his or her assigned route areas and customers.

CWS trains and requires their drivers to perform a pre-trip inspection prior to operating their vehicles and post-trip inspections prior to completing their day. These inspections are primarily related to safety equipment, such as brakes, lights, and tires on the vehicle. All required inspection checklists are filled out and signed by the driver. CWS has designed a specific form for each collection vehicle operated. CWS is proud that its own procedures exceed both State and Federal inspection guidelines. These inspection forms are filled out for the vehicle at the beginning of the day and a post-trip inspection is done at the end of the shift, as required by law. Drivers are trained not to take the vehicle on route until any concerns are addressed and cleared by the maintenance department. CWS has developed a specific vehicle operating form for its front loader, and roll-off trucks that requires drivers to explain any concern and certify that they thoroughly inspected the vehicle and properly completed the checklist before starting or ending daily collection duties.

### **Driver Proficiency**

During the hiring process, prospective drivers are required to provide the company with a recent copy of their commercial driving record and drivers' medical certificate. An additional background investigation is performed by Employment Research Services, which contacts previous employers to review the applicants previous D.O.T. related performance. Once applicants complete other pre-hire requirements, they are evaluated in the field by an experienced route supervisor. Drivers are then immediately enrolled in the DMV Pull Notice Program. Every CWS driver is incorporated into the company's Driver Safety

Observation Program. In this program, drivers are observed without prior notice by the route supervisor, safety manager or operations manager approximately six times per year. The results of the observations are reviewed with each driver and used as a teaching tool for continued improvement. Drivers also participate in formal monthly safety training, which covers topics such as defensive driving; the nationally recognized Smith System Driver Safety Training Program may be implemented by CWS in the future to further hone our drivers' abilities.

Drivers are also trained to observe and report conditions and opportunities to improve safety, service, and solid waste diversion for their customers. These observation and opportunities are entered into the RAMS software and customer database and can be used to recommend service enhancements.

#### ***5.2.6.2. Risk Minimization and Environmental Safety***

CWS is committed to best practices in its operations and risk minimization to its personnel, the public, its equipment and the environment.

#### **Management of Hazardous Waste and Universal Wastes**

CWS' Hazardous and Universal Waste Protocol was developed to ensure employee safety, protect the surrounding community, and meet local, state and federal guidelines for handling hazardous and other prohibited waste discovered in incoming materials as well as hazardous wastes generated from facility operations and maintenance.

Ecology Recovery/Gary Tompkins, Chemist manages CWS' hazardous waste handling for unauthorized liquids and chemicals placed in the recycling stream at our MRF Facilities that need identification and/or additional assessment, including basic chemical qualitative test such as HAZCAT™, is conducted by Gary Tompkins .

- Ecology Recovery's comprehensive hazardous waste management plan includes:
- Control systems for hazardous waste storage and matter control
- Universal Waste (thermostats, batteries, & fluorescent light tubes
- Establishment of EPA Identification number
- Material manifests & profiling
- Lab Packing Segregation
- Bill of Lading Receipts
- Department of Transportation descriptions, Hazard Classes, Packing Group, Reportable Quantity, EPA Codes, State Codes, Emergency Response Number, EPA Identification Number

The CWS Protocol first sets the parameters to determine whether a material is hazardous or otherwise prohibited from being collected and processed. Drivers, inspectors at the facility and sorters are trained on the types of hazardous, universal, and other prohibited wastes.

Typical waste types that fall under these categories are:

- |                    |                                     |
|--------------------|-------------------------------------|
| • Universal wastes | • Computer monitors and televisions |
| • Medical Wastes   | • Oxidizers                         |
| • Paints           | • Gasoline                          |
| • Solvents         | • Compressed gas cylinders          |



- Pesticides
- Used oil and filters
- Car batteries
- Photographic and pool chemicals
- Fire extinguishers
- Pharmaceuticals
- Decommissioned and other radioactive material
- Florescent lighting tubes
- Flammable materials

Public education is an integral part of preventing hazardous and other prohibited waste from entering the waste stream. CWS proposes to provide information through our website and in written publications to residents pertaining to the proper material to set out. CWS proposes to use route auditors who will train and assist drivers to provide notice to and work with residents who happen to place prohibited material in the waste stream.

For CWS' load checking program to be effective, residents need to be informed of safe disposal options for accumulated prohibited waste. CWS will work closely with the City to educate residents on safe disposal options, including use of Alameda County's household hazardous waste program and other collection options.

Educating customers is essential to minimizing potential contamination of recoverable materials and protecting worker safety. CWS will work to educate customers about hazardous and other prohibited wastes in the set-outs.

Drivers, tip floor employees, sort line personnel and all supervisors will have mandatory training and continuing education on hazardous and universal waste. Training is directed to address specific employee safety issues and includes the following as appropriate:

- Procedures for identifying prohibited materials and containers, including asbestos, PCBs, caustics, solvents, flammables, infectious wastes, etc.
- Notification and response procedures
- Record keeping requirements
- Education on the effects of hazardous substances on human health and the environment
- Overview of relevant regulations and definitions of prohibited waste
- Waste handling procedures
- Procedures and equipment for safety and emergency response
- Personal protective equipment
- Emergency response training

Drivers are trained to look for hazardous, universal, and other prohibited wastes while collecting. They will look for fluid or other signs that indicate potential presence of prohibited wastes. With any indication that material may pose a hazard or contain prohibited waste, drivers will step out of their trucks to assess the situation. If the material is suspected of being inappropriate for collection, drivers will leave a notice. If necessary, drivers will immediately call a supervisor for assistance. In an emergency situation, drivers will request response from emergency services.

When a supervisor arrives at the address, a visual and physical assessment of material is conducted. The supervisor, wearing protective equipment, will examine the product label and observe physical signs such as material thickness, odor, and color. If the supervisor concurs with a driver, then the supervisor attempts to contact the resident. In the event that the resident cannot be reached, the supervisor verifies that an



education tag, including the CWS customer service number for further information, is left with the material. This notice will inform the resident to take advantage of the County's household hazardous waste program. The supervisor then notifies customer service staff of the situation and address.

When the collection vehicle enters the facility, the driver unloads the truck in a specific area where a tip floor worker can visually scan the material. If the tip floor worker observes signs that the material may be hazardous or contain universal waste, then the physical assessment, described above, takes place.

If the material cannot be identified by sight or odor then additional assessment, including basic chemical qualitative test such as HAZCAT™, may be implemented.

To minimize the liabilities of landfilling hazardous wastes, recycling and treatment of prohibited wastes must be a priority. CWS' Compliance Team will collect any prohibited wastes discovered and convey those wastes to the designated location(s) for appropriate temporary storage.

Our facilities are equipped with the appropriate containers, signage and labeling for disposal of universal waste. CWS contracts for offsite transportation and disposal of such materials to a universal waste transporter. As part of the annual training plan, CWS provides personnel training to employees about the California Universal Waste Rule.

CWS' Spill Prevention Control and Countermeasures (SPCC) Plan is designed to prevent releases of oil and to mitigate the effects should an oil leak or spill occur. The facility plans are in accordance with regulations of 40 CFR 112. As part of our training plan we provide training to new employees and ongoing education with annual training of employees conducted to present updated information and to maintain a level of employee awareness regarding spill prevention and response.

CWS has a safety committee that meets monthly to review all safety procedures and address incidents that may have occurred, including those involving hazardous wastes. If there are no incidents to review, the protocol is generally considered on a regular basis to ensure that hazardous and universal waste protocols remain dynamic.

### **Environmental Review and Compliance, and Permitting Processes**

CWS operations are subject to numerous environmental review, compliance, and permitting processes and the company has engaged in extensive efforts to comply with these requirements. CWS has a comprehensive understanding of Oakland's environmental review and permitting process. This is important should facility upgrades be needed in response to changing conditions with Oakland's recyclables. Working cooperatively with City agencies, CWS maintains compliance with these requirements. CWS monitors California waste regulators and other agencies, assists with AB 939 planning issues and solid waste permitting concerns, and is experienced and attentive to reviewing its best practices to assure that it is compliant with all regulations and permitting restrictions.

Some of the regulations and requirements with which CWS will ensure compliance, in addition to addressing environmental review and safety issues, include:

- California Environmental Quality Act
- Conditional use permit
- Solid waste facility permit
- Hazardous materials business plan

- Hazardous waste generator requirements
- Load checking/ hazardous waste recognition
- Storm water pollution prevention plan
- Emergency response

CWS is committed to continuing full and aggressive compliance with the environmental requirements of managing recyclables. CWS will work closely with the City of Oakland to assure compliance with all Federal, State, and Local regulations applicable to relevant activities.

### ***5.2.7. Reporting***

CWS will provide the City of Oakland with consistent and detailed reports that clearly document mixed materials and organics tonnages received, residue tonnages, quantities of materials diverted to other processors (including household hazardous waste, sharps, and large items diverted for reuse or special handling), tonnages sold, purchasers of those materials, and other performance metrics, as discussed in this section.

CWS has a successful material tracking computer program that has accurately recorded and reported material by origin and type from the City of San José for nearly a decade. A large part of CWS' program success originates with the program's flexibility and report writing features developed by CWS along with the City of Oakland's OPWA team.

All materials processed through the Interim Processing and Transfer Facility and Oakland Gateway Facility will be tracked by inbound and outbound material types, designating both diverted materials shipped to market and residual materials for disposal. These inbound and outbound volumes will be used to calculate the diversion and residual materials being shipped for disposal to calculate diversion for the mixed materials and organics streams.

CWS employs the Scrapware brand scale system software to track all inbound recyclables and routing into the Interim Processing and Transfer Facility and Oakland Gateway Facility. As part of the FleetMind and RouteSmart softwares and collection services, CWS will track route statistics, which include all weight tickets for materials delivered to the Facility. CWS will enter all weight tickets that are direct-hauled. CWS will total monthly volumes by material types to summarize collection, processing, and disposal. This program provides accurate inbound and outbound weight of materials, by material type. Reports will be prepared for daily, monthly, quarterly, and annual achievements. Operating and report results will be used to evaluate the effectiveness of collection and public education programs and program modifications. Importantly, our reports system will enable CWS to forecast program needs and achievements into the future.

The schedule of required reports and a brief summary of the contents of each report category are shown in Table 5.2.7-1

**Table 5.2.7-1 CWS Reporting Requirements**

<b>Continuous Reporting and Data Retention</b>	
Accounting Records	Full, complete and separate financial, statistical and accounting records, pertaining to cash, billing, and provisions of all MM&O collection services provided, prepared on an accrual basis. CWS will maintain and preserve all cash, billing and disposal records for a period of not less than five (5) years following the close of each of CWS' fiscal years.
Tonnage Records	Records of the incoming and outgoing quantities of incoming and outgoing quantities,

## 5. TECHNICAL PROPOSAL

	measured in pounds, of (i) mixed materials, recyclable materials, and organic material, and bulky materials collected, processed, composted, and disposed, and (ii) recyclable materials and organic materials, by material type, sold, donated or given for no compensation, and residue disposed.
Relational Database	Data from all required reports for the term of the contract. The City will be provided full access to the database.
<b>Monthly Reports</b>	
Collection Service Account Data	Number of SFD and MFD buildings and units served; number of commercial and City facilities served, number of containers in service by SFD, MFD commercial and City facilities, by container size, and by container service location (e.g., curbside or premium backyard service and ancillary service), number of non-collection notices issued by SFD, MFD commercial and City facilities and by reason for non-collection.
Collected Tonnage Data	Tonnage for all materials collected and delivered to the Interim/Oakland Gateway Facility by collection service type and by material type, e.g., mixed material, organic materials, and bulky goods, including collected tonnage, bulky goods item counts, and other data. Tonnage for all materials delivered by City vehicles, and tonnage and pull data for City roll-off boxes serviced.
Processed Tonnage Data	Tonnage of all collected materials that are delivered to processing facilities.
Processed Materials Data	Tonnage of each material produced through the processing of collected materials at CWS' processing facility, e.g., old corrugated containers, old newspaper, mixed paper, glass, various plastic and metal commodity grades, feedstock for refuse derived fuel, and energy products.
Disposal Tonnage Data	Tonnage for all materials collected that are transferred to the disposal facility, tonnage for all residues from processing of collected materials.
Customer Service Data	List of customer contacts, e.g., phone calls or electronic communications, including customer name, service address, and by date and topic.
Local Hire Requirement Update	CWS will provide monthly updates on its compliance with the local hire requirements of this contract.
Roll-off Box Report	Report that shows the allocation of roll-off boxes for City Council and Mayor by office, including allocations that were carried forward, and use to-date for the current calendar year.
<b>Quarterly Reports</b>	
Public Outreach and Information Activities	Report on all public outreach and information activities undertaken during the period, including distribution of outreach materials and other promotional activities.
Processing and Marketing Activities	Report on recyclable materials and organic materials processing and marketing issues or conditions, if any, occurring during the previous quarter.
Customer Service Activities	Report on customer service and call center issues or conditions, if any, occurring during the previous quarter.
Operational Issues and Activities	Report on significant changes in collection service or processing operations, instances of property damage or accidents, scavenging, or other operational issues.
<b>Annual Reports</b>	
Customer Data	List of all customers serviced under this contract including and sortable by SFD, MFD commercial and City facilities, customer name, service address (street number, street name, zip code), type of service (e.g., curbside or premium backyard service, and ancillary service), number of containers and container size.
Local Business Presence and Participation	CWS will provide the Local Business Presence and Participation report.
Local Hire Requirement Annual Report	CWS will provide an annual report on its compliance with local hire requirements of the contract.
Gross Receipts	CWS will provide a summary of the prior year's gross receipts received.
Equipment Inventory	Updated complete inventory of collection vehicles used pursuant to this contract, by vehicle chassis identification number, vehicle body identification number, license number and model year.

Business Tax Certificate	Copy of current business tax certificate.
Annual Cart and Bin Replacement Reports	Electronic report of cart and bin replacements provided during the preceding contract year.

CWS will provide the City with any additional data and information as requested and as reasonable. Upon request, CWS will provide call center records, updated maps whenever route changes include a change to day of service, collection vehicle global positioning system (GPS) reports, and other route information.

Monthly reports will be delivered to the City no later than fifteen (15) calendar days after the end of the prior month, quarterly reports will be delivered no later than twenty (20) calendar days after the end of the reporting quarter, and annual reports will be delivered no later than thirty (30) days after the end of each preceding calendar year. Monthly, quarterly and annual reports will be provided electronically in forms and formats that are acceptable to the City.

CWS agrees to collaborate with the City in developing performance audits and performance metrics to verify the levels of the effectiveness of our collection and processing operations and associated programs. CWS will collaborate with the City in developing and implementing regulations and/or programs such as a State mandatory commercial recycling requirement, and agrees to perform at a minimum of biannual informal waste characterization study for each year of the franchise. These studies will be conducted at times that are mutually agreed upon by CWS and City representatives.

CWS and the City may mutually agree to conduct pilot programs that temporarily change the collection method, equipment, or the type of service to customers for up to ten percent (10%) of the total collected material. A pilot program shall be limited to a term of not more than eighteen (18) months unless otherwise specifically agreed in writing by CWS and the appropriate City Representative. In addition, CWS will perform any additional record keeping required by a pilot program. CWS and the City representative shall execute a letter of agreement setting forth the terms of the pilot test program including program costs, program operating parameters, and program duration.

### **5.3. *Diversion Plan***

CWS intends to make a major contribution to the City's goal of reducing annual tons sent to landfills, from approximately one hundred eighty five thousand (185,000) tons in 2011 to approximately forty-thousand (40,000) tons by 2030. CWS has designed a comprehensive program to support the objective to meet and exceed the diversion goal for the City of Oakland, and to meet the minimum diversion requirement of forty percent of the total tons collected in Calendar year 2022.

The CWS Diversion Plan implements action at multiple levels of the waste stream to achieve the greatest diversion growth and sustained diversion possible. The CWS plan includes:

- Effective communication with customers
- Strong public education tools and outreach
- Strategic routing of collection services
- Observant and reactive collection operation
- Responsive customer services representatives
- Employment of quality trained personnel
- Investment in and operation of a state-of-the-art processing facility

- Continual and exploratory new product marketing Operational Connectivity (OC) that combines all CSW resources toward this goal

CWS is a company that has built its foundation and market share on recycling. CWS does not own landfills in the United States, and therefore focuses on achieving as much diversion as possible. Every ton diverted saves landfill fees and supports the overall company goal of maximizing diversion. Our internal and consulting teams will be working with each customer type to determine the best recycling service options to meet the City's goal.

Based on our collection and processing strategies and approaches presented throughout this document, CWS is confident of achieving the diversion mandate. Our higher than industry standard material recovery rates clearly demonstrate that our focus is on recycling. Our diversion program will be focused on changing the way that the public thinks about the waste stream and the strategy CWS is planning will take the diversion process a big step forward.

CWS understands that the program's diversion goal is extremely ambitious and relies on the meticulous implementation of a well-executed plan. CWS believes it is the contractor that can achieve this goal for the City of Oakland, and increasing investment in local and regional processing capacity for mixed waste will support the City's Zero Waste goal. Achieving this high diversion goal requires thoughtful and deliberate action keeping in mind the following elements:

- Planning
- Training
- Public education
- Capital investment
- Operational implementation
- Recording and reporting of vital information
- Continual involvement from City of Oakland OPWA colleagues

The specific programs and tasks, milestones and schedule for the diversion plan to meet the diversion requirements specified in the RFP are provided in the Transition Plan. CWS will process materials received as part of the mixed waste and organics collection service through its new, state of the art mixed waste processing facility (the Oakland Gateway Facility). This includes SFD, MFD, Commercial, and City materials, and materials collected through bulky, temporary roll-off, City container, special events, and other ancillary collections.

This processing means that materials processed will be screened and processed through a number of separation and recovery technologies removing recyclables, diverting organic fines, and disposing of only non-recoverable materials. As CWS institutes programs to increase diversion in the City of Oakland, we will take a step-by step approach with each diversion program to customize its application to Oakland customers, in an effort to maximize its effectiveness and maximize diversion rates. The schedule of action items and program milestones for each diversion program that CWS will employ are shown in this section. Each proposed diversion program is discussed in the paragraphs below.

### 5.3.1. Diversion Programs

#### Mixed Materials Processing of all Collected Materials

CWS proposes to process materials it collects in Oakland through its new Oakland Gateway Facility after a three (3) to five (5) years. At the facility, recyclable materials and items that can be diverted to other recovery activities are separated from the waste stream before the residuals are transported offsite for disposal. This significantly reduces the amount of waste sent to landfill, saving landfill space and disposal costs, increases the amount of recyclables diverted to market, generating revenue and reducing the environmental impact of disposal, and employs Oakland residents in facility operation. Utilizing a mixed waste processing facility as a precursor to disposal ensures a minimum threshold of recycling regardless of citizen participation. Approximately one-quarter of all MRFs in California utilize mixed waste processing technologies, and the technologies and processes involved are familiar to CWS, its development partners JRMA and DEI. By utilizing this facility, CWS will increase diversion from landfill to reach the City's objective.

#### Setout Awareness Training (SFD, MFD, City, and Commercial)

CWS places an emphasis on recycling starting with the setout. CWS will train its collectors to be cognizant of residences not participating in service, inappropriate setouts that result in contaminated recyclables, and opportunities to educate and inform residents about opportunities to recycle. This will, when reinforced by supervisors and management, result in less contamination of mixed waste by recyclables and vice versa. CWS estimates that it will support diversion of the City's recyclables and increase the diversion of organic materials from the mixed materials stream.

#### Multi-Service Benefit (SFD, MFD, City, and Commercial)

CWS is a company with a vertical business model with extensive Asian post-consumer markets, a processor of recyclable material, and a collector. In Oakland, California, CWS currently collects material at the curb from seventy thousand residents and processes that material. CWS has a business incentive to limit the contamination, diminish the amount of trash set out, and increase the amount of recyclables and the number of setouts at each household, on each block, in each neighborhood.



**MFD Customer Type**

CWS' drivers and supervisors understand the importance of the company's vertical business model. CWS will work with the Service Group 2 contractor to communicate when trash and recycling collections are in conflict; Drivers will note areas that place recyclable materials in the waste stream and do not properly set out materials at the curb. The CWS education team will be alerted and the area will be directed for a campaign to educate residents regarding proper setout methods.

#### Residue Reduction (SFD, MFD, City, and Commercial)

The residue from CWS processing facilities in Oakland is currently disposed of at Forward Landfill in Stockton, CA without diversion credit. Although the use of residue as alternative daily cover on a landfill does not qualify as diversion towards the City of Oakland's goal, CWS will continue to investigate alternative methods of reuse that may be more beneficial.

CWS material processing plan aims to reduce the remaining residual to as small a volume as feasible based on the MRF processing equipment capabilities. Several of our strategies to reduce overall residuals out of the processing system include:



- Pre-sorting some large items and non-recyclable materials on the tipping floor
- Re-running residual components through the processing line
- Recording and reporting of processing and transfer facility performance daily, so that beneficial tactical adjustments can be initiated quickly
  - Daily performance is analyzed to help CWS make beneficial strategic performance improvements
- Aggressive and on-going public education and outreach programs designed for commercial customers to train them in the proper use of containers and associated material types for disposal into the correct containers
- Maintenance of all processing and transfer equipment to ensure that all components operate at peak efficiency and recovery
- Application of CWS Continual Improvement Process (CIP) and Operation Connectivity (OC) programs that frequently bring together CWS managers and external resources to maximize operating efficiency

CWS will also strive to identify and minimize secondary residue generated following receipt of processed materials by secondary recyclable processors such as papermills, glass processors, plastics repelletizing plants, etc. CWS operates three (3) material recovery facilities in the Bay Area and maintains strong and continuous relations with all of its product buyers. CWS seeks the greatest diversion and sales revenue for the materials it markets, and manages material quality carefully because quality directly affects the sales revenue that CWS earns. CWS continually seeks ways to improve the quality of products it produces so to derive the greatest revenue.

CWS maintains strong and continuous relations with all of its product buyers and continually seeks ways to improve the quality of products it produces to derive the greatest revenue. . The company will work to identify and minimize secondary residue in materials provided to secondary recyclable processors such as papermills, glass processors, plastics repelletizing plants, etc.

As an example, CWS recently developed a method for segmenting glass product into different sizes so it may market different sizes and qualities of glass that will be use for different purposes. As this process is tested and refined, it may be applied to Oakland Gateway Facility operations.

### **Temporary Roll-Off Box Collection and Processing**

For an additional fee, CWS will provide SFD, MFD, and commercial customers with temporary roll-off boxes for collection of materials from move-outs, construction projects, neighborhood or MFD complex events, and any other needs. CWS will offer customers a wide variety of roll-off box sizes and collection durations to fit whatever need the resident or establishment demonstrates. Materials from these roll-off boxes will be processed through the Oakland Gateway Facility, and the program will be supplemented by construction and demolition debris recycling to further help boost diversion.

### **Construction and Demolition Debris Recycling**

CWS offers the City of Oakland the opportunity to participate in a construction and demolition debris (C&D) diversion program. C&D debris is nonhazardous, uncontaminated material resulting from construction, remodeling, repair, or demolition of utilities, structures, and roads. These materials include the following:

- Bricks, concrete, and other masonry materials
- Soil (mixed with other C&D debris)
- Rock
- Wood, including nonhazardous painted, treated, and coated wood and wood products
- Wall coverings
- Plaster
- Drywall
- Plumbing fixtures
- Non-asbestos insulation
- Roofing shingles and other roof coverings
- Reclaimed asphalt pavement
- Glass
- Plastics that do not conceal waste
- Electrical wiring and components that do not contain hazardous substances
- Piping
- Uncontaminated soil (mixed with other clean C&D debris) generated from construction or demolition activities
- Metal materials incidental to any of the materials above

Residents can place waste materials from building and construction projects into roll-off boxes, and materials from these containers will be delivered to the Oakland Gateway Facility or a licensed C&D debris recycler. Roll-off boxes from commercial establishments that the collection vehicle driver identifies as containing majority C&D materials will be diverted from the mixed waste tip at the Oakland Gateway Facility, and all C&D materials will be segregated for recycling. CWS' C&D materials collection program will help the City to continue to meet diversion requirements imposed by AB 939, and in the diversion of construction and demolition debris, will assist the City in achieving its diversion goals.

### Increased SFD Organics Diversion

CWS will increase SFD residential participation in organic waste diversion, particularly through an increase in food waste diversion, and through directed education and outreach efforts. CWS will offer residents the opportunity to purchase an in-home food waste collection container, which they can then carry outside and empty into their mixed organic waste container. By diverting food waste, not only will the quality of the organic materials hauled to composting improve, but residents will be able to reduce the amount of mixed materials set out, possibly allowing them to reduce their bin size.

### MFD Food Waste Diversion

It is widely recognized that there are a number of challenges specific to MFD organic waste recycling, which make it difficult to achieve high and consistent diversion. Common challenges include: lack of yard waste generation as most yard debris is managed by property management companies and independent landscapers, manager and tenant transience, and lack of education and outreach aimed at residents. CWS has experienced significant success in its current service area in Oakland in reaching out to the multifamily community to boost traditional recycling. CWS will continue to develop its specific program and educational materials to boost participation and diversion of food wastes from multifamily residences by:

**Ongoing Outreach** - Successful MFD programs require regular outreach. Reminders about organics diversion and food waste collection programs should occur at least once a year to mitigate tenant transiency. Image-based messages help reach multi-lingual groups and those with varied levels of literacy. To streamline efforts, messages should include signage in areas where MFD residents bring their

waste and recyclables, and color-coded and labeled bins and carts for organics. Move-in /Move-out kits can be provided to MFD owners and managers to help bridge the gap in tenant transience.

**Targeting MFDs** - By prioritizing buildings for outreach, CWS can achieve the greatest increases in diversion in the shortest amount of time. CWS will identify high priority MFDs, including large buildings, MFDs with engaged on-site property managers, owner-occupied MFDs or those where residents pay for MM&O and RR collection services, and direct immediate outreach activities to these complexes.

**Work with Property Owners and Managers** - Successful programs depend heavily on the level of commitment from property managers. Working directly with owners and property managers can help solve problems unique to each MFD. CWS will contact the property owner or manager for every multi-family complex at least once a year to promote food waste collection services. CWS will attend homeowners' association (HOA) meetings and communicate with property management to distribute educational materials regarding proper mixed materials and organics collection services and support diversion goals, by both increasing participation and tonnage of materials diverted per generator.

**Conducting Site Visits and Right Sizing** - Site visits provide face time with resident and managers, and opportunities to distribute educational materials and/or assess collection services. On these visits, CWS will verify service, assure adequate storage capacity for mixed materials, inquire about establishing food waste collection service, and troubleshoot problems that MFD account managers are having with their collection services. MFD accounts will be audited periodically to verify services/service levels.

MFD program participation is difficult to assess as not all units take advantage of the same level of service. Site visits will help CWS to assess need for future education and outreach activities aimed at establishing food waste collection services, and boosting participation in diversion programs. CWS will utilize its outreach employees who are assigned to specific areas of the City and interface with MFD property managers regarding their other collection services to ensure that Organic waste service educational and informational material is being properly distributed.

### Commercial and Institutional Food Waste Collection

CWS will offer Food Waste collection services to all businesses in Oakland. Instead of going to the landfill, food scraps collected in this program will be turned into useful products for gardeners and farmers, through composting and anaerobic digestion. An average restaurant sends more than 50 tons of food wastes and other organic material to landfill disposal each year as part of their mixed materials stream, and institutional kitchens and commissaries contribute significant amounts of food scraps to the waste stream. By specifically targeting these institutions through outreach and education, and providing flexible, comprehensive food scrap collection services, CWS will help these local establishments to reduce their mixed materials disposal costs while helping the City to reach its diversion goals. Materials accepted in this program include Fruits, Vegetables, Dairy Products, Bread & Grains, Bones, Meats & Poultry, Fish & Seafood, Coffee Grounds, Eggshells, Plants, Soiled Paper Towels or Plates, and Milk Cartons & Waxed Cardboard.

### Bulky Goods Collection

CWS offers a bulky goods collection program to all City of Oakland customers. The bulky goods program involves CWS working with customers to schedule the collection of large items from their homes. These items will be separated at the CWS facility and then delivered to appropriate recycling firms or sent for disposal if they are non-recyclable. Items include furniture, mattresses, refrigerators, appliances, televisions, monitors and computers. Diversion and recycling achievements for the bulky goods collection program will be included in monthly diversion reports to the City of Oakland. The bulky goods collection

services are provided once per year by appointment for each household, and as a pay-as-you-go service for additional collections.

### HHW Collection and Sharps Mail-In Service

CWS will work to provide Oakland customers with many opportunities to properly manage potentially hazardous materials, particularly through HHW and sharps collection programs.

Residents may request a household hazardous waste (HHW) collection by calling CWS' customer service line or by submitting a simple form on the CWS website. All materials collected by CWS drivers will be delivered to CWS' partners for handling hazardous and difficult to manage materials, Evergreen Environmental and Freon Free, who will process and dispose of all HHW.

Residents may request a secure envelope for sharps collection, by calling CWS' customer service line or by submitting a simple form on the CWS website. CWS will send the resident this envelope, which they will then use to collect sharps and syringes. The securely sealed envelopes will be mailed directly to Stericycle, who will dispose of all materials.

HHW collection services and Sharps mail-in are offered at an incremental cost to residents.

### Commercial Outreach and Technical Assistance

The CWS commercial diversion plan implements multi-faceted action to achieve increased and sustained diversion. The CWS commercial outreach and technical assistance diversion program may include:

- Mailers to introduce new company and new services options
- Site visits to work through service level changes
- Phone calls to certain customers before roll-out to determine service level changes and coordination of site visits as needed
- Visits with select customers to validate service

Our Diversion Plan will include CWS staff who will work directly with commercial diversion initiatives and provide phone and on-site customer training and diversion program development. CWS may engage consulting staff to provide additional multiple language support and specific diversion expertise.

Our philosophy with this new commercial contract will be to expand our efforts and focus on diversion and other environmental reduction ideas. As our teams will be discussing waste stream reduction opportunities with each unique commercial customer, we feel it is a perfect opportunity to also discuss source reduction methods, as well as energy and water reduction ideas. Our goal is to provide an overall assessment and follow-up for each commercial customer to help improve on these issues every year. The top 100 of the customer base by volume will be visited and have follow-up every year.

### Audit Procedures

Audit results inform future waste diversion initiatives, by identifying materials that are not being diverted to their full potential. Through strategic periodic sampling, assessment of the efficacy of current diversion initiatives, subsequent analysis and planning, CWS will develop ways to incorporate diversion of those materials into our diversion program.

CWS will conduct audits of material in residential carts and containers on a regular basis. With the goal of increasing participation and realizing diversion of organic materials, CWS will inspect the material,

commend residents for participation and provide further education through collection notices, brochures and personal contact. Those with severe contamination will be visited by CWS staff. Findings will be reported to the City of Oakland and will include:

- Residential type (Single-Family or Multi-Family)
- Name, Address and contact information
- Audit results and findings
- Educational materials shared
- Personal contact made, if available

All audit criteria and scheduling will be reviewed and approved with the City of Oakland prior implementation.

As discussed in the Reporting discussion in Section 5.2.6, CWS employs the Scrapware brand scale system software to track all inbound materials and routing into its facilities. As part of the FleetMind routing software and collection services, CWS will track route statistics, which include all weight tickets for materials delivered to the Facility. CWS will enter all weight tickets that are direct-hauled. CWS will total monthly volumes by material types to summary over collection, processing, and disposal. This program provides accurate inbound and outbound weight of materials, by material type. Reports will be prepared for daily, monthly, quarterly, and annual achievements. Operating and report results will be used to evaluate the effectiveness of collection and public education programs and program modifications. Importantly, our reports system will enable CWS to forecast program needs and achievements for future months and years.

In the event CWS correctly implements all planned processes, but is unable to achieve its forecasted diversion goal, we will examine all of our operations and seek improvement wherever possible, and make changes to sustain and increase diversion. These changes may involve how:

- Materials are collected and processed
- CWS materials are marketed and sold
- Customers are educated and motivated
- Consuming industries evolve and develop
- Consumers purchase and use divertible products

CWS may anticipate a possible need for reprocessing of some materials and will explore adjustment of the operation of equipment to ensure optimal performance.

CWS believes that the City of Oakland possesses the characteristics that are intrinsic to continuing population growth and the growth and success of businesses and therefore wants to continue investing in the City of Oakland. CWS believes that the characteristics that inspire commercial business growth and success in the City of Oakland include:

- Proven track record of prior success
- Ambitious and industrious community



**Material Bale Transportation**

- Strong governmental leadership and vision
- High emphasis on education and vocational development
- Desire for efficient and productive manufacturing and services
- Motivated and professional workforce throughout the labor continuum
- Ability to develop and implement innovative ideas in the market place

For these reasons and other reasons, CWS has already anticipated a growth in the number of divertible tons generated in the City. Therefore, CWS is already planning for process and equipment enhancements and upgrades at a new mixed waste processing facility in the City of Oakland. This new facility's operation will increase processing capacity and material processing selectivity to accommodate the growth in the amount of materials and emerging diverted material markets. In addition, CWS believes that its own industry technology and technologies of alliance industries will enable greater diversion through new product developments.

At the City's request, CWS may periodically conduct additional reviews of the SFD, MFD, and City MM&O collection service programs to assess performance indicators, including but not limited to: average volume of recyclable materials per setout per Service Address and per unit, SFD and MFD recycling service participation levels, contamination levels, etc. Prior to the program review, CWS will meet with the City to discuss the purpose of the review and the method, scope, time frame for completion and the specific data to be collected and reported by CWS. CWS will then prepare and submit to the City a written plan for review and approval. If the City wants to collect program data, perform fieldwork, conduct waste generation or characterization studies, conduct route audits to investigate customer participation levels and setout volumes and/or evaluate and monitor program results related to recyclable materials collected in the City by CWS, CWS will cooperate with the City and/or its agent(s), including StoOPWaste.Org.

### ***5.3.2. Facilities***

In three (3) to five (5) years, CWS will transition away from its Interim Processing and Transfer Facility and will process all materials received as part of the mixed waste and organics collection service through its new, state of the art mixed waste processing facility (the Oakland Gateway Facility). This includes all SFD, MFD, Commercial, and City materials, and all materials collected through bulky, temporary roll-off, City container, special events, and all other ancillary collections. This processing means that all materials will be screened and processed through a number of separation and recovery technologies removing recyclables, diverting organic fines, and disposing of only non-recoverable materials.



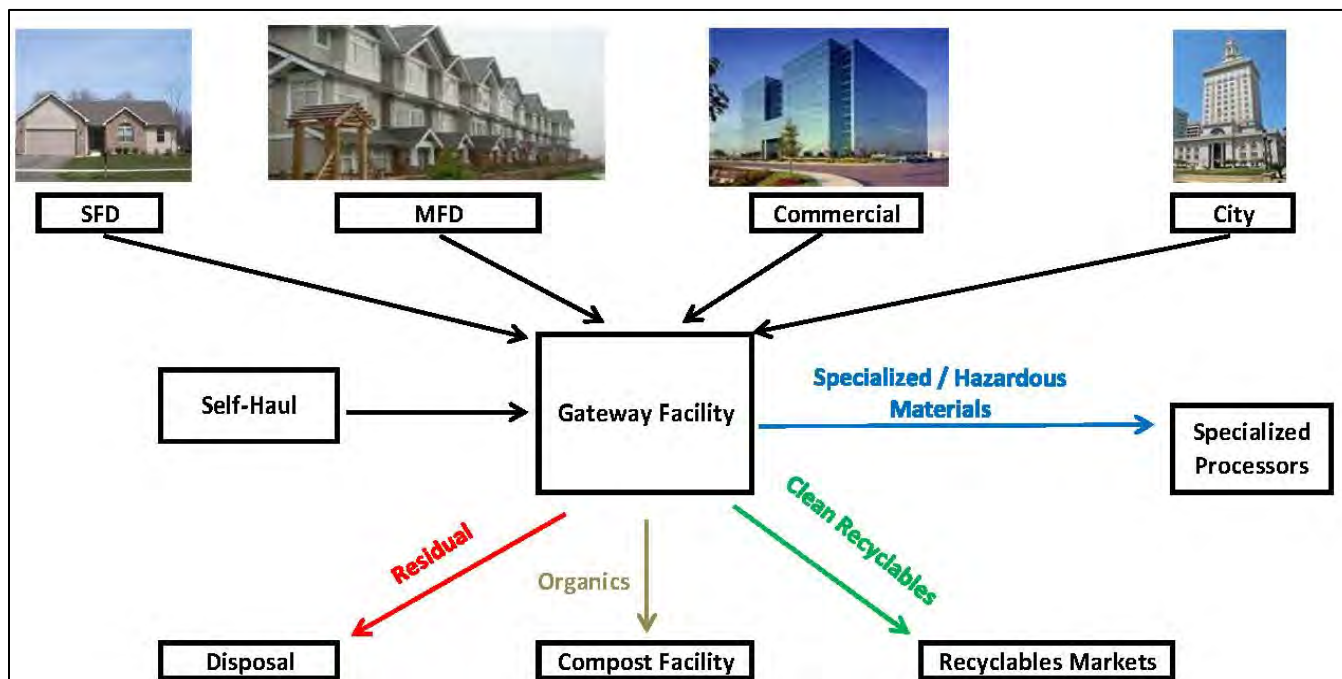


Figure 5.3.2-1 Materials Flow Diagram

#### Adoption of Council Option Regarding East Bay Municipal Utility District

Oakland has a food waste digester facility in West Oakland at the East Bay Municipal Utility District (EBMUD), which has immediate capacity to process most of Oakland's food and green waste. After green waste and food waste is collected by CWS from the organics bins, the material is then processed to produce compost, which can be utilized for agriculture or landscaping, as well as to create energy through methane collection. Through this process, methane from Oakland's green and food waste will be captured to supply power, thus reducing the City's carbon footprint.

As this is a Council selected Alternative, CWS asserts that utilization of the EBMUD digester comes to all City residents and businesses at no additional cost, and is in fact the lowest-cost bio-waste-to-energy option under current consideration. CWS has negotiated with EBMUD regarding rates and material quality requirements, and we are confident that CWS can provide the digester with a consistent stream of high-quality source-separated product. CWS will not only deliver source-separated commercial organic materials, but will also deliver organic materials recovered from multi-family collection, to be processed prior to being utilized by Recology (the processing partner at the facility) and EBMUD. CWS has signed a Memorandum of Agreement for Delivery of Organic Waste and Ground Lease.

As CWS institutes programs to increase diversion in the City of Oakland, we will take a step-by step approach with each diversion program to customize its application to Oakland customers, in an effort to maximize its effectiveness and maximize diversion rates. The schedule of action items and program milestones for each diversion program that CWS will employ are shown in Table 5.3.2-1.

## 5. TECHNICAL PROPOSAL

**Table 5.3.2-1 Diversion Program Action Item Schedule**

Diversion Program	Action Item
<b>Second Half 2014</b>	
Setout Awareness Training and Multi-Service Benefit	Develop training, evaluation, and reward program for collection vehicle operators for the purpose of identifying the best and worst participating locations, including sites with both high and low levels of participation and excellent and poor quality of participation.
<b>First Half 2015</b>	
Setout Awareness Training and Multi-Service Benefit	Identify and maintain a collection vehicle driver position on any outreach and education project team.
HHW and Sharps	Distribute information about the programs
HHW and Sharps	Create a web site interface where customers can request collection materials for sharps and request HHW mobile collections
Public Education	Roll out carts and other containers
<b>Second Half 2015</b>	
Public Education	Target outreach and education to neighborhoods or regions where Organic participation is below average.
HHW and Sharps	Identify customers frequently requesting materials and investigate changing them to a more bulk-style collection container with fewer needed deliveries and collections
<b>First Half 2016</b>	
Setout Awareness Training and Multi-Service Benefit	Establish an annual qualitative award recognition for drivers whose actions result in improved customer behavior.
<b>Annually</b>	
Setout Awareness Training and Multi-Service Benefit	Reduce contaminated loads
Setout Awareness Training and Multi-Service Benefit	Increase number of sites participating
Multifamily Organic Service Expansion	Speak with each property manager or property management company at least once per year
Multifamily Organic Service Expansion	For properties with greater than 100 units, visit and evaluate the property at least once every two years.
Multifamily Organic Service Expansion	At properties with below-average participation, provide information to residents and property staff on proper material preparation, use of the recycling system, and evaluate the system for user-facing problems.
Multifamily Organic Service Expansion	Offer to attend or speak at HOA meetings; create a web site interface where customers can request a speaker at a community meeting; attend meetings at a minimum of 25% of total number of properties each year.

## 5. TECHNICAL PROPOSAL

Through the result of CWS' efforts to best tailor the diversion programs to its Oakland customers, development of and improvements to its facilities and workforce training, as well as population growth and increase in economic activity, the amount of materials diverted in Oakland will increase each year of the MM&O Collection Services Contract. Tonnages for Recyclables, Organics, and Mixed Materials delivered and processed, and the estimated Residual Tonnages for each calendar year of the MM&O Collection Services Contract beginning with calendar year 2016 are shown segregated by SFD, MFD, Commercial, and City services in Table 5.3.2-2.

**Table 5.3.2-2 Tonnages of Material Received**

Calendar Year	SFD			MFD		
	Recyclables	Organics	Mixed Matls	Recyclables	Organics	Mixed Matls
2015	804	24,520	25,615	NA	NA	15,638
2016	1,607	46,245	50,528	NA	NA	29,728
2017	1,607	45,918	49,858	NA	NA	28,291
2018	1,607	45,606	49,217	NA	NA	26,958
2019	1,607	45,309	48,605	NA	NA	25,723
2020	1,607	45,025	48,020	NA	NA	24,581
2021	1,607	44,754	47,462	NA	NA	23,526
2022	1,607	44,496	46,928	NA	NA	22,553
2023	1,607	44,251	46,419	NA	NA	21,658
2024	1,607	44,017	45,933	NA	NA	20,835
2025	804	22,008	22,967	NA	NA	10,418

(1) Recyclables include bulky items recovered from mixed material processing and items separated at setout. As per RFP, most of this tonnage was collected from SFD but includes a nominal portion was collected from 5-9-unit MFDs.

Calendar Year	Commercial		
2015	NA	NA	43,303
2016	NA	NA	86,013
2017	NA	NA	85,443
2018	NA	NA	84,895
2019	NA	NA	84,368
2020	NA	NA	83,864
2021	NA	NA	83,381
2022	NA	NA	82,919
2023	NA	NA	82,477
2024	NA	NA	82,055
2025	NA	NA	41,028

According to the East Bay Economic Development Alliance, forecasted growth for Oakland over the next 5 years shows a growth rate on par with the US average. The key to Oakland's continued population growth is international migration. In addition, Oakland receives net positive inflows of households from San Francisco and San José. The EBEDA estimates a 0.9% annual average growth rate for the metro area over the 2009-2014 period. This population growth results in an increase in mixed materials, recyclables, and organics generation each year.

As CWS begins processing all materials through the Oakland Gateway Facility, continues to make technological improvements to its facilities to most effectively process the Oakland waste stream, diverts

additional materials away from the mixed waste stream before it is accepted at CWS processing facilities, and supports correct disposal and diversion practices with significant public information and education outreach, it will experience reductions in the residue rate for all Oakland customers. Considered as a contribution to the diversion rate for the sum of the City of Oakland's residential, City, and small business recyclable materials, organic materials, and waste materials, this is a final 42.00% diversion of materials handled in 2025.

**Table 5.3.2-3 Overall Diversion Outcome**

	<u>New BAFO 6/13/14</u> <u>MMO</u>
7/1/2015 – 12/31/2015	<u>30.00%</u>
1/1/2016 – 12/31/2016	<u>31.50%</u>
1/1/2017 – 12/31/2017	<u>33.00%</u>
1/1/2018 – 12/31/2018	<u>34.50%</u>
1/1/2019 – 12/31/2019	<u>46.00%</u>
1/1/2020 – 12/31/2020	<u>47.50%</u>
1/1/2021 – 12/31/2021	<u>49.00%</u>
1/1/2022 – 12/31/2022	<u>50.00%</u>
1/1/2023 – 12/31/2023	<u>51.00%</u>
1/1/2024 – 12/31/2024	<u>52.00%</u>
1/1/2025 – 6/30/2025	<u>52.00%</u>

CWS has been able to maintain similar diversion guarantees as were made in the original January 2013 proposals, assuming the North Gateway Facility was operational for the first five years because of the EBMUD outlet for organics. In addition, during the future years when at North Gateway, CWS has increased the diversion guarantees by an additional 10 percent.

#### **5.4. Customer Service Plan**



**Customer Service Representative**

Customer service involves not only the front line interaction of our crews, but also our customer call center. CWS currently operates a customer call center in Oakland, California and San José, California. Each center focuses on the customers in the prospective territories. By having the separate call centers CWS is able to provide redundancy, to ensure any extended outages will result in customers will continue receiving the best possible service available. For its Oakland call center, CWS has reserved **1-510-OAKLAND** as an easy to remember call-in number for its customers.

Our Customer Service Representatives are trained to treat customer calls with the utmost professionalism and accommodation. CWS wants callers to feel that CWS understands their needs and responds appropriately. To achieve the goal CWS uses the "World Class" Customer service and marketing model. This involves extensive training on how to best respond and resolve all customer calls, including customers who may be challenging to work with. Developing, implementing and maintaining extremely high levels of customer service skills are critical in maintaining and increasing customer satisfaction. All representatives are trained and empowered to resolve customers' needs without the need for further follow up by the customer, or letting the customer feel that CWS does not take their needs seriously. This level of customer satisfaction is achieved through proper

training, empowerment, and supervision. The pro-active “World Class” service model will also be all encompassing and ensure that the customer are always provided the most current and correct program information to ensure that customers are part of the solution in achieving the solid waste diversion goals for their personal household, their community and the City of Oakland.

To achieve the goal of a successful “World Class” service model, the Customer Service Technicians must be effectively trained in how best to respond. A Customer Call Center Coach will continually motivate the Customer Service Technicians to provide the customer support everyone would want: courteous, helpful, and quick to resolve any customers’ needs and to be pro-active. The Customer Service staff will be consistently evaluated to ensure that staffing levels are maintained to provide the highest service levels and to exceed contract level requirements.

CWS ensures it meets the “World Class” Service model by ensuring fluid communication between all departments, from Billing, Collection, Processing and Management. Additionally this extends to CWS’ other operations: Information Technology, Contract Compliance, Human Resources, and Public Affairs. CWS ensures that in addition to service level changes the customers’ billing needs are integrated, to ensure that Customer Service Technicians can directly respond to and adjust customers’ billing needs as well. When CWS says our Customer Service Center is a “One Stop Shop” it’s not just a slogan it’s a reality.

#### ***5.4.1. Customer Service Technology Platform***

The CWS Customer Service Representatives, and all other CWS operations, have access to the valuable Route Accounts Management System (RAMS) computer software tools. This package provides faster speed than comparable systems, flexibility to modify and adapt to changing needs, exceptionally stable database management, and most importantly accurate and real-time billing. This software is backed by over 25 years development enhancements and experience within the waste industry. This software is developed by waste industry specialists for the waste industry. This means that the software from the base platform up uses the needs and details this industry requires as its basis.

RAMS does not only allow for real-time information, but is built on the basis that everything is real-time. From the customer service representative all the way to the driver in the truck, up to the minute information about a customer’s profile, specific needs and current billing status can visually be seen. Because of the flexibility of the system, even persons off-site, with proper security access can view and update these files anywhere in the world with access to the internet. In this way, even the field supervisor, sales staff, and City staff can view and update files as necessary.

RAMS capabilities include secure customer billing, customer payments, intra-departmental communication, routing/dispatch, reporting, route modeling, rate changes, container inquiry/inventory, customer inquiry, customer entry/maintenance, route audit tracking, work order generation, real-time route changes, direct communication to drivers in the field, remote access worldwide, internet payment and billing information.

Because of the adaptability and flexibility of RAMS, additional features can be developed quickly and easily, making RAMS the most powerful software packages for the Waste Industry. Additionally the way that RAMS is built, report generation is flexible and fast. RAMS major software modules include:

- **Customer Service Profile:** Data entered here feeds the rest of the system; the functions for this module are rate information and service location data including key contacts, container information, and billing information. This area allows CWS to access any part of the customers’ profile.



- **Routing and Route Model:** With these modules, permanent routing can be created based on information keyed into Customer Maintenance. Efficiency is maximized through automated grid routing and search capabilities to locate a service location for easy route maintenance all the way down to geo-coding of the actual containers. This modular draws the route for the driver similar to a standard GPS system but is much more powerful. The system documents when service is completed both visually and using GPS and RFID tagging.
- **Dispatch:** With CWS using RAMS, daily dispatch will be smooth, efficient and easy. Drivers log into their touch screen computer panel inside the truck and the route is drawn for them. Changes can be made even while the driver is in the field without the complication of printing paperwork and other more cumbersome communication methods. The driver has an interactive computer panel in the truck that updates the route real time. Missed collections are virtually eliminated due to someone forgetting or lack of familiarity of a route. The system prevents the misses because the driver is not permitted to log out until the route is completed and any adjustment or service changes are addressed as well. Customers can log into the system to see if they have been service, if there were any challenges or if they are still pending.
- **Container Inventory:** This module ensures that container inventory is up-to-date, automatically updating the dispatching system when container delivery/removal routes are updated.
- **Report Capabilities:** Using SQL language RAMS offers unlimited report writing capabilities. If it is in the system, it can be retrieved in many types of report formats to include Excel. Because of the flexibility and ease of use, development of the reports takes hours vs. typical report writing systems, which require weeks or days for an IT programmer to create them.
- **Accounts Receivable, Invoicing and Billing:** RAMS permits any type of invoice formats, billing periods, and restriction of service. In this way customers can rest assured that billing accuracy and integrity are maintained at all times.

At CWS, RAMS has proven to especially facilitate and support Operational Connectivity (OC) because it enables us to:

- Know and greet our customer.
- Anticipate the needs of our customer.
- Identify opportunities to improve customer service, performance and reduce expense.
- Apply, add, and adjust services to better satisfy the customer's needs and changes.

In summary, CWS has been very successful at increasing the diversion of solid waste because it effectively and efficiently practices highly integrated Operational Connectivity among all CWS operations, daily. CWS tests the effectiveness of its alignment and support by exercising the connectivity between departments. The Customer Service system has been and will continue to be tested, refined, and adjusted to ensure that all Customer Service Technicians are competently trained before they take their first call and their ongoing training does not stop for their career time at CWS. Our approach and philosophy will be to:

- Achieve the highest level of customer satisfaction as possible by successfully implementing and supporting our customers.



- Earn excellent program participation and compliance by all customers so to maximize solid waste diversion in the City of Oakland.
- Motivate customers to participate in achieving the communities Green-vision and Citywide solid waste diversion goals.
- Achieve and sustain an effective level of customer education about programs, materials and material preparation.
- Continually reduce the number of customer-generated service calls because customers are pre-informed about program options, expectation, and program benefits.
- Increase the number of CWS-generated service calls to ensure that we promote the program services that increases solid waste diversion, program efficiency, and reduced collection rates.
- Establish a Direct Engagement and interaction with customers regarding their solid waste service communication.

In order to ensure that any customer calling into the customer call line (***1-510-OAKLAND***) is able to communicate effectively with our staff, CWS uses and will continue to use Language Line Personal Interpreter Services. These highly qualified interpreters are just a phone call away and virtually any language is available 24 hours a day. Once CWS determines the language the customer communicates in, our representatives will use this service to have a live person translate their conversation back and forth. In this way, each customer no matter his or her potential language barriers will be able to experience the “World Class” Service model. Additionally CWS will maintain a TeleTypewriter Telecommunications Device for the Deaf (TDD) service for our customers who utilize this service to ensure that their service needs are met with the same level of professionalism.

#### ***5.4.2. Customer Service Protocol***

When customer calls are received, CWS Customer Service Representatives using the RAMS customer service and billing system will determine the type of inquiry, e.g., service-related, billing problem, container exchange, etc. During the call, the following information will then entered by the CSR who will print a standard two-part automated service call work order at the Dispatch office.

- Date and time of customer contact with CWS plus; date and time response was provided; date and time resolution was provided; description of CWS’ resolution of service issue or complaint, or response to inquiry; CWS’ employee identification codes for employees inputting the complaint or inquiry as well as the resolution
- Customer’s name and contact information: phone numbers, e-mail address, account address; service address; and occupant address
- Service location information: including where applicable, number of units; number, size and type of mixed materials and organics containers; collection service day; route number; backyard service status; special handling service status; and bulky item collection history (e.g., number of annual services performed, date requested, date provided)

The customer’s request for service is handled at the time the customer contacts CWS.

During the call, the CWS Customer Service Representative listens while reviewing the customer’s account for previous service request history. As the customer is making their request, the Customer Service

Representative enters the appropriate computer codes, route and priority number for processing. The request is processed electronically so that it appears immediately in the system and is available on-line in real-time to Dispatch. The work order is printed out immediately and assigned a priority number, and is held in a batch file for printing or viewing in real-time, together with other similar requests. Work orders can be categorized in various ways, including by route, by type, and by status (pending, open or closed).

Complaints and missed collections are addressed the same day whenever possible and no later than the next day if the call request is made after business hours. If the response time for the request is the same day, the online feature of the CSR system allows dispatchers to quickly assess outstanding work orders and immediately relay them to drivers in the field.

If the response time for the request is the next day, the work orders are printed as part of the route sheet and given to the drivers at the start of their shift for completion that day. Completed work orders are input by Dispatch, which enters the resolution and closes out the call. Resolution codes can include information to show how long it took to complete the work order. Customer service staff provides all information needed for customer follow-up on the work order.

Both hard copies of work orders and electronic data are kept on file as part of the monthly reporting requirements to the City. All customer calls are noted in the system and all information is kept confidential. The computerized database allows requests to be catalogued for reporting purposes. All customer service inquiries that have been received on the voice mail system after office hours are transcribed onto a work order by a CWS Customer Service Representative. A special note is made indicating when the customer requires a return phone call. The business office and call center will be open for at a minimum the hours of 8 am – 6 pm Monday through Friday and Saturdays on which SFD or MFD MM&O Collection Services are provided.

The minimum customer service standards for customers in the City of Oakland will be as follows:

- A minimum of ten (10) incoming calls can be received at one time at the call center
- All incoming calls are personally answered within five (5) rings before a message is taken
- Customer on-hold waiting time will be three (3) minutes or less based on a daily average
- During any on-hold waiting time and when the call center is closed, customers are offered the option to leave a voice message
- Any call “on-hold” in excess of one and one half (1.5) minutes will have the option to remain “on-hold” or to be switched to a message center where the customer can leave a message
- Customer voice messages are returned in the order received and at latest by the close of the workday following the day the voice message is received
- Customer emails are responded to in the order received and at latest by the close of the workday following the day in which the email is received
- All customer complaints received prior 2:00 p.m. will be resolved on the same day, and complaints received after 2:00 p.m. will be resolved on the next business day
- All new accounts will be contacted after their first service day to verify container delivery and driver courtesy, and to answer any questions
- Our CSR staff will receive quality-based performance reviews and continuous training in the latest customer service techniques

CWS will allow callers to be automatically transferred to and from the RR Contractor, as appropriate, and CWS will ensure that the transferred callers do not experience any changes in volume or clarity as they transfer to or from the RR Contractor.

CWS will upgrade its website to provide its Oakland customers with a one-stop resource for news, information, and education on CWS' collection and processing services. The site will provide in-depth information on programs and environmental initiatives. Sections of the website will include:

- Tips and resources for maximizing residential and business diversion
- Information for commercial customers to boost diversion rates
- Specifics on how to responsibly dispose of e-waste, hazardous household materials, and other environmentally harmful materials
- Find answers to frequently asked questions
- View rates for residential collection services
- Find listings and descriptions of collection service schedules and maps, and
- Other related topics.

CWS' locally managed and updated website will enable customers to securely pay their bills online, and identify whom to contact at CWS with service issues or questions. The website will have a link to the City's website and a link to the RR Collection Contractor's website. CWS will work with the City to ensure that the City's website has a link to the CWS Oakland homepage, and a link that customers can use to email the CWS customer service team directly. Similarly, the CWS website will feature a simple contact form and e-mail that customers can use to send comments and inquiries and request services or service changes to CWS.

#### ***5.4.3. Customer Billing and Collections***

CWS's Enterprise Class billing system integrates Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM), and provides both CWS and our customers with real-time access to business-critical data, a wide range of information and the ability to analyze detail. CWS customer service staff housed in Oakland will be the direct point of contact for all customers who call in on billing, payment and collection matters.

**Billing:** Our advanced system can facilitate accurate filing and accounting of customers. It seamlessly integrates ERP and CRM to provide comprehensive up-to-date information. The main features of the system are: General Ledger Management, Controlling and Budget Management, Fixed Asset Management, Compliance Management, Bad Debt Collection, Accounts Receivable, and Accounts Payable. Several new components will be added to CWS's already robust and proven Rams Customer Service System to enhance its current Customer Billing System and provide additional features.

CWS will maintain the same billing cycle and frequency currently in place for all Oakland customers. Every customer will receive a personal profile in our system that contains a unique account number, service classification, related payments and other relevant information. Invoices will be generated by the Rams Customer Service System. Once invoice reports are approved, electronic invoice information will be transmitted in encrypted format to a 3rd party billing company and data receipt will be automatically confirmed to CWS. Information on Bend Mailing, which has been identified as our 3rd party billing company, will use a time tested proven method to send invoices to all of our customers within 48 hours. Information on Bend Mailing is provided below.

CWS will offer customers clear and professional, paper based and online invoices and add the RAMS Online Billing Module to the current Rams System. This Module allows customers to login into a secure web based portal to review accounts online. Through this online portal, customers can view service and payment history; submit customer service requests, such as change of service, address, etc.; and make online payments.

Following internal review, billing data will be transmitted using the Rams Customer Service System through a process initiated by the Customer Service Manager. This data will be processed to generate an electronic file that contains all invoice information. This file will be submitted electronically through an encrypted secure method to the 3rd party billing company. The receiving system will verify that the transmitted file was sent without errors and provide an instant electronic confirmation of receipt.

Customers will have the options of making payments through the mail, securely online or over the phone, or in person at our company's Oakland headquarters.

Our Billing System uses a highly robust and industry standard Microsoft SQL database to house all customer service and customer billing information. Use of this highly standard, widely used database allows our other systems to integrate very closely with our Billing System through the use of data queries.

**Collections:** CWS will adhere to the "Delinquent Service Account Termination Process" defined in RFP Section 7.13 or any alternative prescribed by the City, work with City of Oakland staff to assure that our internal procedures are consistent with City requirements and preferences, determine how delinquent account information shall be transmitted to the City, and identify any additional and appropriate roles, responsibilities and strategies for resolving delinquent accounts. CWS' computer system will generate an Accounts Receivable Aging Report indicating whether accounts are current or aged 31-45 days; 46-60 days; 61-75 days; 76-90 days, and over 90 days. We initially anticipate that, at a minimum, the City will be notified of all accounts that are over 30 days past due and subsequently informed of ongoing delinquencies every 30 days.

CWS will dedicate Oakland-based staff to address certain invoice issues and assist with City interface on bad debt and delinquent accounts. Staff scheduling issues that might arise will be addressed by temporarily assigning personnel from our San José office to assure continuity of billing and collections functions.

**System Security and Reliability:** Our System Administration plan includes various fail-safe components including hardware redundancy; remote access and functionality, such that in an emergency CWS can continue servicing customers from one of our other facilities in a manner that is completely transparent to our customers; and nightly encrypted backups to our offsite location of the entire billing and customer data components.

Our IT department administers a range of tests as part of CWS' Disaster Recovery Procedures to ensure that redundant operations will work flawlessly when needed. Monthly challenges are run to ensure that our off-site "Hotspot" location will function well and quickly when needed. Sample invoices, bills, payments, and receipts are generated each month and tested by staff. System performance assurance includes review of all aspects from receiving paper based bills at a designated physical location to testing online credit card transactions to ensure a perfect experience for our customer.

CWS has developed and currently uses a thorough process to minimize both data and financial errors for our current business customers in Oakland. CWS will employ these same methodologies for all new Oakland residential and commercial customers. This process generally contains, but is not limited to the following:

- Daily backup of customer service data, and customer service database
- Daily off-site backup of customer service data and service database
- Daily database maintenance which includes re-indexing of database to check file consistency
- Weekly “Packing” of database to maintain its size and the efficiency of queries and reporting
- Weekly financial AR reports sent to various managers including the AR Supervisor, CFO, and Customer Service Manager

**Bend Mailing Services:** In business since 1997, Bend Mailing Services’ (BMS) clients include service and nonprofit organizations, large and small businesses, church and civic organizations, and political action groups. BMS offers a full range of bulk mailing services and a sophisticated invoicing system that delivers economy and efficiency to any company needing to send statements to its customers BMS pays living wages, full insurance benefits and vacation pay for their employees and as a result, has dedicated workers who take pride in the work they do which encourages top quality job performance.

BMS processes statements for a total of 106 companies, including waste companies, water companies, Odwalla Juice Company, an electric company (Central Electric Cooperative) and a resort company (Jeld-Wen). BMS has been performing like services for municipalities since 2004. They mail approximately 500,000 - 600,000 + per month of statements.

BMS receives an electronic file in the morning, processes it, mails invoices by that afternoon and makes them available online through their secure website. BMS has redundant sequencing built in and a verification system in place at the beginning and end of the inserting process to insure accuracy. Each statement is given a unique number and verified at the end of the inserting process to eliminate a lost or missing statement. BMS uses the Intelligent Mail Barcode for its delivery point barcode on all utility billings. This bar code was developed by the USPS as an upgrade and replacement to the long standing POSTNET™ Barcode Redundancy is a rule that BMS incorporates into their standard business operation and they have equipment for each and every job and backup equipment that will ensure job completion. In case of power outages, fires or other reasons that the billing process cannot take place at the BMS location, a certified backup will be available.

### 5.1. Transition Plan

CWS has dutifully served Oakland's residents since 1993. As CWS currently collects recyclables from 50% of Oakland, addition of the balance of the city to CWS existing operations represents an expansion of service as opposed to startup of a new operation. Expansion of residential recycling collection services to all Oakland residents will deliver CWS' local, friendly and successful services and minimize service disruptions, given our company's existing Oakland collections knowledge base. As an experienced, dedicated and successful service provider, CWS combines working knowledge of Oakland's Public Works Agency (OPWA), its operations and program with long-term working knowledge of Oakland collections to ensure that transition with CWS will be less complex and impactful for customers than might transition with a new contractor that is unfamiliar with the city. Although changes may be required for the current and expanded CWS customer base, they would pale in comparison to the experience with a new contractor. In 2007, CWS won public praise and recognition from the City of San José City Council for its leadership in executing the smoothest transition for services that the City and its citizens had ever experienced during the 14-year history of the City's Recycle Plus program.



San José Certificate of Commendation

With Oakland's Zero Waste program goals, customers will be able to add additional materials to their recycling cart. CWS will inform customers of these new opportunities and deliver customer communications and education through mailings, web and social media outreach and events throughout the City, while making efforts to ensure that all customers receive the service configuration that best suits their needs.

A well-managed transition is critical to establishing the foundation for a successful franchise. During transition, the people, systems, procedures, and resource application crucial for a smooth running franchise will be put in place. During the transition period, all aspects of collection will be addressed including customer service, worker health and safety, work quality, staffing, skills, vehicles and equipment. Our team will prioritize the resolution of any start-up issues. CWS will utilize the transition period to identify and make service improvements. Baseline data, including service needs will be measured and used to guide development of and complement a comprehensive public education and outreach program. This data-driven approach will result in greater recycling and solid waste diversion. CWS will work diligently with all parties to accomplish a seamless transition.

### CWS Transition Team

The CWS Transition Team will be a partnership composed of internal CWS staff, Circlepoint, The Next Generation and, for the purposes of transition only, solid waste and associated professionals, Archie Humphrey, Gershman, Brickner & Bratton, Inc., and, Kneal Resource System. The CWS Transition Team will be led and fundamentally directed by CWS President and Executive Director.

Team members will meet as planned and will be in consistent communication to ensure a successful transition. The principal contact for communications with the City will be CWS' Transition Manager. Information about meetings with City staff and others, updates on transition status, data needs, policy issues, and other pertinent information will be shared electronically as appropriate.



Provided in this section is our proposed and detailed transition plan for provision of the services set forth in the RFP. This transition plan will demonstrate CWS' ability to implement all necessary procedures and ensure a seamless transition for the residents of Oakland.

### 5.1.1. Timeline

On Wednesday July 1, 2015, residents in Oakland will have their recyclable material collected by CWS according to their current schedule. CWS will have implemented the transition seamlessly and in the professional manner expected and required by the City of Oakland.

Key CWS managers will work with the City through all aspects of the transition, which can be categorized as follows:

1. Transition Management
2. Personnel hiring and training
3. Detailed collection routing
4. Education and outreach campaign development and implementation
5. Customer service coordination
6. Customer collection assurance
7. MRF enhancements/new equipment
8. Carts/bins acquisition and delivery

Beginning in the second quarter of 2014, CWS will begin working with the City to review and update the overall service implementation plan and confirm the transition period public outreach and education program. This will include, but may not be limited to the following:

- Coordinate with the City to finalize the public outreach and education program to be inclusive and consistent across all service areas
- Initiate a branding exercise in close coordination with the City
- Hold kick-off "all hauler" coordination meeting which should continue on at least a quarterly basis
- Conduct early polling and focus groups to better understand community perceptions and begin the process of gathering more granular demographic data
- Develop and deliver new carts to customers
- Work collaboratively with the City to develop highly visual and culturally appropriate informational tools and materials
  - A high-quality website with an abundance of information on the new collection services, tips for appropriate sorting and other opportunities to support Zero Waste goals through changes in habits. The website will be fully accessible to the disabled, mobile devices, with critical information available in Spanish, Chinese and Vietnamese. The site will be easily shared on social media platforms. This will help residents to prepare for the transition and access important customer service information during transition.
  - An introductory mailer to customers notifying them of the new collection service and container options, and requesting a response about cart choice, address verification and



**Cart Delivery**

service levels at residences where this information needs to be updated. Customers will have the option of returning the survey by mail or completing the online version that will incorporate messages about recycling and waste diversion.

- A new public education packet to describe available services and identify recyclable items.
- Educational materials detailing, in multi-lingual text and universal images, acceptable and non-acceptable materials for recycling. Certain of these materials may be delivered in tandem with delivery of new containers to all customers. The initial educational packet will also contain CWS contact information as well as information on other waste services, including new programs to manage recycling batteries and used oil.
- Informative decals embedded in all new carts and bins that illustrate acceptable and non-acceptable waste and recycling items in English, Spanish Chinese and Vietnamese, . In later stages of the program, decals in other languages spoken in Oakland may be developed and distributed based on data about recycling habits in different communities.
- Conduct polling and focus groups to acquire additional data to tailor messaging and identify preferred tools and methods to reinforce program goals and reach customers where the greatest improvements can occur
- Implement other activities to extend the reach of the transitional public outreach and education program

Major tasks in the schedule are described below:

Prior to the start of services and coordination of cart and vehicle purchases, CWS proposes to initiate an investigatory waste composition study in the franchise area to better understand the potential for diversion from the waste stream. This will allow CWS to better tailor education programs to target diversion of specific recyclable materials present in the waste stream.

The CWS Transition Manager will work closely with the City to establish accountability throughout the transition effort. Regular check-in meetings will be established between the two parties, ensuring fluid communication and maximum efficiency. Daily conference calls and weekly meetings with City staff will be scheduled for a period two weeks prior to and eight weeks following the start of the franchise. This period will also provide an opportunity for the two parties to clarify the CWS approach, budget, and scope of work.

During the transitional period, the team will establish contact with customers in Oakland, preparing them for the change in service provider, sharing tips for sorting home and commercial recyclables, and requesting their participation in a short survey that will inform the data-driven transitional outreach program. The team will also conduct an initial assessment of Oakland residents' recycling habits through polling, focus groups, and a waste stream audit. This initial effort will help to identify communities in Oakland that have the greatest potential for improvement in their recycling habits. Once this information has been collected, directed outreach can address specific information needs or incentive programs that would be beneficial to these communities.

### New Collection Services Implementation Tasks

- RFP Due; January 9, 2013
- Selection of contractor, July 2014.
  - CWS will immediately organize opportunities to meet with the City of Oakland at its earliest convenience to discuss the RR Collection Agreement
- City of Oakland conducts and completes negotiations with CWS
  - CWS will complete the RR Collection Agreement and provide the required bonding, insurance, and other contractual mandates
- City of Oakland approves the RR Collection Agreement
  - CWS proposes coordination meetings weekly with the City of Oakland to establish continued proactive communications among all stakeholders
- CWS will initiate a waste composition study and identify service requirements for new customers in the expanded franchise area to ensure that its MRF and services are best tailored to ensure inclusion and maximize recyclables diversion from the waste stream
- CWS will continue permitting and begin construction of the new Interim Transfer and processing Facility, continue permitting and development of the Oakland Gateway Facility and begin improvements to the 10th Street MRF
- CWS will work closely with the existing household mixed waste collector and departing recyclables contractor to ensure a seamless transition of account information and expand CWS customer profiles and service preferences
- CWS will work with the City and other contractors to introduce the new recyclables collection services to the public
- CWS will collaborate, lead, and/or participate in community and media information events
- CWS will complete customer contact and education materials, including updating its website ([www.calwaste.com/Oakland](http://www.calwaste.com/Oakland))
  - CWS will update its website with information on the new collection services, along with links to relevant City of Oakland web sites. Residents will be able to access CWS' site and obtain information on customer service and other community outreach efforts as well as build service profiles and preferences that help enhance customer service.
- E-mail and social media such as Facebook and Twitter will be used to inform, educate and support customer connectivity to service opportunities and options. These media will provide a range of information including suggestions about parent-student school projects, notification about participation achievement for different neighborhoods, business diversion program support, commercial customer resources, and service holidays.

## 5. TECHNICAL PROPOSAL

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- CWS and our public education partners will work with Oakland Public Works Agency staff to complete and get approved customer contact and education materials, including introductory electronic and paper mailing communication to customers.
  - CWS will send an introductory mailer to customers notifying them of new collection programs and provide CWS contact information and links to educational materials regarding CWS services and the City of Oakland Zero Waste program. The introductory mailer will also include a mail-back card that informs the customer of service and container options, and gives the customer the option to change their collection container size. The customer can also call CWS or visit the CWS website to reply. If the customer does not elect to upgrade or downsize their service, or does not respond by mail, phone, or web, they will receive their current cart size. As responses to the customer service mailing are received, customer records will be completed or revised with the selected container size, number, collection frequency, and any corrections to name, address, service or schedules.
  - CWS and our public education partners will work with the City of Oakland to create and distribute educational materials detailing, in text and universal images, acceptable and non-acceptable recyclable materials that may be delivered in tandem with delivery of new recycling containers to all customers. The launch educational packet will provide a CWS phone, email and website contact information as well as information on other recycling services. CWS and our public education partners will work with the City to create decals that adhere to new carts and roll-off bins to illustrate acceptable and non-acceptable waste and recycling items in English, Spanish, Chinese and Vietnamese.
- Container mobilization for carts and commercial roll-off bins
  - CWS will direct the container manufacturers to ship carts to a central staging area. The local distribution company will deliver containers prior to the determined start-up service date.
- Order trucks
  - CWS will purchase the necessary new trucks. Per the transition schedule, all service trucks will be on-site 30 days before startup.
- Corporation yard and maintenance facility
  - CWS will begin development of its Interim Transfer and Processing Facility, and prepare the office at the 10<sup>th</sup> Street facility for service expansion, as this will be the operational headquarters until the Oakland Gateway Facility is completed. CWS will also ensure that its vehicle management facilities at the OMSS Site are well established and ready for vehicle parking.
- Driver and support staff training
  - CWS will seek to hire existing drivers knowledgeable of and familiar with the City, and provide training on new service requirements and assignments. Drivers will be trained to use the collection vehicles and equipment. Training will start at least 30 days prior to start-

up of new services. Training will be held on weekends and evenings to ensure driver availability.

- New vehicles and route familiarization
  - CWS will design and print materials for the route work and set up logs, computer data files and report formats. Familiarization runs, using new equipment under simulated adverse conditions, will also be initiated.
- Begin new services

CWS will launch new recycling collection and other services on schedule on July 1, 2015.

### ***5.1.2. Carts and Bins***

CWS has initiated letters of commitment to acquire the carts and roll-off bins needed to fulfill this contract. CWS officials will place binding orders with manufacturers soon after the City awards the RR Collection franchise.

CWS will provide carts equipped with industry best practice RFID technology. The manufacturer, Otto, Shaffer, Rehrig Pacific or a firm of equal or greater quality, will provide firm production and delivery timelines and personnel training. CWS will work with the cart manufacturer, to engage an Oakland-based subcontractor for cart delivery. The initial order will be adequate to distribute containers throughout Oakland, and create a three-month replacement inventory. Benchmark dates for manufacturing, printing and shipping will be agreed to by all participants and submitted to the City for approval. To ensure timely arrival, CWS will conduct weekly update calls with the manufacturer.

Cart and container deliveries to Oakland residents will begin on June 1, 2015 and be completed by June 30, 2015. This schedule ensures complete delivery of containers before collection service begins on July 1, 2015.



**Cart Repair**

CWS will work directly with customers to “right size” their carts by conducting surveys and providing recommendations. This effort will:

- Optimize collection services and minimize expense for each customer
- Maximize solid waste diversion and recycling
- Conserve collection and processing resources

Utilizing RFID technology, CWS will record cart and container distribution with customer name, address, cart or container size, container distribution date, container identification serial number, and container service history; data that CWS will use in reporting and for service monitoring.

RFID technology will ensure account database accuracy, provide detailed service verification and inventory asset tracking, measure recycling participation by residence /landfill diversion, identify specific

areas and customers for directed education campaigns, and provide the infrastructure for future collection data tracking programs.

**Table 5.1.2-1 CWS Residential Cart Preferences (Subject to City of Oakland Approval)**

Characteristic	CWS Detail
Size	SFD –64-gallon carts as default size with 96- 32- and 20-gallon cart options depending on customer need
	MFD –64-gallon carts as default size with 96-, 32- and 20-gallon cart options depending on customer need; 1, 1.5, 2, 3, 4, 6 or 7 CY bins. Minimum levels of service will be calculated by multiplying the number of dwelling units
	Commercial –Options are: 20, 32, 64, or 96-gallon wheeled carts; 1, 1.5, 2, 3, 4, 6 or 7 CY Bins; 6 - 40 CY roll-off boxes; or compactor.
	City –Options are: 32, 64, or 96-gallon wheeled carts; 1, 1.5, 2, 3, 4, 6 or 7 CY bins; 6 - 40 CY roll-off boxes as determined by City needs
Construction	Injection-molded carts
Color	Recycling cart in blue for City and service branding
Signage Identification	labeled identification and program logos for branding
Public Education	label with a Quick Read code for public education and material descriptions

Cart delivery will begin four weeks prior to the start of collection service and be completed citywide before service begins. CWS currently services half of the City, so is able to seamlessly transition into the new franchise. We will coordinate with the contractor currently serving the other half of the city to ensure that all residents receive an appropriate cart for their recycling needs. Cart delivery will be performed in all areas to the full satisfaction of every customer.

CWS' Oakland cart repair staff will work closely with the CWS transition team and cart manufacturer to sufficiently train personnel on cart repair, cart inventory and asset control best practices, and work-order protocol.

### ***5.1.3. Vehicles and Routing***

CWS will empty recycling carts and bins using new automated McNeilus, Pacific Series Side Loader® vehicles with 31-cubic yard volume bodies on a Peterbilt cab and chassis. Cart contents (20, 32, 64, and 96 gallons in volume) will be loaded into the side loader truck with an automated arm connected to the vehicle. CWS has selected the McNeilus brand of vehicles for specific reasons including equipment efficiencies, low maintenance requirements, and cost-effective servicing options. Roll-off boxes and other commercial service containers will be serviced utilizing Nor Cal Roll off Dead Lift vehicles with a Peterbilt cab and chassis.

In our ongoing commitment to environmental responsibility, all collection trucks in the CWS fleet are currently planned to be fueled by compressed natural gas (CNG) as an alternative to diesel fueled trucks. Use of this fuel as an alternative to traditional diesel will result in greenhouse gas emissions reduction.



Because CWS is proposing to purchase new collection vehicles that differ from those used by the existing contractor in the half of the City not currently serviced by CWS, different capacities and vehicle characteristics may change routes. CWS' Chief Operations Officer will lead appropriate staff in analyzing existing Oakland routes to validate existing route maps, identify efficiencies that can be



### Route Management and Coordination

achieved through route or schedule alterations. Under no circumstances would efficiencies be made at the expense of changing residents' collection day unless accepted beforehand in writing by the City.

CWS will use RouteSmart™, its Geographic Information System (GIS) based optimization software, to integrate recent census data and on-site observation to maximize productivity of each collection vehicle, and coordinate for same day collection and minimize disruption to customers. CWS has been using RouteSmart™ successfully since 2006 for its Oakland and San José collection services. Route maps and driving instructions will be developed, and the resulting routes test driven by CWS staff. RouteSmart™ will also be used for point-to-point routing of commercial or

ancillary collections. Supervisors and drivers will be trained on these routes during the thirty days prior to July 1, 2015.

The CWS routing team will provide monthly updates to the CWS/City transition team.

### *5.1.4. Labor, Management, and Coordination*

CWS will add new staff to meet the new franchise requirements. New employees will include the following:

- Truck drivers
- Truck and MRF Mechanics
- MRF sorters
- MRF operators
- Supervisors
- General Manager
- Customer service representatives
- Public Education Staff
- Container delivery and repair staff

CWS does not anticipate any difficulty in hiring experienced employees from the directed local job market, especially given the opportunity to work with CWS, serve this contract, and develop a good career. CWS will work with local job programs, personnel recruiters, ILUW Local 6, International Brotherhood of Teamsters Local 70, and Association of Machinists and Aerospace Workers Union Local 1546 and have initiated discussions with the Oakland Workforce Investment Board on ways to partner to provide job opportunities for Oakland residents.

The City and CWS will conduct a "job fair" during which the CWS Human Resource Manager will meet with prospective employees working under the current contract. During the job fair, CWS will provide company information and collect resumes from prospective employees. Knowing that transition to another

company can be sensitive, CWS will work to make the experience as smooth and positive as possible for all involved.

CWS is committed to hiring Oakland residents and eliminating unnecessary barriers to employment for these residents. Thus, we will place hiring priority related to this franchise on residents of Oakland and our employment application. CWS will not include any question or check box related to prior legal prosecution or conviction. CWS is committed to hiring and training local employees, and will strive to continue to achieve a 50% local hire goal. CWS has consistently had good relationships with local unions and public organizations for public outreach and employment support, and will utilize its City job fairs and events to reach new potential employees.

As a committed community partner, CWS believes in supporting, encouraging and empowering our youth, as well as preparing them for a responsible and productive future. We will be an active and engaged participant in the Mayor's Summer Jobs Program by hiring youth and identifying work activities that are safe, appropriate and constructive for our employed youth.

CWS believes in customer service and our field crews are on the frontline of customer interaction. CWS' Human Resources Manager will work closely with the City of Oakland's Department of Human Resources Management to assure a smooth transition to the CWS family for all qualified and interested employees of the outgoing contractor.

CWS recognizes that the individuals who process Oakland's recyclables provide an essential public service that benefits the City's residents, businesses, and visitors, and are vital to the City's ability to meet zero waste goals.

CWS proposes to meet the goals and policy of the City Council that all workers who provide recycling services to the City of Oakland, its residents, and businesses pursuant to any new City exclusive franchise agreement or renewal/extension of any existing exclusive City franchise agreement be provided wages comparable to those wages recycling workers in Fremont, San Jose, and San Francisco currently earn or are scheduled to earn under existing agreements while maintaining wage differentials. The City Council's goal is to reach a wage of \$21 per hour by 2019, while also ensuring workers receive quality, affordable health coverage for their families.

CWS has determined the impact of this wage and benefit increase to SFD and MFD rates, and the impacts are shown in Table 5.1.4-1 and Table 5.4.1-2.

In Table 5.1.4-1 Table 5.1.4-1, the ILWU rate begins at \$13.97 on 1/1/15, and increases to \$20 by 2019.

**Table 5.1.4-1 Wage and Benefit Change Rate Impacts - \$20 by 2019**

	01/01/15- 06/30/15	07/01/15- 12/31/15	01/01/16- 12/31/16	01/01/17- 12/31/17	01/01/18- 12/31/18	01/01/19- 12/31/19
Increases		\$ 0.77	\$ 1.18	\$ 1.26	\$ 1.36	\$ 1.46

## 5. TECHNICAL PROPOSAL

### Current and RR

83 Employees \$ 2,855,325			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	60%	40%	0%
Cost increase per allocation	\$ 1,713,195.23	\$ 1,142,130.15	\$ -
Cost Increased per account type per month	\$ 0.31	\$ 0.34	\$ -
Cost Increased per account type per year	\$ 3.72	\$ 4.03	\$ -
Example of cart type	32GAL	32GAL	1 CY 1x/week

### Current plus RR and MMO

135 Employees \$ 4,644,204			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	35%	25%	40%
Cost increase per allocation	\$ 1,625,471.38	\$ 1,161,050.98	\$ 1,857,681.57
Cost Increased per account type per month	\$ 0.29	\$ 0.34	\$ 6.01
Cost Increased per account type per year	\$ 3.53	\$ 4.10	\$ 72.12
Example of cart type	32GAL	32GAL	1 CY 1x/week

In Table 5.4.1-2, the ILWU rate begins at \$13.97 on 1/1/15, and increases according to the report issued in support of the council resolution.

**Table 5.4.1-2 Wage and Benefit Change Rate Impacts - \$22.94 by 2019**

	01/01/15- 06/30/15	07/01/15- 12/31/15	01/01/16- 12/31/16	01/01/17- 12/31/17	01/01/18- 12/31/18	01/01/19- 12/31/19
Increases		\$ 3.71	\$ 1.18	\$ 1.26	\$ 1.36	\$ 1.46

### Current and RR

83 Employees \$ 3,214,035			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	60%	40%	0%
Cost increase per allocation	\$ 1,928,420.87	\$ 1,285,613.91	\$ -
Cost Increased per account type per month	\$ 0.35	\$ 0.38	\$ -
Cost Increased per account type per year	\$ 4.19	\$ 4.54	\$ -
Example of cart type	32GAL	32GAL	1 CY 1x/week

Current plus RR and MMO

135 Employees \$ 5,227,647			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	35%	25%	40%
Cost increase per allocation	\$ 1,829,676.43	\$ 1,306,911.73	\$ 2,091,058.77
Cost Increased per account type per month	\$ 0.33	\$ 0.38	\$ 6.77
Cost Increased per account type per year	\$ 3.98	\$ 4.61	\$ 81.18
Example of cart type	32GAL	32GAL	1 CY 1x/week

CiviCorps is a social enterprise organization that is dedicated to training young adult interns with technical, experiential, and life skills that provide a greatest path toward success and contributions. CiviCorps has a high percentage of (85%) of its Interns presently residing in the City of Oakland.

CWS' collaboration with CiviCorps provides CiviCorps interns with a unique opportunity for development of skills and preparation for a career in the solid waste industry in Oakland and other communities. CWS' goal is to maximize local-hire of Oakland residents, as CWS has already done. CWS' local-hire rate is 69%. The collaboration among CWS and CiviCorps involves the important and initial collaboration opportunities for training, development and transition of CiviCorps Interns into CWS' union solid waste sorter, operator, weigh master and driver jobs, as well as, and non-union technical and supervisory jobs.

Among CWS and CiviCorps managers, we identified the following areas of collaboration that benefits our own local organizations, success of local youth, and the contributions all make to the City of Oakland:

The alliance between CWS and CiviCorps is designed and engineered to improve:

- Integration of select CiviCorps Interns into temporary training jobs at CWS, without any impact or displacement of permanent union jobs
- Preparation of select CiviCorps Interns with interviews, safety and operations training at CWS
- Participation of CiviCorps for work in diversion survey teams that operate in the community to optimize diversion performance and ensure compliance program standards.

CWS and CiviCorps alliance will complement the development of union and non-union industrial jobs for the next generation of solid waste men and women workers with no conflict or displacement of union jobs or employees. The alliance continues enabling CWS and CiviCorps to pursue their independent activities and goals.

### ***5.1.5. Facilities***

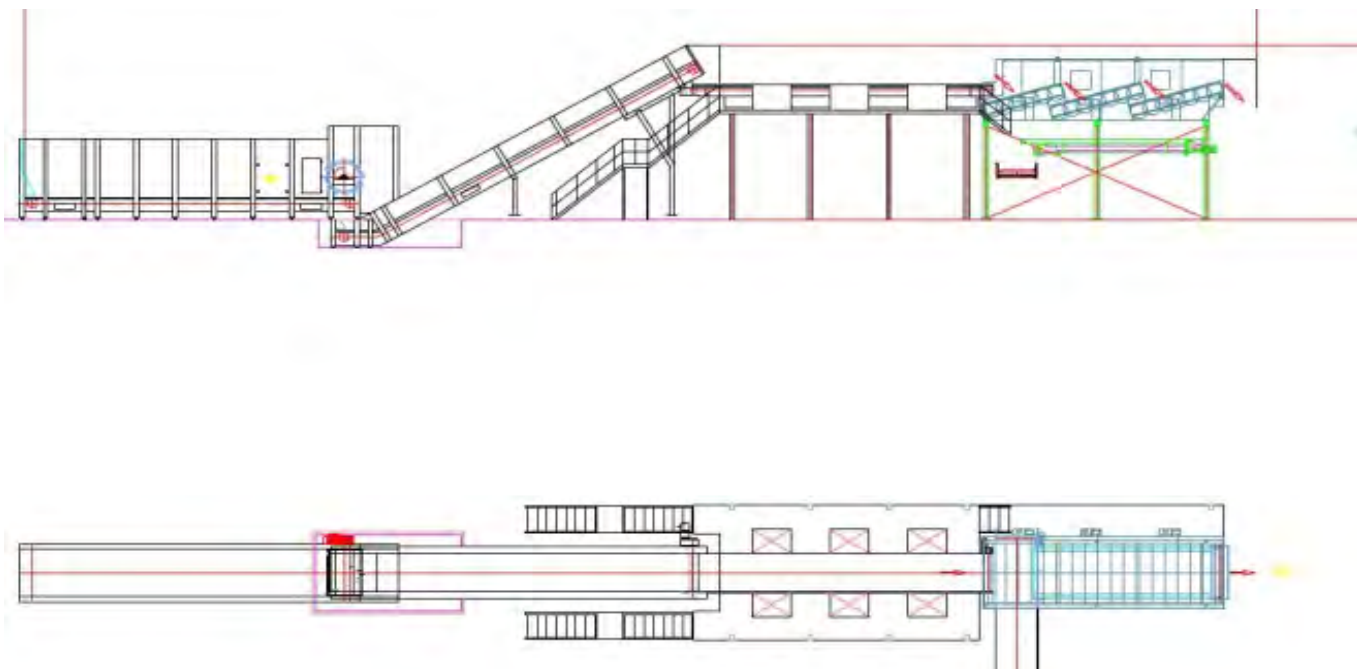
#### ***5.1.5.1. MRF***

CWS has two processing facilities in Oakland; one on 10<sup>th</sup> Street and the other on Wood Street. Both are able to receive and process recyclables from single-family, multi-family, commercial, and industrial recyclable waste streams. They currently operate at 50% of full capacity.

## 5. TECHNICAL PROPOSAL

**Table 5.1.5.1-1 CWS MRF Capacity**

MRF Features	1820 10 <sup>th</sup> Street Oakland, CA	3300 Wood Street Oakland, CA	Total
Design Capacity (tpd)	400	400	800
(tpy)	72,000	72,000	144,000
Current Utilization (tpd)	200	200	400
(tpy)	40,800	42,000	82,800
Operating Permit	Recycling Center CUP	Recycling Center No CUP Required	



**10<sup>th</sup> St. MRF Upgrade Layout**

CWS strives to align the best possible processing system with the collection system and material stream to maximize solid waste diversion and productivity. CWS will develop a new materials recovery and processing facility in Oakland. The Oakland Gateway Facility will be a state-of-the-art mixed waste, recycling processing and transfer facility located on Engineer Road at the North Gateway of the former Oakland Army Base. Its increased processing capacity will allow CWS to re-locate all of its Oakland operations to this site. The facility will result in greater recovery of materials from single family, multi family, business, city, and commercial recyclables.

To best serve Oakland and this contract, CWS will utilize its newest Oakland Gateway Facility, once development is complete. Before the CWS Oakland Gateway Facility is operating, CWS will upgrade its successful 10th St facility with state-of-the-art processing equipment that will improve productivity, material quality and diversion. The upgrades will be manufactured and installed by the Bollegraaf Equipment Company, CWS' equipment supplier at the Oakland Gateway Facility. The upgrades will enhance the starting and ending sections of the processing operation, and will include the following components:



- Drum Feeder – to enhance the infeed of materials into the processing system
- OCC Screen – to enhance the removal of cardboard and large containers before reaching existing newspaper screens
- TiTech – to enhance the recovery of small containers and fiber with computer optical sorting precision

CWS will move these three components to the Oakland Gateway Facility at the time the full recyclable material processing operation moves to the Gateway. Once opened, the new Oakland Gateway Facility will have even greater processing capacity than 10<sup>th</sup> St. As a contingency, CWS can also process recyclable materials at its Wood St MRF facilities in Oakland.



10<sup>th</sup> St. MRF Facilities

### ***5.1.5.2. Vehicle Maintenance and Support***

CWS will continue to use its fully equipped and modern 10<sup>th</sup> Street facilities and yard for equipment maintenance and repair for the new collection fleet, as well as other activities. The facility is currently the maintenance facility for our Oakland residential recycling vehicles and is capable of providing all maintenance requirements of the new commercial vehicles and accommodates other activities including:

- Truck maintenance and repair
- Container maintenance and repair
- Vehicle cleaning
- Container cleaning
- Vehicle fueling
- Truck yard
- Dispatch, driver training, routing
- Large and bulky item recycling
- Used motor oil & filter recycling



CWS will utilize existing, excess office space at its current facility located at 1820 10<sup>th</sup> Street, Oakland for management and administrative operations, including outreach and technical assistance, customer service, and billing functions until the new Oakland Gateway Facility becomes operational, at which point all operations will move to that site.

#### ***5.1.5.3. Interim Vehicle Parking***

Until the vehicle yard at the new Oakland Gateway Facility is available for use and all fueling infrastructure is installed on the site, CWS will park and fuel vehicles at a nearby property, 2240 Wake Ave, Oakland 94607, owned by Oakland Maritime Support Services (OMSS). CWS will lease this 17-acre property beginning January 2015, which will allow ample space to park all of CWS' collection vehicles and parking for CWS employees. As part of the site lease, OMSS will provide:

- Fenced and lighted parking spaces
- 24-hour security and cameras
- 24-hour access for CWS employees
- Access to fueling and service by CWS representatives
- Shower and locker facilities for CWS drivers

Starting the lease of this site in January of 2015 will allow CWS ample time for vehicle and cart staging, preliminary maintenance, and driver training activities. CWS will retain use of the site until the new Oakland Gateway Facility is fully operational and construction of all parking and CNG fueling areas is completed. A letter from OMSS to CWS regarding this site lease is provided as Appendix 7-15.

#### ***5.1.6. SFD and MFD Programs Implementation***

To improve cost-effectiveness as well as efficacy, all communications with customers will include education on recycling and opportunities for feedback, enabling CWS to continuously update and refine outreach based on data collected. In the first half of 2015, all Oakland residents will receive an information packet with an overview of the new services, tips for sorting materials at home, and may receive a personalized survey of initial attitudes toward recycling and diversion that will inform the data-driven transitional outreach program. A questionnaire will be included to determine appropriately sized bins and design a well-suited collection schedule.

All Oakland residents will receive their cart and a reminder flyer with information about the recyclables collection program in late June 2015. The cart design will contain information on acceptable program materials and other appropriate information as agreed to in consultation with City staff.

Container distribution to multi-family dwellings (MFD) will be planned in conjunction with the City and existing contractors. CWS has experienced greatest success with MFD programs when implementation is carefully coordinated with property managers. CWS will conduct outreach to property managers to determine the preferred bin size and hauling schedule for the specific needs of the property.

#### ***5.1.7. City Programs Implementation***

City buildings provide a unique opportunity for comprehensive education and outreach in the CWS recycling program. Thoughtful engagement through informational materials, online communication, signage and training opportunities can support widespread participation in the new recycling program. As staff adopts new habits, they can help to distribute this message to the broader Oakland community, and visitors to City offices can pick up new recyclables diversion habits. CWS will work closely with the City of Oakland to develop engaging and highly visual informational materials for distribution across city offices.

### ***5.1.8. Commercial Non-Exclusive Recyclable Material Programs Implementation***

CWS currently has a strong presence providing recycling collection to commercial customers throughout the Oakland, and intends to continue these services and increase its customer base, with or as a complement to the City's commercial non-exclusive franchise. CWS will also work to offer recyclables processing services to smaller collection firms throughout the City, as it maintains excess capacity at its Oakland facilities.

CWS will work to ensure that all commercial customers within the City receive services that best suit their needs, support proactive planning, including drawing up new routes through the City, and approach all companies and customers with respect, courtesy and patience. During the transition period following award of the non-exclusive franchise, CWS will maintain close communications with the City and request assistance in identifying new customers in order to keep the transition as smooth as possible for the commercial customers. If commercial establishments elect to switch service providers and utilize CWS' services, CWS will communicate with current providers to coordinate container delivery and removal at locations with space constraints.

#### **Collection Supervisors**

CWS will hire experienced collection supervisors for this service area who are well versed in the complexities of commercial collection and routing duties. All collection supervisors will receive further training on the specifics of conducting commercial collection services in Oakland. Routing procedures and methodologies will be established along with the provision of route safety training and establishment of communication practices. CWS will employ the FleetMind GPS software systems to gain real-time response mechanisms to changing route conditions. Collection supervisors will interact with dispatch to address any commercial customer related issues requiring field resolution.

#### **Route Collection Staff**

CWS commercial collection drivers are a main link to the business community. How their daily duties are performed contributes to business community perceptions of CWS. CWS has developed a successful, multifaceted driver education program that stresses safety and commercial customer service. Specific training of route personnel includes:

- Familiarity with CWS company procedures and practices
- Familiarity with the truck equipment
- Use of personal protective gear
- Defensive driving training
- Spill response training
- Hazardous waste material identification
- Injury and illness prevention
- Customer service procedures and practices
- Thorough understanding of new Commercial Collection and Recycling Program

#### **Public Outreach**

The transitional Public Education and Outreach Program will be carefully designed to address the specific needs of new commercial customers. CWS will continue to distribute an information packet outlining the new program, including materials for its commercial customers, including potential for cost savings in the

procurement process, marketing opportunities for “greening” a business, including opportunities for source reduction. This “how to” will explain the new, revised or optional programs business owners can request. Along with the brochure will be a post card requesting that the business fill out the information requested including the new service levels and frequency. A specialized education program for commercial recycling will provide information to the management team and their employees, supporting high participation and minimizing potential for contamination. This education program can be customized for distinct business types, e.g. restaurants, offices, medical, manufacturing, warehouse, and retail. Written materials could include posters in lunch rooms and at disposal containers within the business property, and flyers/brochures. CWS will contact local business associations and make an effort to collect and/or purchase commercial customer databases to further expand its services.

#### ***5.1.9. Public Education and Outreach***

CWS will partner with local firms Circlepoint, The Next Generation, Kneal Resource System and the City to develop public education and outreach materials and campaigns. In consultation with City staff, a Public Education Plan (PEP) will be developed during the transition planning period and presented to the City for approval.

#### **Goals of Transition Education and Communications Program**

- Prepare customers for changes in the new program and franchise, such as different trucks and/or multiple collection vehicles on their route, as well as other operational changes such as pickup times, etc.
- Educate customers about simple ways to move toward Zero Waste and create a personal connection to citywide goals
- Develop look and feel for materials and key messages
- Provide key news media with background on CWS team and approach
- Develop partnerships with organizations, corporations, etc. for full implementation of outreach programs during contract
- Establish database of national collection communications Best Practices
- Finalize outreach details and budgets

To achieve these goals, the team proposes a data-driven, highly visual, and innovative outreach program to ensure significant behavior changes and the real-world success of the new recycling program. In-person focus groups and telephone polling will test consumer habits, patterns of thinking about recycling and waste, and cultural factors relevant to Oakland’s highly diverse population. Combined with a comprehensive waste stream audit, early data gathering will establish the baseline for improvement, and identify target areas for tailored outreach. Ongoing audits and surveys will measure recycling and waste reduction and monitor the efficacy of outreach programs, allowing the team to continuously adjust programs and messages for maximum impact.

This data-driven approach will be complemented by an innovative and highly strategic outreach program that takes advantage of all available media and builds a connection to neighborhoods and communities in Oakland. Using motivational and culturally relevant techniques that prompt consumers to take action, the outreach program will utilize the latest research in behavioral economics to create lasting changes on the habits of Oakland residents and business owners. We will weave in messages designed to prompt behavioral changes, using both cutting edge and traditional media elements that will earn consumer attention.

The CWS Transition Manager and public education team members will work closely with the City to establish accountability throughout the transition effort. Regular check-in meetings will be established between the two parties, ensuring fluid communication and maximum efficiency. This period will also provide an opportunity for the two parties to clarify the PEP, CWS approach, budget, and scope of work. Information gathered from polling and focus groups will be shared with the City so officials can fully participate in this data-driven and highly responsive outreach approach.

### Assessment Period

In order to maximize the benefit of outreach, the team will conduct an initial assessment of Oakland residents' waste disposal habits through polling, focus groups and a waste stream audit. This initial effort will help to identify communities in Oakland that have the greatest opportunity for improvement in their waste disposal habits. Once this information has been collected, directed outreach can address specific information needs or incentive programs that would be beneficial to these communities. Information from multiple sources, outlined below, will be combined to provide a comprehensive, detailed, and multi-dimensional picture of the waste stream in Oakland. This "map" will provide a baseline for measuring progress and adjusting programs as outreach continues beyond the transitional period.

### Polling

A series of telephone polls will build our dataset on the attitudes of Oakland residents toward recycling. Well-crafted polls provide a scientific basis of attitudinal information and allow us to add dimension to the information, by cross-referencing demographics with geographically-based waste stream information, all the while being able to test specific messages and analyze attitudes. Combined with market research, a series of consumer profiles will be developed in concert with geographic distribution of the Oakland population to allow for micro-targeting and robust information-gathering at the street level. This level of information is vital to success in significantly increasing local recycling rates.



**Waste Auditor**

### Focus Groups

Based on the results of polling, and combined with the waste stream audit, focus groups will allow the team to focus on target communities and demographics and ensure the efficacy of brands and messages. Focus groups provide additional data to drive education around waste diversion and recycling in the most effective manner. One goal of the focus groups is to understand how different communities within Oakland think about waste and recyclables so that the team can develop culturally-relevant and effective outreach strategies and messages.

### Program Branding

The outreach team, in close collaboration with the City, would determine a "brand" for Zero Waste Oakland, informed by focus groups, polling, and other data. This brand would be included on all future project materials to support program continuity and name recognition. Branding would be based on collected data, as well as Oakland pride and environmentalism. Example taglines include:

- ❖ *Reduce Your Waste-Line*
- ❖ *Oakland Recycles*

❖ *Oakland Greens Oakland*❖ *Feed the Green Economy*

A concerted effort will be made to brand this campaign with a strong dose of Oakland pride. We want to convey the idea that Oakland could become known nationally as a model for reducing waste. In addition, branding will be tested in multiple cultural contexts to ensure relevancy to every Oakland waste consumer.

**Direct Outreach**

During the transition period, CWS will establish contact with new customers to introduce them to the new recyclables collector or existing customers to confirm collector continuity and begin the educational campaign. These communications will be coordinated with the messaging, branding and targeting that will inform the program, based on the waste stream audit, polling, and focus group data. As with all direct outreach, opportunities for gathering information will be seized to provide as much information as possible to inform this data-driven marketing program.

Residents will receive an information packet with an overview of services, such as pickup times, different collection vehicles on their route, tips for proper disposal, and a survey of initial attitudes toward recycling that will inform the data-driven transitional outreach program. The information packet, and all CWS customer communications, will prominently display the customer call-in number **1-510-OAKLAND**, that CWS has reserved. The information packet will provide contact information for CWS and opportunities for direct consultation. A questionnaire will also be included to determine appropriately-sized bins for each location. Commercial customers will receive an educational packet that includes information addressing their particular waste stream. These materials will include an introduction to the waste-diversion branding.

The CWS Oakland Gateway Facility design includes a 6,000 square foot education area that offers public meeting and classroom space, and an enclosed and conditioned walkway and viewing area that allows safe overhead viewing of recyclables deliveries and processing. The design and functionality will allow for ongoing promotion of public awareness and environmental consciousness through real-time observation. This setting provides guests with a unique overhead view enabling the survey of all phases of material separation, recovery and solid waste diversion – from receipt of materials to generation of product for recycling. On-site messaging will emphasize environmental stewardship and conservation.

**Driver Contact and Visibility:** CWS drivers are a key communication link with customers. Drivers will be trained to provide education where possible, but will also be provided with a variety of tools to reinforce proper recycling and diversion techniques. Tools will include informational handouts, cards, brochures and “correctional” notices when improper sorting is witnessed, while also reporting this information back to headquarters.

CWS may also develop a visibility campaign built around collection vehicle drivers, featuring actual drivers. City-approved posters with photo of driver to be attached to trucks with personal statements of their pride in their job and requests for help from residents with reducing litter, complying with universal and hazardous waste requirements, etc. CWS will work with the City to design attractive informational signage for collection vehicles, displaying City recycling program contact information and web resource links.

**Community Partnerships:** CWS will establish contact with key community groups during the transitional period to prepare for collaborative programming in the next phase of outreach. In order to conduct this



outreach, the team will develop a package with an overview of benefits to potential partners (e.g. supermarket, drug store and convenience store chains; newspapers and radio stations, including Spanish, Chinese and Vietnamese outlets; outdoor advertising companies). The team may also establish contact with local schools to introduce the educational outreach program.

**Web:** A high-quality website will be developed during the transitional period. The site will be accessible to the disabled and mobile devices, and will provide critical information in Spanish, Chinese, and Vietnamese. The website would provide an abundance of information on services, the nature of recycling, the waste stream, and how one can contribute to Zero Waste goals through small habit changes.

**Focused, Directed Outreach:** Based on the results of early data gathering, CWS will begin to focus outreach efforts on areas where the greatest benefits are possible. This will continue and adjust as new data becomes available or unexpected changes are seen in the waste stream.

### Media Outreach

Media outreach to promote Oakland's zero waste goal is a key component of the transitional outreach program because it is very cost-effective and has a wide reach, while also offering opportunities for targeting specific communities, such as non-English speakers. As discussed above, cost-effectiveness and cultural relevancy are vital to driving the new consumer habits that will make a significant difference to Oakland's waste stream.

Effective media outreach will build on program branding, inspiring civic pride and a shared commitment to the Zero Waste goal. CWS will begin outreach with a press release when the franchise (s) is awarded, highlighting local job opportunities, a community-based approach to public education, and innovation in waste processing. A media event may be coordinated where key civic speakers address Oakland's zero waste goals and CWS staff provides an overview of the new services program and the transitional outreach plan. In conjunction with this event, CWS might invite key media, especially local television news, to tour the newly upgraded 10th Street MRF and join on test-drives of new collection vehicles. Spokespeople in Spanish, Chinese, and Vietnamese will be available to attract a variety of media.

The outreach team might also work with the City to develop a Media Transition Kit, which would be an education packet for local reporters for print, television, and radio. The Transition Kit would provide facts on the recycling collection program; proper manner and time by which to place materials out; information about CWS' diversion initiatives, and the contact information for residents to call if there are any problems. Throughout the transition period, Circlepoint and The Next Generation will identify and use opportunities – such as the holiday season - to pitch this story of a new approach to waste to the media, helping to earn publicity and introduce Oaklanders to the upcoming changes.

### Community Outreach Strategy

Following the period of initial data collection, campaign branding, and introduction of the new service provider, the outreach program will be integrated into the broader delivery effort. The following sections outline an outreach program that, pending City staff approval, could be in place for the first 6 months, July-December 2015, and continually improved through data-driven program evaluation.

This program would focus on establishing new habits for Oakland customers while building connections to civic environmental goals. Micro-targeting will ensure each community in Oakland receives the message that is most likely to produce behavior changes, based on polling, focus groups and updated waste stream data. Directed outreach (information and materials available in multiple languages), broad



visibility, community partnerships, special events, media outreach, and paid advertising are all elements that contribute to the success of the recycling program in Oakland.

CWS will utilize a variety of methods to convey service and diversion messages to its customers that could include bill inserts, direct mail, container deliveries, cart tags, bin designs, calendar giveaways, posters, reply and opt-in emails, website, social media, and other methods as appropriate. We will set up a program of email alerts through which we can share news worthy items and tips for diversion to our customers. A crisis communications plan and protocol will be developed to address unlikely but possible events that would adversely affect service delivery, such as a natural disaster.

#### ***5.1.10. Coordination***

The approach to managing and coordinating the transition is to ensure that the CWS Transition Manager

The CWS Transition Manager will effectively oversee and manage all work in the transition efforts, establish accountability for quality, work closely with the City through a series of formal/informal communication approaches and conduct meetings in a timely manner.

The methodology for accomplishing these objectives is as follows:

The CWS Transition Manager will plan, coordinate, monitor, and direct all of the transition tasks in concert with other appropriate CWS Transition Team members and review all draft transition reports to ensure consistency of professional quality and performance prior to final submission to the City. An established format for transition reports will be uniformly applied and agreed upon by the City early on in the Transition effort.

Formal and informal communications with the City will be essential components of Transition management. Formal communication will include written monthly progress reports to the City summarizing the percentage of work completed to date and, where applicable, any problems/difficulties encountered as well as a forecast of upcoming activities based on the CWS Transition Schedule. These reports will be generated by the CWS Transition Team using Microsoft Word and delivered to the City by e-mail. The e-mail, with any supporting documents, will be delivered by the tenth day of the month following the reporting period. A hard copy will follow by mail. In addition, because of the type of project and transition timeframe, a series of regularly scheduled meetings between the CWS Transition Manager and selected members of the City of Oakland Transition Team throughout the transition period are suggested and noted in CWS' detailed Transition Schedule.

#### **Customer Service Coordination**

During Transition, CWS will enhance the capabilities of its Oakland-based customer call center to best serve its new customers in the City. Our Customer Service staff are trained to treat residents calling in with the utmost professionalism.

The Customer Service staff to support the Oakland services will be increased to a total of 2 people to easily handle calls coming in from new customers. During Transition, CWS will advertise for the new staff and conduct interviews.

Transitioning from one employer to another is a difficult process. CWS wants this transition to be as positive as possible for the men and women who will service this contract. Staff will be regularly updated and trained on the transition plan and proper information to provide callers. OPWA customer service personnel will work with CWS to assure that information between the City 311 system and CWS call

center is perfectly integrated. CWS has secured **1-510-OAKLAND** as its call-in number, to provide a simple and memorable contact point for all customers.

CWS will upgrade the existing Oakland customer center with an adequate number of phone lines to ensure great service and contract compliance, adequate high-speed internet access, and any modifications to the CWS customer service software system, which allows the interface with City work order information. Training of existing staff on the new system and the additional customer service staff will be completed fifteen days before the first collection

The systems will be modified and tested and Customer Service Staff completely trained on their use before the first collection takes place. A redundant back-up system will be in place so that the customer call center can still service residents in the event of an emergency.

#### **Customer Collection Assurance**

On July 1, 2015, customers will have the collection switched to a new contractor. Trained employees, a solid customer service center and a Media Transition Kit will prevent most problems to a large degree but not prevent all of them. Some residents currently know exactly when their recycling and garbage collector comes by their house and, despite information on new times may place their carts out just before the previous collection time. When the new service begins, the new contractor may complete routes differently, hence the time of the residents' collection may change; resulting in increased calls citing missed collection. CWS will have a Customer Collection Assurance team that will have crews in satellite collection vehicles collecting such incidents during the initial period of the contract until the customers become accustomed to their new collection schedule. CWS understands that customer service response and cart delivery assistance will be greatest in the first few months of the new franchise, so we will hire additional temporary employees over the summer transition period.

##### ***5.1.11. Combined Services***

Should CWS be awarded the RR and MM&O franchises, a combined strategy for recyclables, organic and mixed materials offers significant, synergistic opportunities. Choosing to recycle is associated with reducing the waste stream and achieving community goals. Additionally, each public education campaign would enjoy the benefits of a considerably larger budget, since distributed materials could incorporate messaging from the two, complementary activities.

As an inducement to award both contracts to CWS, a discount is proposed for RR rates. Calculation of this discount is based on specific synergies and efficiencies gained from award of both. These efficiencies would result from the reduction of overhead expense, a combined public outreach effort, a minimization of fleet equipment redundancies, availability of more Oakland hiring tax credits, and realization of a more streamlined work force applied to a larger base of tonnages, etc. An added advantage is that stronger, more consistent and integrated public messaging from a single source will help to assured that the right materials, especially RR and organics, get in the right cart and/or bin. The discount rate is included in Form Multiple Service Discount – 2K.

##### ***5.2. Collection Services Operations Plan***

CWS has dedicated recycling collection, processing, and product marketing for the City of Oakland. CWS assets providing SFD, MFD, City, and Commercial Recycling Collection for the City of Oakland will include the following:

- Truck corporation yard and office building
- Truck maintenance and tire repair shop

- Truck fueling
- Truck wash
- Collection dispatch office
- Customer service office
- Public education office and public learning center
- Three Material recovery facility (MRF) buildings and office buildings
- Greater than 50 collection and service trucks

The resources that CWS will contribute to serving the City of Oakland collection operation will be instrumental to providing comprehensive, consistent, and dependable Oakland services.

### **Collection Services Management**

CWS will have multiple personnel dedicated to the management and facilitation of collection services. The basic responsibility and role of the supervisors including the positions of Collection Supervisor and Customer Service Supervisor are to facilitate the most efficient operations in the field along with providing the highest quality customer service and to attain the City's diversion goals.

- **Most Efficient Operations:** CWS drivers operate safely and productively while accommodating City and customer needs
- **Greatest Customer Service:** Customers have the optimal collection service type, container and frequency (right-sizing)
- **Achieve Diversion Growth Goals:** Coordination of appropriate participation, collection, and processing service that assures maximum diversion of solid waste

All CWS employees who earn a supervisor position will have demonstrated great awareness of and proficiency in recycling, and have the expertise to enable colleagues and customers to continuously improve their diversion achievements. These specific service skills complement mandatory safety, labor, vehicle, and container operating proficiency. The responsibility CWS gives to our collection supervisors are described below.

The Collection Supervisor assists the company in meeting its goals and objectives by ensuring all assigned customer accounts within assigned areas are accurately and safely serviced. The Collection Supervisor also performs administrative and supervisory duties related to department business needs and will partner with employees, customers, labor representatives, and other stakeholders to maintain an efficient, safe, and healthful work environment. The collection operations supervisory duties both off-route, at the office, and on-route in the field will include:

- Ensure customer accounts are properly serviced in assigned areas
- Maintain route efficiency by completing routes within management expectations
- Ensure drivers are in compliance with driver DOT, federal, state, local, and company regulations
- Ensure the efficient and safe transport of residential, commercial, and roll off materials
- Identify and establish corrective actions needed to address opportunities related to route and services
- Train and support drivers and helpers in collection activity, vehicle operation, and safety procedures
- Communicate with management regarding customer services and/or employee situations

- Maintain all required records and reports accurately and timely
- Prepare, present, and distribute statistical and timekeeping reports and documents as required by management
- Complete accident investigations and submit appropriate documents and reports as required by management
- Conduct safety observations and prepare documentation in accordance with program requirements
- Conduct and document regular safety meetings with assigned employees
- Monitor driver Vehicle Condition Reports and supervise equipment inspections
- Participate in special projects as needed
- Identify ways to continuously improve and promote exceptional customer service
- Comply with all company safety and operating policies, procedures, plans, and programs while on-route and on-site
- Maintain all company issued property in good working order
- Direct, plan, monitor, and evaluate the work activities of all drivers. Responsibilities include, but are not limited to, training of employees, rewarding and disciplining employees, and addressing and satisfactorily resolving problems and conflicts.
- Act as liaison to customer to determine customer service requirements, including special service needs such as, time constraints, noise issues, space constraints, etc.
- Integrate with all other CWS operations to maximize service, safety, and efficiency

Collection supervisors will receive continual specialized training necessary to provide employee direction and customer assistance as needed for the redesigned collection system.

### ***5.2.1. Vehicles***

CWS will provide cart and bin service to customers with newly acquired McNeilus Side Loader® vehicles that have 31-cubic yard volume bodies on a Peterbilt cab and chassis. Cart containers (20, 32, 64, and 96 gallons in volume) will be emptied into the side loader truck with an automated arm connected to the vehicle. CWS has selected the McNeilus brand of vehicles for a number of reasons including equipment efficiencies, low maintenance, and cost-effective servicing options. Roll-off and compactor containers (10, 14, 20, 30, and 40 yards in volume) will be serviced by three-axle Nor Cal Roll Off Dead Lift trucks with a Peterbilt cab and chassis. They will service all roll-off container types.

### **Alternative Fuel Use**

As emission standards become more stringent, alternative fuels have become increasingly popular. Many proponents of alternative fuel use cite resultant lower maintenance costs, Environmental Protection Agency (EPA) emissions standards compliance, improved air quality, quieter streets, and increased U.S. energy independence compared with traditional petrodiesel fuel use. In its ongoing commitment to environmental responsibility, CWS Oakland collection trucks are currently planned to be fueled by compressed natural gas (CNG).

The City of Seattle has found that CNG refuse fleets are seeing decreased maintenance costs, and cleaner vehicles, as the refuse trucks do not require as many add-ons for emissions control, including DPFs (diesel particulate filters), EGR (exhaust gas recirculation), and urea-based selective catalytic reduction

systems. The City has also reported that drivers find trucks easier to operate because they do not have to worry about regeneration as they would with diesel trucks.

Although CNG vehicle acquisition cost is higher than for diesel trucks, the costs are offset by lower and more predictable fuel costs, and lower maintenance costs. The City of Seattle has stated that estimated payback for their vehicle acquisition is less than two years, and less than three years if including infrastructure costs including installation of a fueling station. McNeilus estimates that a minimum fuel savings of \$15,000 per year per vehicle can be achieved by switching from diesel to a CNG powered refuse vehicles, considering conservative estimates for fuel costs and without accounting for additional savings due to tax credits or fuel rebates.<sup>1</sup>

The reductions in environmental impact and emissions achieved by converting fleets from diesel to CNG are significant. CNG vehicles produce less carbon monoxide, fewer volatile organic compounds and lower levels of nitrogen oxide compared to diesel trucks, causing less smog and fewer human health impacts.

The reductions in environmental impact and emissions achieved by converting fleets from diesel to biodiesel or CNG are significant. Vehicles utilizing these alternative fuels produce less carbon monoxide, fewer volatile organic compounds and lower levels of particulate matter and carbon dioxide when compared to traditional diesel trucks, causing less smog and fewer human health impacts. A U.S. Department of Energy study showed that using CNG in refuse vehicles instead of diesel fuels results in an estimated 22 percent fewer greenhouse gas emissions per truck annually.

**Table 5.2.1-1 Emission Reductions for CNG Vehicles Compared to Diesel Vehicles<sup>2</sup>**

Emission	CNG Reduction from Diesel
Carbon Dioxide	20-30%
Carbon Monoxide	70-90%
Sulfur Dioxide	99%
Nitrogen Oxide	75-95%
Particulate Matter	90%
Volatile Organic Compounds	89%

Ancillary benefits to the City of Oakland:

- CNG-powered refuse truck engines are significantly quieter than those of diesel refuse trucks. Diesel-powered refuse trucks can generate noise levels as high as 100 decibels, which is high enough to cause permanent hearing damage – quieter natural gas trucks protect workers from hearing damage<sup>3</sup>
- Natural gas is a domestically abundant fuel and every truck powered by natural gas enhances our energy and economic security by reducing our national reliance on foreign oil
- The US Environmental Protection Agency (EPA) estimates that occupational exposure to diesel exhaust increases the risk of lung cancer between 20 and 50 percent

<sup>1</sup> Assumes CNG price of \$2.50/gallon, Diesel price of \$4.00/gallon, fuel usage of 40 gallons/day

<sup>2</sup> 100% Biodiesel = B100; 20% Biodiesel 80% Diesel blend = B20

<sup>3</sup> [www.informinc.org/FS\\_ST\\_NYC\\_Refuse.pdf](http://www.informinc.org/FS_ST_NYC_Refuse.pdf)

Other cities throughout California and the U.S. have realized significant savings and environmental benefit from conversion to CNG-fueled refuse fleets:

- The City of Los Angeles Bureau of Sanitation recorded a 23 percent reduction in nitrogen oxide emissions through the use of natural gas in its fleet
- Seattle's waste management fleet added 106 CNG vehicles to its fleet of collection vehicles as replacement for older diesel models and saw a 20 percent reduction in greenhouse gas emissions using natural gas trucks over the life of the truck
- Columbus, Ohio saved \$33,600 each year on fuel costs from each of its natural gas refuse trucks

CWS's proposed fleet of McNeilus® CNG-powered trucks offers lower fuel costs and reduced noise pollution, and they are six times cleaner than diesel-powered trucks, making them an economically and environmentally-friendly alternative fuel solution for consumers. As part of CWS's CNG fuel offering, CWS will install its own CNG fueling station. CWS is willing to share its fueling facility with other private or public CNG fuel users to expand the use of this low emission fuel.

CWS is a demonstrated leader in achieving the most environmentally friendly solid waste collection fleet in the history of San José. In 2007, CWS implemented use of alternative low sulfur fuel on all new collection trucks; investing in this new and expensive technology before any other solid waste firm in the United States and two years ahead of US EPA requirements. CWS has continued and will continue this leadership position with regard to advanced and alternative fuel low emission vehicles and equipment in the City of Oakland.

### **Collection Vehicle Standards**

All collection vehicles and equipment that CWS will use in Oakland will have appropriate safety markings including, but not limited to, highway lighting, flashing and warning lights, clearance lights, and warning flags. All safety markings will comply with California Vehicle Code requirements, and all collection vehicles will be equipped with audible back-up warning devices.

In order to provide the best, most modern, safest and most efficient services to Oakland customers, all CWS equipment and vehicles will be high quality, and collection vehicles will be newly manufactured 2014/2015 vehicles. They will be designed and operated so as to prevent collected materials from escaping the vehicles; hoppers will be closed on the top and sides with screening barriers to prevent collected materials from leaking, blowing or falling from the vehicles. All trucks will be watertight and operated such that no liquids spill while recyclables are being collected.



## 5. TECHNICAL PROPOSAL

**Table 5.2.1-2 Vehicle Equipment Metrics**

Truck Type	Application		Manufacturers	Capacity	Total Vehicles	Route Vehicles	Designated Spare Vehicles
SFD Services							
Satellite Side loader (HTS)	Routed Collection Services	SFD, MFD	Ford/Heil	10 yd	3	2	1
Manual/Automated Side Loader	Routed Collection Services	SFD, MFD	Peterbilt/McNeilus	31 yd	32	27	5
Standard Rear Loader (REL)	Routed Collection Services	SFD, MFD	Peterbilt/McNeilus	25 Yd	3	2	1
Flat Bed with Lift Gate	Cart Delivery	SFD, MFD	Ford		2	2	0
Supervisor Pick up	Collection, Route Management and Customer Service Support	SFD, MFD	Ford	N/A	2	2	0
MFD Services							
Roll Off Dead Lift	Roll-Off Collection	MFD	Peterbilt/Nor Cal	N/A	2	1	1
Container Carrier (Forklift) NCC-4000	Container Delivery	MFD	Ford/Nor Cal	N/A	2	1	1
Long Floor Front Loader (FEL )	Routed Collection Services	MFD	Peterbilt/McNeilus	40 yd	2	1	1
Commercial Services							
(non-exclusive)	Assets will be based on customers serviced						
Transfer							
Services							
Tractor	Material Transfer	TRS	Peterbilt	N/A	1	1	0
Trailer Live Floor	Material Transfer	TRS	Western	135 yd	1	0	0

Total Vehicles	Route Vehicles	Designated Spare Vehicles
----------------	----------------	---------------------------

3	1.7	1
32	22	4
3	1.7	1
2	2	0
2	2	0

2	1	1
2	1	1
2	1	1

1	1	0
1	0	0

To be sold in California, new collection vehicles must meet stringent noise emission standards. CWS drivers will be sensitive to compacting and cycling loads within 150 feet of residential properties. All CWS vehicles will be in full compliance with local, state and federal clean air requirements that have been or are proposed to be adopted, including, but not limited to, the California Air Resources Board Heavy Duty Engine Standards as currently proposed to be contained in CCR Title 13, Section 2021 et seq and the Federal EPA's Highway Diesel Fuel Sulfur regulations.

All collection vehicles will have City-approved signage on each side and the rear to clearly state that it is servicing the City of Oakland, provide CWS' name and customer service telephone number (**1-510-OAKLAND**), and display the Oakland Recycles logo and vehicle identification number. The vehicle will also have space for poster advertising to promote the recycling and diversion programs. CWS will repaint all vehicles (including vehicle striping) as frequently as necessary to maintain a positive public image.

All collection vehicle windows, mirrors and cab interiors are cleaned daily by their drivers. Exterior cleaning is performed weekly, and washes will be conducted in a manner that conforms to the California Storm Water Quality Association (CASQA)'s BMP Guidelines for Non-Point Source Pollutants. Painting and signage replacement will be conducted as needed as fading or chipping occurs. Trucks will be inspected both pre and post trip daily by drivers and weekly by maintenance personnel for any damage to the exterior that may require repair. Preventive maintenance service will be performed on all vehicles according to manufacturer specifications. CWS will maintain collection vehicles in a clean condition and in good repair at all times, and ensure that no collected materials, oil, grease or other substances will blow, fall out, escape or leak out of the vehicle.



**Vehicle Cleaning**

### Vehicle Maintenance



**CWS Collection Fleet**

CWS is proposing to purchase new collection vehicles from Coast Counties Truck and Equipment Co. with a ten-year comprehensive warranty. This warranty covers all major maintenance items. During the warranty these major warranty repairs will be performed at their facility located at 260 Doolittle Drive in San Leandro. This is a large facility with ample room for staging equipment prior to delivery. The service and parts departments are open from 8:00 a.m. to 5:00 p.m. Monday through Friday.

During the contract period, CWS will perform oil changes and other preventive maintenance functions according to the schedules provided by equipment manufacturers and Coast Counties. The goal of CWS fleet maintenance is to minimize unscheduled repairs. CWS will keep vehicles maintained on schedule in keeping with fleet operation best practices.

Road service will be performed by Coast Counties and CWS estimates a response time of no more than 60 minutes for replacement vehicles to be put into service. The specific time for any replacement will be influenced by breakdown location and traffic conditions at the time. Replacement collection vehicles will be dispatched by CWS from the vehicle storage yard. Should an in-service vehicle breakdown occur, the operator will notify the CWS Collection Supervisor who will generate a Service Order that is transmitted to fix the vehicle.

CWS will maintain an industry standard reserve spare vehicle ratio to be placed into service in the event regular route trucks experiences breakdowns. At all times, reserve collection equipment, corresponding in size and capacity to the standard fleet and equipment used by CWS for this contract, can be put into service and operation within one (1) hour of breakdowns.

CWS estimates that Oakland tire service or replacement response time will be a maximum of 60 minutes.

Major item repair records will be generated and maintained by Coast Counties using automated fleet maintenance software. These repair records will be transmitted to CWS so that the Collection Supervisor has a complete file on each vehicle, can predict availability and anticipate issues.

Per the Agreement, CWS will keep a maintenance log for all collection vehicles, available to City staff upon request, that includes each vehicle's assigned identification number, purchase or initial lease date, routine maintenance performance dates, and additional maintenance dates and descriptions. Each year, CWS will report to the City its record of collection vehicles and major equipment; assigned identification numbers, DMV license numbers, chassis and body ages, type of fuel used, type and vehicle capacities, number of vehicles by type, acquisition date, decibel rating and maintenance status.

### Financing Method

CWS will finance collection vehicles and containers through a line of credit from the Industrial and Commercial Bank of China and East West Bank, located in San Francisco, California.

#### ***5.2.2. Containers***

CWS will provide all customers with the appropriate size collection container for recyclable materials.

Single-family residences and Multi-family establishments will receive 65-gallon roll-out recycling carts with 20-, 32-, and 96-gallon carts for special circumstances, such as for storage in single car garages and townhomes, and to meet the residents' service needs.

These carts will be injection molded for maximum strength and durability, and blue in color with a blue lid. Signage on each will identify it as part of the City of Oakland's recycling program, with Oakland program logos and identification in-mold stamped for durability on the container lid and body. The in-mold label will feature a Quick Read (QR) code that can be scanned by a Smartphone, with information transported to CWS' website and alerts provided on changes in service, collection schedules, and call center information.



**Sample QR Code for  
CWS' Website**

## 5. TECHNICAL PROPOSAL

Prior to the start of service, CWS will send an introductory mailer to all customers with a mail-back card that informs the customer of service and container options, and gives the customer the option to change their collection container size. The customer can also call CWS or visit the CWS website to reply. If the customer does not elect to upgrade or downsize their service, or does not respond by mail, phone, or web, they will receive their current cart size. As responses to the customer service mailing are received, customer records will be completed or revised with the selected container size, number, collection frequency, and any corrections to name, address, service or schedules.

CWS will provide residents with opportunities to request replacement carts once per year for single-family residences, twice per year for multi-family residences per terms of the Agreement. Drivers will be trained to identify containers on each collection route that require repair and CWS will provide ongoing cart maintenance services as required.

CWS' multi-family customers at buildings with a high level of demand, businesses, government buildings, commercial customers, and others requiring larger-sized recycling disposal containers will receive metal dumpsters, roll-off boxes, and compactors as appropriate for their needs. CWS will work with customers to select the most appropriate container size for their level of recyclables generation and vehicle access to the collection locations.

All metal bins, compactors or roll-off boxes furnished by CWS will be either painted or galvanized and display CWS' name and toll free customer service telephone number (**1-510-OAKLAND**), and will be kept in a clean and sanitary condition. Each bin, compactor or roll-off box for a specified material type (cardboard, glass, etc.) will include a description of the type of material to be placed within and be painted in a color and manner, approved by the City, which is unique to that type of material.



**Cart Replacement and Repair**

CWS drivers will be trained to identify and report containers requiring maintenance. A work order will be submitted to maintenance for appropriate work to be performed. Maintenance activities will include graffiti removal, and wheel, lid and leaks repair, painting and decal installation. Prior to customer delivery, containers will be cleaned, inspected and repaired or painted again if necessary, and affixed with appropriate decals and company identification as specified in the Franchise Agreement. Upon request for a maximum of one (1) time per quarter, CWS will clean or replace any bin, compactor or roll-off box marred by graffiti within five (5) work days. For containers not marred by graffiti, CWS

will provide once annually, container exchange of CWS owned containers without charge for SFD customers, and twice annually for MFD customers,

where requested and appropriate.

Customers requesting to have non CWS owned containers cleaned or CWS owned containers cleaned or exchanged on a more frequent basis can do so for an additional fee.



### 5.2.3. Route Operations

All collections will occur between the hours of 6 AM and 6 PM, Monday through Friday. CWS plans for on-route and on-board video recording and transmission to broaden the involvement of other colleagues and quicken our customer response, as thoughtful and quick responses result in higher customer satisfaction levels.

Collection drivers report operational issues to a central dispatcher; who in turn provide instruction or issue an electronic work order to customer service and the appropriate collection supervisor. Should immediate action be required, the crewmember can connect with the supervisor directly. All supervisors can monitor communications and communicate directly with collection personnel. All vehicles and personnel will be assigned a mobile communications device and an on-board computer. On route GPS systems allow communication between supervisors, crews, dispatch, customer service, maintenance, and customer outreach personnel on a real-time basis.

CWS' integration of collecting and processing activities, complemented by its successful operational connectivity program (OC), enable routing changes to be suggested by our MRF management team, which plays an important role in evaluating the quality and preservation of collected materials quality. Recommendations from the MRF management team can enhance material collection, as well as, how the material is tipped at the MRF. OC enhances communication and helps customer-collection continuum improve diversion and efficiency performance.



**Operations Coordination**



**Mobile Route Audit and Support**

In concert with its OC initiatives, CWS utilizes FleetMind systems. FleetMind is a technology leader for integrated fleet management solutions, and is field proven to increase customer density, reduce costs, confirm service performance and increase revenue with the only fully integrated Waste-specific fleet management solution supporting all major back-office systems. FleetMind provides in-vehicle integrated GPS and route tracking systems, with connectivity to an in-office technology suite. The FleetMind software and hardware package allows users to:

- Expand the functionality and benefits of existing back office software (dispatch, billing, accounting, etc.)
- Download and upload information between office and vehicles – automatically through audio, video, and text message communication
- Improve outbound planning and route profitability
- Reduce paperwork, phone wait times, and communication costs
- Deliver real-time status updates to customers
- Receive comprehensive reports covering daily driver and vehicle activities
- Identify potential fuel and vehicle maintenance savings
- Track the fleet in real-time or view routes followed on previous days with FleetMap

- Enable informed fleet and operations decisions with FleetMind's powerful and flexible reporting capabilities

FleetMind will help CWS to track the locations of collection stops, automatically associate collection stops with customers, and observe it all with system-managed time stamps. Drivers can easily log the precise activities that account for the full day, as they happen, with the easy-to-use Fleetlink Driver Display Terminal. The system will allow CWS to output end-of-day paperless driver logs that immediately update real route –history, by day, week and month for every customer and every route. All daily operations are managed cleanly from inside the back-office system. Routes are pushed to vehicles using dispatch screens and at the end of day routes are updated automatically.



**Figure 5.2.3-1 Areas of On-Board FleetMind Connectivity**

CWS has successfully used RouteSmart™ software for routing its collection services in Oakland and San José since 2006. RouteSmart provides vehicle route optimization software technology for many communities and services, including solid waste collection. Comprised of the leading geospatial technologies from Esri and NAVTEQ, RouteSmart software integrates with client-side systems to form a complete routing solution for meeting the demanding operational needs of solid waste collection fleets. Unlike other vehicle route planning software that can only manage one category of waste or recycling collection, RouteSmart for ArcGIS offers powerful optimization capabilities for residential and commercial service routing all in one seamless environment. CWS will utilize route optimization from RouteSmart to



balance all aspects of collection routing, including coordination of residential service collection days and optimizing multiple days of service for different types of customers.

CWS will perform a detailed routing analysis using time and motion models, along with extensive, practical field experience, to ascertain the most efficient collection vehicle movements for recyclables. Routes will be carefully designed so that collection drivers can optimize time in the field, personal safety, and responsiveness to customer needs and concerns.

CWS considers the following factors in designing collection routing systems:

- Urban street design
- Customer density and street geometry
- Early morning and peak traffic patterns
- Projected amounts of recyclables per collection vehicle for that particular route location
- Distance and time to the processing and disposal facilities

CWS will additionally consider the following special operational conditions:

- One-way streets
- Narrow alley conditions
- Containers placed in hidden or obscured locations
- Automobile parking in business lots or along downtown streets
- Noise Restrictions
- Central Business District and Transit Mall Zone Requirements

CWS will use:

- Highly experienced and committed CWS dispatchers, routing supervisors and drivers, each of whom brings extensive street-by-street knowledge and first-person understanding of routes and customers
- Pre-assigned routes designed to optimize drivers' time in the field, minimizing overtime costs
- Stringent safety training and monitoring, including eliminating unnecessary driver traversing, left hand turns, and backups wherever possible

The number of stops per route depends upon the location of routes within the City, street geometry, car parking, geography, and the distance to the processing or disposal facility. Collection methods may be different at each stop, particularly on routes that service small businesses, city buildings, and multi-family complexes, considerations that will be factored into each day's route and customer service load. In developing and modifying routes and collection schedules, CWS will also take into account the City's street sweeping schedule, street closures for City-sanctioned events, road repairs, and City-approved activities and events for which CWS will provide waste and recyclables management services.

Within five (5) work days of receipt of a request from the City, CWS will provide the City with maps precisely defining vehicle collection and travel routes, together with the days and the times at which collection activities will occur on each route. Every three (3) years, CWS will perform a comprehensive audit of SFD, and MFD customer routes and submit to the City a written report on the results. These audits

will help to ensure that the routes remain current through changes in customer count, changes in subscription to service by MFD, City, and commercial customers, changes in traffic patterns and other conditions which may shift over time. The report to the City will describe testing protocols, and detail the route audit findings along with recommendations, if any, on how CWS will modify the current routing system to correct any issues noted during the audit.

### **Collection Methodology**

Collection methodology for customers is intended to efficiently collect recyclables with as few driver steps as possible, while ensuring utmost employee safety, efficiency, and limited spillage.

Using a McNeilus Side Loader with a 31 cubic yard capacity, CWS' cart collection method is as follows:

- CWS driver arrives at address
- Driver approaches cart and begins the lifting process, or when required, driver will exit the vehicle, unlock/open a gate, and position the cart/roll-off for lifting
- Once the cart is properly and safely positioned for lifting, the CWS driver moves the vehicle into location, lifts the container automatically, and deposits the contents in the container into the body of the truck
- CWS driver slowly lowers the cart back to its standing position. When the cart/bin has been properly emptied, the driver either leaves the location or exits the vehicle to physically move the cart/roll-off back into its proper area and, if applicable, closes and relocks the gate
- In all collections, the CWS driver will clean up any litter resulting from the collection activity. The CWS driver must factor in different collection methods at each stop to accommodate various service requirements

For residential and small business routes, special collection conditions such as nearby parked cars, narrow public parking areas and alleyways may require modified methodologies to efficiently pick up containers. For some stops, the driver may be required to conduct a 3-point turn within a public parking area to maneuver the truck for the best position on the egress side of the street.

In cases of missed collection notifications that are received by 12:00 PM on a collection day, CWS will return to the address and collect missed carts or bins before leaving the service area for the day. For complaints related to missed collections received after 12:00 PM on a collection day, CWS will return the following workday to resolve the complaint. If customers issue complaints or service requests related to carts or bins for new customers, or repair, replacement or exchange of carts or bins for existing customers, the orders will be fulfilled the following collection day.

CWS feels strongly that for optimal and most efficient collection, greatest diversion, and greatest customer confidence, it is in the best interest of both the City and CWS that all recyclable materials are collected on the scheduled collection day. Accordingly, missed collections will normally be collected as reported above, on the scheduled or following day, regardless of the reason that the collection was missed. However, in the event a service address reports missed residential recycling collections more than two (2) times in any consecutive two (2) month period, CWS will work closely with the City to determine an appropriate resolution.

#### ***5.2.4. Commercial Recycling Collection and Processing Services***

CWS proposes to provide recycling collection and processing to Oakland's commercial establishments, as it currently performs these services for many businesses and commercial customers throughout the City. CWS has considerable experience collecting and processing commercial recyclables in the Bay Area, has developed a quality management team, selected the highest quality vendors, and further supplemented internal resources with knowledgeable industry professionals who have specialized experience in commercial collection and recyclables processing.

CWS will offer and provide source separated recycling services to all commercial customers in the City as part of its merchant collection and processing operations, whether or not designated by the City. CWS believes that this expanded source separated recycling program will enhance the City's diversion of recyclable materials because CWS has demonstrated unique ability to motivate commercial customers to initiate and sustain such programs through excellent education and support. These programs include:

- Programs and presentations appealing to specific customers
- Education and training in multiple languages
- Analysis of opportunity by recycling
- Reporting of progress from recycling
- Continual communication and support
- Demonstrated value for effort exerted

From day one of the commercial nonexclusive franchise agreement, CWS will deploy the new state-of-the-art front-end loader, side loader, rear loader, and roll-off fleet to provide maximum flexibility in the Commercial Collection program. As for residential and City recyclables collection, all vehicles will be equipped with GPS and on board communications equipment. The greatest level of emissions reduction will be provided with a new, state-of-the-art, highly efficient CNG- powered collection fleet. CWS will purchase new containers that eliminate storm water runoff to meet the highest environmental standards.

Currently, as a commercial service provider in Oakland, CWS is well-experienced working with businesses in the City, and will continue to provide as many service options alongside commercial education programs as feasible. CWS will minimize transition issues by communicating and negotiating with other contractors currently serving the City to ensure service interruptions do not occur, and businesses receive consistent and improved service moving forward.

The CWS Team will work hand in hand with the City of Oakland to develop and execute Commercial Education and Outreach programs. CWS will meet with the City, business customers, and other interested participants to initiate a highly advanced commercial recycling system. CWS will provide follow-up service and communications to identify any underperforming areas of the program in terms of recycling, and to determine how best to address customer focused education programs.

#### ***Advantages of CWS Commercial Service***

The CWS Team has the will, desire, and necessary experience and resources to provide the highest quality services to the commercial customers in Oakland. CWS companies and personnel have a proven reputation as "recyclers", and CWS is in the best position of all competing companies to enhance the recycling programs for commercial establishments within the City of Oakland. In the final analysis, the ultimate success of the commercial franchise will confirm that CWS is clearly the best choice based on our demonstrated customer satisfaction in the collection, processing, and marketing of commercial recyclable

materials. CWS has prepared for this opportunity by securing employees who have gained commercial recycling operating experience in the City of Oakland.

### ***Containers***

The quantities of containers proposed in Section 5.2.2 and 5.2.4 may be modified by actual commercial customer usage (counts).

Service levels will include 20, 32, 64, and 96 gallon wheeled cart containers; 1, 1.5, 2, 3, 4, 6, and 7-yard metal dumpsters, 14, 20, 30, and 40-yard roll-off boxes, and compactors 1, 1.5, 2, 3, 4, 20, 30, and 40-yards in volume.

**Table 5.2.4-1 Commercial Collection Service Type and Service Levels**

	Cart Volume (gallons)	Metal Dumpsters (cubic yards)	Compactor Volume (cubic yards)	Roll-Off Volume (cubic yards)
Commercial Recycling Services	20, 32, 64, 96	1, 1.5, 2, 3, 4, 6, and 7	1, 1.5, 2, 3, 4, 20, 30, and 40	14, 20, 30, and 40

Since commercial customer usage is dependent on specific needs, companies that aggressively recycle may only need or want containers of a different type or size than other companies of similar size. CWS will work with each customer individually to determine how to best meet recycling service needs. As with SFD, MFD, and City services, CWS will work directly with customers to “right size” collection services by conducting surveys and providing recommendations. The effort by CWS will:

- Optimize collection services and expense required by each customer
- Maximize solid waste diversion and recycling
- Conserve collecting and processing resources

CWS is committed to working with commercial customers by assisting them to make the correct choice of container types and size, with emphasis on increasing diversion. This work will be supported by all levels of the CWS Oakland Commercial Collection team, from the drivers to customer service to commercial recycling coordinators. For example, a driver may notice that a businesses’ recycling or organic container contains unacceptable materials (contamination). The driver will make a note in the customer account tracking system (FleetMind) and the occurrence will be sent on to our customer service personnel and recycling coordinators. A subsequent phone call and site visit by CWS if necessary will be made to talk to the business owner and provide technical assistance to mitigate the problem.

### ***Operations Plan***

Commercial routes will be carefully planned so that collection drivers follow assigned routes designed to optimize time in the field, personal safety, and responsiveness to customer needs and concerns.

The numbers of commercial cart, bin, compactor and roll-off box stops per route depend on the location of that route within the City, street geometry, car parking, geography, and distance to the processing or disposal facility. Collection methods may be different at each stop, a circumstance that will be factored into each day’s route and customer service load. Based on future time and motion studies routing studies to be implemented by CWS prior to program roll-out transition, smaller bins (1- to 2-yards) may take slightly longer to service due to their smaller size, low profile, and tendency to be overloaded compared

to 3- to 4-yard containers, which are typically located in such a position that the CWS driver can directly access the larger bins and lift and load them more efficiently. While the average time to lift and empty a bin can be as little as 26 seconds, the range of time per commercial stop can range from under a minute to 3-5 minutes, depending on customer access conditions. We will continue to review local commercial benchmark standards in other large Bay Area cities as route planning is performed for the City.

In general, each commercial collection vehicle, whether front loader or roll-off truck, will be operated by one (1) FTE employee driver. Specific routes with difficult access may have a helper with the driver to get out of the truck cab and move a cart or bin into position for more efficient use of time and motion. In all commercial collections, the CWS driver ensures the lid of the cart/bin is closed before leaving the area, and will clean up any litter as a result of the collection activity.

CWS will utilize its FleetMind GPS system for each vehicle, recording driver, route, and collection service data, and respond to on-route disruptions and additional service requests originating from CWS offices, ensuring operational connectivity.

For roll-off box and compactor commercial routes, special collection conditions such as nearby parked cars, narrow public parking areas, and alleyways may occur which require modified approaches to efficiently pick up roll-off box/compactor containers. At commercial stops, a driver may be required to conduct a 3-point turn within a public parking area to maneuver the truck for the best position on the egress side of the street. Due to the nature of drop box collection, a collection vehicle may need to back into a street or public parking area to align pick up of the drop box and position the container for collection.

Cart containers (32, 64, and 96 gallons in volume) will be emptied into new McNeilus, Side-Loader® vehicles with 31-cubic yard volume bodies on an Autocar cab and chassis. These vehicles will service cart and bin recycling containers including compactors up to 8 cubic yards in volume. Roll-off and compactor containers (10, 14, 20, 30, and 40 yards in volume) will be serviced by three-axle, Norcal brand roll-off trucks. They will service all roll-off container types including solid waste, recycling and organic materials boxes.

As needed, CWS will review the adequacy of container enclosure spaces, noise restrictions and limited accessibility to containers for CWS collection vehicles. A service questionnaire will be provided to commercial customers prior to service initiation to help determine service levels, special requirements and customer training needs. If warranted, a CWS customer service visit by will be conducted. CWS will also provide annual customer satisfaction surveys.

This survey will ascertain the following:

- Adequacy of container enclosure space for the anticipated volume and type of materials.
- Accessibility of the container enclosure space to provide safe and efficient service.
- Noise impacts and experience.

### ***5.2.5. Facilities***

#### ***5.2.5.1. Oakland Gateway Facility***

To best serve the customers in the City of Oakland, CWS will develop, build, and operate the Oakland Gateway Facility at the port of Oakland. The Oakland Gateway Facility enables CWS to increase the amount of material it can process and the number of Oakland citizens employed by the company. The Facility will be CWS' fourth commercial enterprise in Oakland, and will enable CWS to consolidate operations from its two West Oakland MRFs. The Facility is located on Engineer Road, at the North Gateway of the former Oakland Army Base.

The Facility has been designed to safely and efficiently receive, process, and transfer the full complement of materials identified in the City of Oakland's Request for Proposals for Zero Waste Services including, Mixed Materials and Organics Collection Services (Service Group 1) and Residential Recycling Collection Services (Service Group 2). The Facility will have sufficient capacity to process additional material collected by CWS from the greater East Bay area. The Facility includes administrative office space, employee and staff areas, a recyclable material shipping area, parking and all facilities needed to support recyclable, organics and mixed material collection operations.

CWS will equip the Oakland Gateway Facility with state-of-the-art mixed waste and recycling processing and transfer equipment. This facility will receive and process a greater amount of materials from Oakland, as well as the western United States. Importantly for Oakland, this facility will ensure maximum solid waste diversion and recovery of recyclable materials from single family, multi family, commercial, City, construction and demolition, and organic wastes within Oakland. Most favorably, the Facility will be an Oakland business that caters to Oakland and Oakland residents. Additionally, this facility is strategically located next to the Port of Oakland, and close to downtown. This strategic location advantageously positions CWS for major export of finished product to global markets; a benefit that helps to position Oakland as a business hub for the growing recyclable material processing, marketing and logistics industry.

The location of the new Oakland Gateway Facility is shown in Figure 5.2.5.1-1, the location of the facility on the Gateway site shown in Figure 5.2.5.1-2, and a rendering of the facility as designed by DEI shown in Figure 5.2.5.1-3.

*Gateway is "OAKLAND'S RECYCLING FACILITY"*



## 5. TECHNICAL PROPOSAL

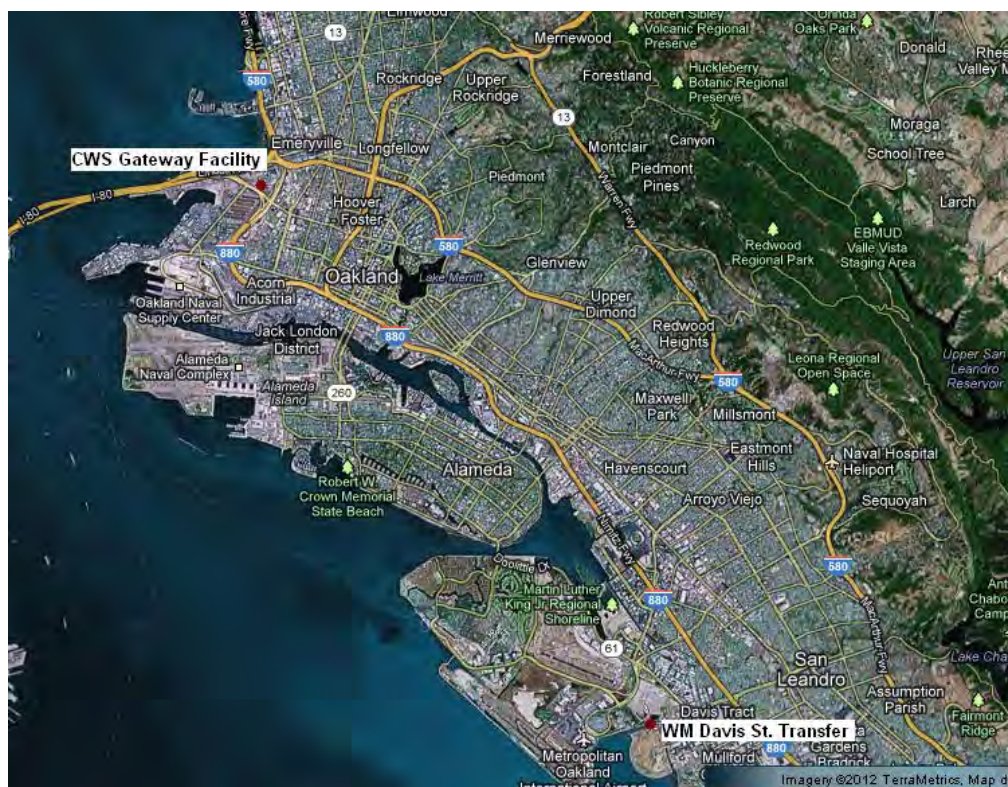


Figure 5.2.5.1-1 Gateway Location in Oakland

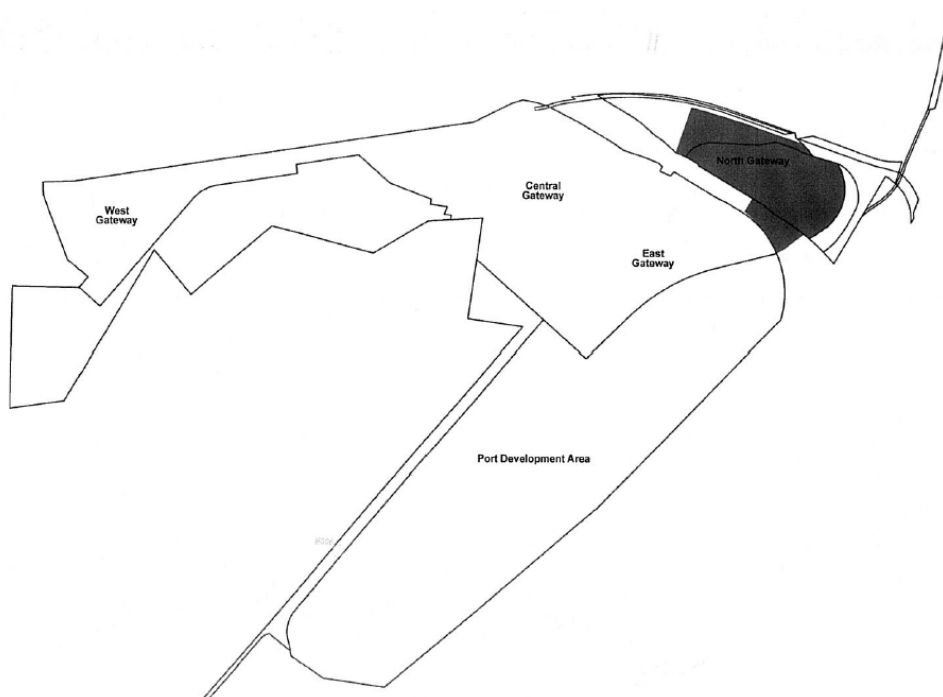


Figure 5.2.5.1-2 Location of CWS Facility on Gateway Site



Southwest View



Northwest View





Street View

#### Figure 5.2.5.1-3 Oakland Gateway Facility Renderings

Every aspect of the project design has taken into consideration the criteria needed to accommodate a Leadership in Energy and Environmental Design (“LEED”) certification at a Silver or possibly higher level. A partial list of the environmental features for the facility includes:

- Extensive roof-top and structure mounted photovoltaic solar panels
- Recycled content building materials
- Skylights & translucent building panels for increased natural lighting
- CNG fueling stations for all collection vehicles
- Two Wind turbines - vertical axis for quiet & more bird-friendly operation capable of generating approximately 10 kilowatts each
- Living green roof features
- Bio retention tree planters
- Rain water collection and storage for landscape irrigation
- Environmental education center
- Collection truck parking under photovoltaic shade canopies

In addition to LEED features, the plan incorporates design features such as raised building panels, variable roof heights, selective glass window placements, visual screening, architectural awnings and distinctive color schemes to create a visually interesting and attractive project. The two-story office section sits one story above ground level to maximize visitor and employee parking space. It incorporates a staggered floor plan design with living green roof and awning structures along with an outdoor patio

with attractive landscaping. The overall site landscaping includes green belts around the project and incorporates bioswales for storm water management.

Our intent is to build a facility that is functionally efficient and takes full advantage of our prominent location to create an iconic symbol and daily reminder of the City of Oakland, and California Waste Solutions' shared commitment to environmental.

The site is bound on the North/Northeast by the East Bay Municipal Utility District ("EBMUD") wastewater treatment facility, on the south by Grand Avenue and the eastern approach of the Oakland – San Francisco Bay Bridge, on the east by Route 880 and the west by realigned Wake Avenue.

**Office Area** – The 18,300 square foot administrative office area will consist of: a lobby and entrance area; a call center for servicing the City of Oakland and additional collection services offered by CWS; staff and management office space; and an education center with an observation area for viewing the facility operations. The administrative office will be located on the west side of the Facility and have parking for visitors and some office staff. Additional parking may be provided off site with shuttle service provided to the facility.

**Main Building Area** – The 165,585 square foot main building is made up of the following:

- Material receiving, tipping, pre-processing and transfer area ("Receiving Area") (50,625 sq. ft.). This is where all material is received, pre-processed and floor separated for delivery by loaders to the appropriate organics, residential recycling or mixed material recycling area for recyclable material and organics recovery. This area includes the loadout area for organics and non-recyclable material and includes push walls and pedestals to elevate excavators for loading into transfer trucks. Bulky item receipt and storage will also occur within this area.
- Organics processing area (sq. footage included in above). Area includes equipment designed to process and recycle organic materials from residential and commercial recycling and single family mixed material streams discussed in the material processing section of the proposal.
- Material Recovery Facility ("MRF") staff area (4,500 sq. ft.). This area consists of a break room and male and female bathrooms, showers and locker rooms to support employees working in the receiving, MRF and Bale Storage areas.
- MRF area (68,000 sq. ft.). This area provides space for the temporary storage of material and three of the four material diversion and recovery processing systems. These include the Mixed Material Processing System, the Single-stream Residential recyclable material Processing System and the Bulky Item, Compactor and Debris Bin mixed Material Processing System. Each of these systems is discussed in additional detail in the subsequent sections of this proposal.
- Bale Storage and Loadout Area (23,000 sq. ft.). This area is adjacent to the processing systems described above and will be used to store baled recovered material in preparation for loading into containers for shipment to market for beneficial reuse.
- Zero Waste Observation and Education area (3,860 sq. ft.). This area, located above the MRF staff area, will allow viewing of MRF operations and features a public education center. Access to this area will be provided from the third story of the office area through an elevated walkway on the north side of the main building and from the MRF staff area below.
- Maintenance, dispatch and staff area for truck operations (15,600 sq. ft.). This area will be used to maintain collection trucks and provide space for truck dispatch and driver and maintenance staff. The maintenance area will have all necessary equipment, lube and oil systems, air compression systems and parts needed for maintaining collection trucks. A second story mezzanine will also be developed for parts storage and other support needs.

- Photovoltaic solar panels will be installed on the roof of the main building to generate approximately 80 to 90 kilowatts of electricity for on-site consumption.

**Collection Truck Parking Area** – The collection truck parking area located on the east end of the main building will have sufficient parking for approximately 150 trucks, the estimated number required to service both the mixed material and organics and residential recycling franchises. Also installed in this area will be a CNG compressor and slow fill fueling system to fuel trucks while parked. Photovoltaic solar shade structures have also been incorporated into the design of the collection truck parking area. These panels installed above the truck parking area will generate approximately 50 to 60 kilowatts of electricity.

**Scales and Scale Houses** – Two in-bound scales and one scale house are located on the east end of the Facility for the weighing in of trucks and one out-bound scale and one scale house on the north west end of the facility for weighing trucks before they exist the site. These scale systems will be connected to each other and the facilities data management system to ensure accurate weights of incoming material and outgoing recyclable material and organics going to market or non-recyclable material going to the landfill.

**Rail Spur** – A rail spur may be installed on the north side of the Facility for receipt of incoming material for processing and transport of recyclable material to market.

**Site Ingress, Egress and Road Infrastructure** – Trucks using the Facility will enter from Wake Avenue on the south side of the office and main building. Exiting trucks will use the exit at this same point on Wake or will use the Wake exit on the north side of the office and main building. Visitors and employees using the office will use the driveways from Wake directly in front of the office for ingress and egress. MRF and collection employees will enter the site using the south Wake entrance by way of car or shuttle. Car parking for employees and vendors is provided on the north east side of the main building. Necessary gates, clearances and security will be in place at the entrance and exits to the Facility for safety and protection of the site.

Personal vehicles, collection trucks, recyclable trucks and transfer trucks have complete access to the Facility by way of a road system that encircles the south, east and north side of the main building. The Facility has been designed to accommodate the various truck types and includes a traffic plan to provide efficient, safe movement of trucks and vehicles throughout the site.

**Facility Utilities** – All necessary water, sewer, natural gas, electrical and phone service will be brought into the site from Wake Avenue or closest source possible. Electrical power supply will be fed to primary transformers and then distributed throughout the Facility for yard and building lighting and general power supply and for equipment used to process material. A stand-by generator will be installed to support critical electrical equipment in case of a power outage.

**Building Overview and Architecture** – The Facility's office and main building will be designed to provide a high quality professional office environment and an enclosure for the receipt and processing of material in an efficient manner while minimizing any impacts of the operation. Provided below is a description of proposed building construction for the office, staff areas and main building.

**Office, Dispatch and Staff Areas** – The office will be a three story, pre-engineered metal/steel structure constructed building that meets all building and fire protection codes. Floors of the building will be metal deck with concrete, walls will be metal framed with dry wall and ceiling will have acoustical panels. The office will incorporate sound and thermal proofing and push wall separation on the MRF side to minimize

impacts from the operation. All office, bathroom and other interior improvements will be consistent with a high quality office design and setting. The office will have necessary stairs and elevators and access to all floors to meet ADA requirements. The office will also include conference and education facilities with viewing areas of the MRF operation for training and recycling education purposes. Further to this, the office will also be connected to the Zero Waste Observation and Education Center located above the MRF staff area by way of an elevated walkway and viewing gallery located on the north side of the main building.

***Education Center*** – The CWS Oakland Gateway Facility design includes a 6,000 square foot education area that offers public meeting and classroom functionality and an enclosed and conditioned walkway and viewing area that allows safe overhead viewing of recyclables deliveries and the labor and machinery recycling separation equipment. The design and functionality will allow for ongoing promotion of public awareness and environmental consciousness in a hands-on setting. This setting provides guests a unique overhead view enabling the survey of all phases of material separation, recovery and solid waste diversion – from the receipt of materials to generation of product for recycling.

Teaching and resources will emphasize environmental stewardship, conservation and source-reduction. CWS will develop school curriculum that provides grade-appropriate, multi-media teaching lessons that may be used by Oakland schools. That curriculum will involve subjects including mathematics, history, science, and humanities. Teaching will coincide with field trips and lectures for Oakland students, residents, educators, entrepreneurs, community service groups and government guests.

Staff and dispatch areas will be constructed similar to the office and will meet all applicable building, ADA and fire protection codes. As with the office, staff and dispatch areas will utilize sound and thermal separation from the MRF operation including the use of masonry walls. The office, dispatch and staff areas will utilize full heating ventilation and conditioning systems.

***Receiving, MRF and Bale Storage Areas*** – The main building consisting of the receiving, MRF and bale storage areas will be pre-engineered, metal/steel constructed building that meets all applicable building, fire and ADA code requirements. The Facility will incorporate steel columns spaced at 25 foot centers and will be clear span across all operational portions of the building. The design will incorporate metal siding with translucent panels to enhance lighting inside the building. The roof will be metal panel and incorporate translucent panels for lighting and smoke vents for fire protection purposes. The roof will also include induced draft ventilation fans to impart a negative pressure across the building through door openings and louvers installed in the side walls. The building will incorporate all necessary fire protection including fire proofing, sprinkler systems and fire extinguishers throughout the Facility. The Facility will also incorporate all necessary odor and dust control systems need to effectively manage on-site odors and dust that could be generated from the receipt and processing of materials.

The inside column height of the building will be approximately 35 feet tall to accommodate installation of processing equipment and Facility operations. The eave height of the building will be approximately forty feet with a ridge height of approximately 48 feet. A parapet will be installed at the edges of the building to approximately 50 feet for architectural affect and to provide a view shed for the ventilation fans on the roof.

Electric overhead roll up doors will be installed throughout the building for ingress and egress of trucks into and out of the building, for transfer trailers used for the loading of organic and waste materials and for recyclable material trucks taking material to market for reuse. Additional doors will also be installed for maintenance, bin positioning and equipment access.



It is anticipated that building and floor foundations will be supported by driven piles with additional depth of foundation provided for certain pieces of processing equipment. Concrete push walls with steel reinforcement will be utilized in material receiving and storage areas to facilitate stock pile management and protection of the building.

In addition to light coming into the building through the translucent roof and side panels, light fixtures will be provided throughout the building to create an efficient and safe working environment.

CWS' mission is to align the best possible processing system with the collection system and material stream to maximize solid waste diversion and productivity. CWS will have sufficient capacity to process materials collected from the entire City of Oakland at the new Oakland Gateway Facility. As a contingency and until the Facility is fully operational, CWS can process recyclable materials at its two current Oakland MRFs. The new CWS Oakland Gateway Facility will be a state-of-the-art processing facility that incorporates proven and efficient systems and design, and will include:

- Volume reducers
- A mechanical screen
- Optical and computer aided screens
- Air and computerized screens
- Magnetic and eddy systems
- Conventional conveyors
- High capacity balers



**Sorted Material Bales**

CWS and Bollegraaf evaluated a variety of factors that resulted in the basic MRF design. These factors included:

- Solid waste system design
- Diversion goals for the City
- Volume and tons of inbound materials
- Market expectations and options for finished products

Required permit and operational entitlements have been confirmed and those components of the development process will be led by David Edwards and his firm of David Edwards, Inc., in partnership with J.R. Miller & Associates, both California-based firms. Both firms have great experience and accomplishment track records with facility planning and permitting in California combined with knowledge about the solid waste and recycling industry. Both firms have been assisting CWS with its development and permitting efforts to implement the new Oakland Gateway Facility.

### **Facility Development**

CWS' experience has proven that adherence to the above best practices result in the highest quality end product with the lowest contamination. Our experience retrofitting the site at the San José Timothy Drive

MRF in 2002 and 2007 confirms that CWS has the resources and ability to successfully follow through with its plans. Since CWS differentiates itself as an excellent solid waste material processing company, our expertise in developing facility infrastructure and processing materials cost effectively and efficiently has long been a hallmark of our company. The timeline and projected schedule for the development of the Oakland Gateway Facility is dependent on timely CWS site acquisition progress with the City of Oakland and subsequent City-action dependent and other work of team firms, including DEI, JRMA, and Bollegraaf.

#### ***Land Acquisition, Zone Change and Environmental Review***

CWS is in the process of purchasing the North Gateway property described in this proposal from the City of Oakland. Prior to entering into a purchase agreement, the City of Oakland prepared a master plan for the development of the property that formally made up the Oakland Army Base which was dedicated and is now owned by the City. As part of the development of the master plan, an environmental review was conducted under the provisions of the California Environmental Quality Act and certified by the City of Oakland. As part of this review, the Facility, including its operation, was briefly described. To further entitle the North Gateway property and the Facility for its intended use, additional project specific environmental review will be conducted and certified by the City of Oakland. A general plan amendment and zone change will be performed on the property to provide consistency with the City's land use and zoning regulations.

#### ***Facility Operating Permits***

Concurrent with the environmental review process discussed above, CWS will work with the Alameda County's solid waste task force to process an application for inclusion of the Facility into the Countywide Non-disposal Facility Siting Element. This will identify the Facility as part of the County's overall waste management system which is necessary for the processing of a Solid Waste Facility Permit discussed below.

Following the purchase of property and environmental approvals from the City of Oakland and inclusion of the Facility into the Non-disposal Facility Siting Element, CWS will secure a Solid Waste Facility Permit (SWFP) jointly from the County of Alameda, Department of Environmental Health (LEA) and Cal Recycle for the operation of the Facility. This approval process will include the following activities:

- Preparation of a Transfer, Processing Report (TPR) that completely describes the physical features and all operational components of the Facility
- Meetings with the LEA and Cal Recycle to review the Facility and the permitting process that will be undertaken to receive a SWFP
- Completion and submittal of an application package that includes the above mentioned TPR
- The LEA will conduct an informational meeting to inform interested parties of the permitting process that will be followed for review and approval of the SWFP
- Following their initial review of the application package, the LEA will deem the application complete and write the SWFP
- After written, the LEA will forward the SWFP to Cal Recycle for their review and concurrence with the issuance of the permit

Following this review and concurrence by Cal Recycle, the LEA will issue the permit and assign the Facility a Solid Waste Facility Permit Number.

#### ***Design and Construction***

During the process of receiving its operating permits, CWS will complete the detailed design for the Facility including:

- Geotechnical investigations
- Utility studies and design
- Civil design
- Building design
- Structural design
- Mechanical design
- Electrical design
- Processing equipment design
- Preparation of construction specifications and bid packages

When complete the design package will be used to solicit proposals to local to the City of Oakland general contractors for the construction of the Facility. CWS's goal is to utilize, to the extent possible, local contractors and sub-contractors to provide economic benefits to the City of Oakland and Alameda County. The design plans will also be used to secure waste discharge, utility interconnection and facility building permits.

During this project time frame, CWS will also be working with its process equipment vendor to complete design and start fabrication of equipment. The equipment design information will be used to complete the design of Facility. The complete installation of the equipment will be performed by the equipment vendor in coordination with the general contractor.

The selected general contractor and its sub-contractors will use to design plans and specifications to complete the construction of the Facility. A brief list of construction components include:

- Site preparation and grading
- Installation of building slabs and foundations
- Building fabrication and installation
- Mechanical and electrical construction
- Coordination with the equipment vendor for the installation of process equipment
- Site paving and parking area preparation
- Site lighting and fencing
- Office and staff area improvements
- Installation of data, communication and security systems
- Landscaping
- Installation of "green" facility features

#### ***Facility Start-up and Operation***

As construction nears completion, the Facility will go through an extensive start-up and staff training program of each operational component to ensure that it is ready for the receipt and processing of the City of Oakland material. Once complete, the Facility will begin receiving small amounts of material to test and refine equipment processing and then gradually ramp up to full material throughput and continuous operation.

#### ***Schedule Summary***

The schedule for the Gateway facility will be dependent on the anticipated availability of the property to California Waste Solutions. Presented below are two schedules; one with the property acquisition date of June 30, 2015 and the second with an acquisition date of September 16, 2016,, working through the

property acquisition, permitting, construction and facility start-up phases of the project to be ready for continuous operation and receipt of the City of Oakland's material by July 1, 2015.

**Table 5.2.5.1-1 Projected Oakland Gateway Facility Development Schedule**

Task	Completion Date	Completion Date
<b>Property Acquisition</b>	<b>June 30, 2015</b>	<b>September 16, 2016</b>
Facility included in Countywide Siting Element	April 2, 2015	September 21, 2016
Receive Facility Operating Permit	January 19, 2016	April 7, 2017
Prepare Transfer Processing Report	July 30, 2015	October 18, 2016
Solid Waste Facilities Permit (SWFP)	January 19, 2016	April 7, 2017
Detail Design	February 17, 2016	May 8, 2017
Building Permits	March 18, 2016	June 7, 2017
Construction	January 30, 2017	April 19, 2018
<b>Facility Start-up</b>	<b>March 29, 2017</b>	<b>June 18, 2018</b>

CWS will continue to have discussions with the City of Oakland Planning Department regarding the proposed scope for physical site improvements, nature of planned operations, facility tonnage input and total daily vehicle trips.

CWS plans to relocate 72 Oakland employees and to add approximately 143 new employees at this facility. CWS currently has collective bargaining agreements with the International Longshore and Warehouse Union Local 6, Teamsters Industrial Union Local 70, and International Association of Machinists and Aerospace Workers Union Local 1546. Each of these agreements is expected to be extended for this facility and all wage categories therein either conform to or exceed prevailing wages, if any.

CWS will continue to operate its 10th St. MRF that will be upgraded with some new equipment, prior to the start of this contract. This MRF will receive all recyclable materials collected under this franchise until the Oakland Gateway Facility is operating.

#### ***5.2.5.2. 10th St. Maintenance Facility***

CWS will continue to utilize its fully equipped facilities and yard at 1819 10th Street, Oakland, to support equipment maintenance and repair for the new collection fleet, as well as other activities. This facility is currently the maintenance location for our Oakland residential and commercial vehicles and is capable of providing all maintenance requirements of the new vehicles. It accommodates the following:

- Truck maintenance and repair
- Container maintenance and repair
- Vehicle cleaning
- Container cleaning
- Vehicle fueling
- Truck yard
- Dispatch, driver training, routing
- Large and bulky item recycling
- Household Hazardous Waste and Sharps transfer to processors

Cart painting will be contracted out to a local Oakland company that is properly permitted for this service.

### 5.2.5.3. 10th Street MRF

The CWS 10<sup>th</sup> Street facility is a modern MRF located at 1820 10<sup>th</sup> Street in Oakland

Employees at this location separate all types of current Oakland program recyclable material including paper, plastic, aluminum, other metals, glass, and textiles and prepare them for marketing. These operations employ a combination of mechanical processes and human sorting to maximize the recovery of material for remanufacturing. The facility is designed to sort and process residential recyclables collected through residential (i.e., curbside and multi-family) recycling programs and commercial recyclables.

CWS expects to recover and divert the following products from the MRF:

- Newspaper (6-8)
- Telephone books (#1)
- Mixed paper (1)
- NCR computer paper
- Carbon computer paper
- Laser computer paper
- Laser-free computer paper
- White ledger paper
- Colored ledger paper
- Card stock
- Boxboard furnish
- Coated white overruns
- News scrap
- Glass bottles and jars in three colors
- Aluminum cans
- Aluminum foil
- Non-ferrous scrap
- Tin, steel, bi-metal cans
- Ferrous scrap
- PET clear
- PET colored
- HDPE natural
- HDPE colored
- Mixed plastics 3-7
- Injection molded HDPE



#### Sorted Material Bales

- LDPE natural film
- LLDPE films
- HDPE films
- Specialty polymers
- Wood
- Textiles
- Lead acid batteries
- Tires
- Compressed gas cylinders
- Carpet and carpet pads
- Integrated circuit boards
- Inerts (glass fines for ADC, asphalt, concrete, dirt, rock, brick)
- White goods and small appliances
- E-waste including CRTs and integrated circuit boards
- Used motor oil
- Used motor oil filters

The 10<sup>th</sup> St. site is zoned M-20, Light Industrial and R-36, Small Lot Residential Zones. The facility sits on 2.2 acres featuring 58,800 sq. ft. in four industrial buildings with office space in two of the buildings small office. The maximum daily capacity for the facility is 400 tons. CWS has purchased land adjacent to the site that provides an additional 34,000 sq. ft.



### ***5.2.5.3.1. Facility Schedule and Labor***

CWS will deliver Oakland residential recyclable materials Monday through Friday, and commercial materials Monday through Saturday and periodically on Sundays for special circumstances, such as emergencies and servicing of City events. The facility will be open for receiving and processing materials from 6 AM until 6 PM, or as otherwise dictated by operating permit limitations. The facility closes for three holidays during each year: Thanksgiving, Christmas and New Years Day. Operating hours and days of operation may be negotiated between CWS and the City. The facility will have sufficient storage capacity to support the proposed schedule.

Based on need and permit limitations, the facility may also be opened for processing, administrative activities and outbound materials transport only during earlier or later hours on Monday through Friday, or on designated weekend days.

Materials receiving and processing related activities will generally be conducted in one work shift. From time to time it may be necessary to extend shift operations. In such instances, a work schedule and staffing will be defined according to need and required duration. The Plant Manager will determine overtime and supplemental shift construction. Work shift staffing, along with primary job responsibilities, are shown in Table 5.2.5.1.1 1.

**Table 5.2.5.3.1-1 Staffing at 10<sup>th</sup> Street MRF**

<b>Title</b>	<b>Employees</b>	<b>Primary Job Responsibilities</b>
Plant Manager	1	Oversee all plant activities and personnel
Shift Supervisor	2	Supervise facility operations
Scalehouse Operator	1	Conducts scale house operations
Traffic Control	1	Directs the safe passage of vehicles in and out of the facility; may perform tipping floor housekeeping duties and pre-sorting
Forklift Operator	5	Operates one or more types of forklifts
Loader Operator		Operate the wheel loader in the materials unloading area
Baler Operators		Operate balers
Sorters	24	Sort materials on the processing conveyors
Maintenance and Preventive Maintenance	2	Repairs, and replaces equipment and parts including regular preventive maintenance
Utility/Yard Maintenance		Keep premises, streets and neighboring business clear of litter
Sweeper Operator		Keep inside gates clear of litter
Total MRF Personnel	36	



Staffing at the new Oakland Gateway Facility is shown in Table 5.2.5.3.1-2.

**Table 5.2.5.3.1-2 Staffing at CWS' Oakland Gateway Facility**

Labor Categories		Gateway Facility Employees
<b>Management</b>		
	Facility Manager	1
	Project Engineer	1
	Maintenance Manager	1
<b>Administrative</b>		
	Administrative Assistant	1
	Safety	1
	Scale House Attendant	2
<b>Operations</b>		
	Shift Supervisors	4
	Control Room Operators	1
	Aux Operators	2
	<b>Sorting Labor</b>	<b>43</b>
	Equipment Operators	9
	Traffic Control	1
	<b>General Laborers</b>	<b>2</b>
<b>Maintenance</b>		
	I&E Tech	1
	Maintenance Mechanic	4
	<b>General Laborers</b>	<b>7</b>
<b>Total</b>		<b>81</b>

Work breaks and lunch times will continue to be in accordance with our collective bargaining agreements. The Plant Manager and Supervisors are empowered and responsible for notifying employees of changes in work routine and schedules. A letter referencing the collective bargaining agreement with Teamsters Local 70 is provided in Section 4 of this proposal.

Overtime work may occasionally be required to handle receipt of greater amounts of material as a result of increased recycling tonnages from organic, programmed and seasonal growth. Other times overtime work is required for processing materials to compensate for time when the facility may be undergoing scheduled maintenance or capital improvement projects. The Plant Manager determines the use of overtime based on operating conditions and inbound materials.

The opportunity for an employee to work overtime is a feature defined by seniority and job classification and governed by our Collective Bargaining Agreements.

#### 5.2.5.4. Facility Operations

Single stream recyclables processing facilities must be able to sort commingled materials into individual components for these materials to be manufactured into new products. To determine upgrades to the Oakland 10<sup>th</sup> St. MRF, CWS focused on desired product outcomes and requirements of product customers. CWS is familiar and meets regularly with representatives of all available markets to determine their quality standards.

Improved equipment and operations at the 10<sup>th</sup> St. MRF that are identified have been designed to accomplish the following:

- Operate and maintain equipment for safest performance
- Produce the best quality product demanded by buyers
- Build sufficient capacity and flexibility into the MRF that enables operational agility
- Process at levels of greatest efficiency and economies of scale
- Educate employees at all levels to operate with excellence
- Minimize the handling of non-recyclable, contaminated materials
- Prevent cross- and re-contamination of recyclable materials
- Process materials in a sequence that will maximize the quality of the recovered materials
- Maintain the appropriate burden depth and speed on conveyor lines and screens to ensure quality sorting, while operating the processing system with an adequate number of workers
- Achieve scalability and flexibility so that operations can be modified to keep pace with any tonnage and materials changes that develop from the waste stream



Manual Sorting Line

**Material Receipt and Management** – Collection trucks delivering material to the Facility will enter from Wake Avenue on the south side of the site. The trucks will proceed to one of two in-bound scales that are serviced by a scale house equipped with state of the art programs for weight data management. Here customer and truck information is requested and entered into the data management system prior to the trucks being weighed.

After weighing in and recording of the gross truck weight, the truck is directed to proceed to the Receiving area located on the North West side of the main building. When safe and directed by a traffic management spotter (“spotter”), the trucks will turn to the north and then back up to the south to enter the building through one of the overhead roll-up doors. Based on the type of material contained in the collection trucks, they will be directed to specific areas of the Receiving area for off-loading and management of materials. When completely inside the building, the truck will unload its material and then pull forward to clean any residual material from the truck.

Once clean and directed by a spotter, the truck will exit the building and proceed to the out-bound scale serviced by a scale house similarly equipped to the in-bound scale house. Here the tare weight of the empty truck will be recorded and the net weight of the truck's content determined. After the process at the out-bound scale is complete, the truck will then exit the Facility on the north of the Facility to Wake Avenue. For fixed body trucks, once a tare weight has been recorded, these trucks can by-pass the out-bound scale and proceed to the Facility exit. Fixed body trucks will have their tare weights re-recorded once every three months. Non-fixed body trucks, such as roll-offs, will weight out each time they use the Facility.

Vehicle queuing will proceed in a manner to allow for efficient and safe move-in and move-out of the Oakland Gateway Facility. Loads that contain unacceptable materials (hazardous or otherwise) will be noted by the driver, loader operator and sorting personnel and the origin of the vehicle will be noted. Vehicle unloading time should be 2-5 minutes including safety checks by collection drivers CWS traffic directors will provide traffic control to the collection vehicles in addition to examining each load for compliance with state mandated load checking procedures to estimate the approximate percentage of contaminants and unacceptable materials received from customers.

Residential and commercial trucks containing single stream recyclable material will enter the building using one of the doors located toward the east side of the Receiving area which is near the Single-stream Residential Recyclable Material Processing System ("SSRR"). Push walls will be designed and installed to protect recycling equipment and the building and to assist in the management of materials. Front end loaders will push and manage the single stream material to provide a continuous stock pile of material for in-feed to the SSRR system. A stationary excavator positioned adjacent to the SSRR system will grab the single stream material from the stock pile and load it into the in-feed for processing and recovery of recyclable material. Following processing, non-recyclable material will be conveyed or otherwise transferred to the loadout area for transfer to the landfill.

#### ***5.2.5.4.1. Load Screening***

CWS has extensive experience with addressing hazardous and prohibited wastes detected in recyclable materials.

Tipping floor staff is trained to evaluate loads as they are brought in and deposited on the tipping floor. Additionally, management is on the tipping floor on a regular basis. If an unacceptably bad load, or portion thereof, is suspected, the loader operator is directed to immediately notify a supervisor. Personnel on the pre-sort line remove any hazardous or prohibited wastes remaining in the recyclables.

The 10 percent visual guideline provided by the former California Integrated Waste Management Board (CIWMB) is one tool used for evaluating incoming loads. The image adapted from CIWMB LEA Advisory Number 58 (Revised April 18, 2003), is available on-line at:

(<http://www.ciwmb.ca.gov/LEAAdvisory/58/default.htm>), Attachment 2A, Comparison Chart for Estimating Percentage Composition. CWS has adapted this visual as a tool to provide a comparison of the percent contamination in a load of solid waste.

#### **Load Classification and Assignment**

Loads are visually inspected either before or after unloading. CWS personnel observe the load for indications of prohibited materials that are not on the City of Oakland's recyclable program list, including garbage and hazardous materials. Either the loader operator or a spotter conducts this assessment. Workers must exercise caution and use safety precautions when observing loads from the

rear of the vehicle. If necessary, the driver will be instructed to wait before discharging the load and the load will be discharged in a more appropriate area of the facility for further processing and recycling.

### 5.2.5.4.2. *Sorting Process*

CWS strives to process material in the most effective and efficient manner by segregating final marketable products, MSW, and hazardous waste. Material is typically processed on a first-in, first-out basis so that specific material is not on site longer than 48 hours.

The materials stockpile will average between 2 and -15 feet in height and CWS loader equipment personnel will selectively load material from stockpiles to processing equipment. Loads delivered by vehicles that contain certain materials of like kind will be identified and may be isolated and processed separately. The separate processing of some materials is done to increase productivity and/or preserve product quality. Pre-sorting of recyclable materials separates material by size and then enables larger material to be identified and removed for recovery or disposal.



#### **Cardboard and Paper Screening**

operation enable CWS to exceed all prior industry standards for diversion and recycling of this material stream.

The series of engineer equipment included in the SSRR processing system includes the following:

**Bollegraaf Drumfeeder Material Metering Bunker:** The drumfeeder material metering bunker consists of a large horizontal rotating drum and belt encased in a steel bunker. Material is loaded into the bunker with an excavator. The material that is loaded into the bunker is conveyed toward the rotating drum. As the material reaches that drum, steel teeth and cleats roll the material up and over the drum and liberating material from bags and evenly distributing it onto the infeed conveyor. The evenly distributed materials improve presentation to individuals, efficiency and work place safety.

The even distribution of material on the conveyor facilitates manual presorting of film bags, oversized metals, plastics and trash present in the waste stream on the presort line and helps individuals on that presort line to remove and recover film, large metals, plastics and dispose of remaining garbage. A

The Single-stream Residential Recyclable Material Processing System (SSRR) at the Oakland Gateway Facility has capacity to process approximately 70,000 tons per year during a single shift, five days per week. CWS has the capacity to process more material by increasing either the number of employees, work shifts or days per week operation. The system will also process some selected recyclable materials from commercial sources.

The SSRR system includes an engineered series of equipment components that separate fiber, film plastic and containers. The SSRR system includes a sophisticated container sorting system that uses computerized optical technology to separate a mixture of high value containers into individual clean material grades. Enhanced technology design and



series of overhead air suction hoods improve the logistics of removing film plastics from the waste stream. Any remaining oversized material on the belt is removed and stored in bunkers for subsequent processing. Any material left of the belt proceeds to the OCC cardboard Screen.

LUBO Triple Deck OCC star screens: The OCC cardboard separator is 20-30 foot long screen consisting of a horizontal shaft deck whereby steel shafts with large rubber star discs rotate forward and propel the large, rigid OCC over a fast, forward moving bouncing surface. Large openings in between the stars allow the smaller and less rigid newspaper, mixed paper and mixed rigid containers such as glass, water, soda and soap bottles to fall through the openings resulting in a clean, high quality cardboard floating over the discs and via a manual quality control station into a bunker and baler for sale to market.

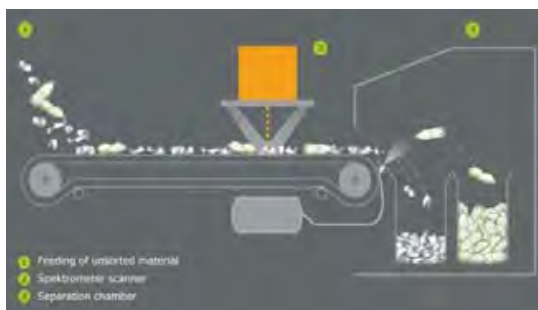


**Star Screen**

LUBO Double ONP star screens: The Double ONP newspaper screens are similar in design to the OCC separator, but instead recover Newspaper and large dry mixed fibers. The two stacked screens consist of two 20+ feet long by 10 foot wide screens. A horizontal shaft deck with steel shafts and 9 inch diameter rubber star discs rotate forward and propel the flexible but flat Newspaper up a 40-50 degree inclined surface by hundreds of rigid rubbers stars. The material is propelled up and forward over a fast, forward moving bouncing surface with openings to remove smaller items. The combination of an inclined angle, traction provided by the stars and the bouncing motion effectively separates the newspaper from the smaller mixed paper and ballistic containers that fall backwards off the screen as they bounce and lose traction. The larger newspaper rolls over the discs and the smaller mixed paper and rigid containers roll back and fall through the discs and travel to a second deck for an identical screening environment but with slightly smaller sized disc openings. The paper that rolls off as overs of that discs becomes a secondary newspaper stream. The smaller mixed paper and containers travel to the next screen.

LUBO Mixed Paper / Rigid Container Separator: The Mixed Paper / Rigid container separator functions similarly with very small spaces and many rubber star discs rotating on an axle. A similar action to the OCC and ONP screens drives the remaining mixed paper over the screen while the rigid containers tend to bounce and travel backwards due to the steep inclined angle of the screen. The separation results larger clean paper floating over the discs and conveyance for further manual quality control. The separated containers containing small remnants of paper, large bottle caps, etc. proceed to the container separation system. Due to the smaller screening surface, any fines that fall through the screen (mostly broken glass) are conveyed to a small particle glass cleanup system.

LUBO Paper Magnet: The Paper Magnet is an innovative solution to remove the smaller particles of paper and film from the rigid containers found in the small material fraction of the mixed paper screen. The material is conveyed over a very steep, 60 degree inclined conveyor with thousands of small suction holes imbedded within the belt. An internal suction system causes the adhesion of flat and light materials against the belt while the heavier rigid and flat containers with less surface area, are unable to stick and fall down. Therefore, it received its name because of the visual impression of paper being magnetically attached to the steep conveyor by the air suction. This has proven to be a very effective solution to remove the majority of small paper that would otherwise be lost during the commingled container recovery process. The paper magnet increases the recovery of fiber and improves the quality and value of the rigid containers.



### Optical Sorting

**TITECH Optical Sorting Units:** TITECH's innovative and advancing sorting technology fully automates the separation of recyclable materials from a mixture of material. The technology complements CWS' staff. The input stream is analyzed by a computerized scanning sensor that is installed over a conveyor belt. Sensors rapidly identify materials, shapes, textures and colors as well as the object position needed for precise recovery and attaining a high purity of the desired commodity. These optical sorters are used to remove cardboard, paper, film plastics, rigid plastics, PET, HDPE and 3-7 plastic containers (including California Redemption Value material). A separate, single unit is also

present to capture the wood to complement skilled manual sorting. The TITECH component will recognize and eject an item that is as small as 1/2 inch in size.

The combination of state of the art optical sorting technologies, mechanical screening techniques and the implementation of strategic manual quality control operations allows for any waste stream to be effectively mined of any valuable commodity without less impact on individuals and lower maintenance costs. The role of individuals remains essential and is more focused on advanced aspects of product quality control and equipment adjustment of the sophisticated equipment.

The final components on the SSRR processing system is the container recovery system. Although the container recovery system is integrated in the SSRR processing system, it deserves special mention because it processes high diversion value, mixed materials (i.e. containers, three dimensional and rolling fractions) that emigrate from the SSFR, MFCMM and BDCMM processing systems.

The first process in the container system is a high power magnet to recover larger ferrous metals. Remaining material on the sorting line passes through a TITECH Optical PET Sorter where all the #1 PET plastics are identified and ejected.

The ejected PET plastic is inspected by an individual who will monitor and control production quality and remove remaining available contaminants. Contaminants are returned to the mixed plastics stream and continue to a second TITECH optical sorter to eject the natural and color #2 HDPE. The ejected HDPE is conveyed toward CWS staff that sort natural HDPE from the mixed color HDPE and inspect final product quality. Both finished HDPE streams are conveyed to their respective bunkers for baling and contaminants return to the mixed plastics line.

The remaining 3-7 plastic and similar sized materials are sent to a third TITECH optical DV sorter that will separate it into two separate commodities, Aseptic packaging and all remaining 3-7 mixed plastics. The ejected aseptic packaging and 3-7 plastics can be separated as a clean commodity and will not require further quality control. Both are conveyed to their respective storage bunkers for baling. The remaining product pass under a secondary magnet to recover the last bit of ferrous to be combined with the previously ejected ferrous. The entire remaining product is now conveyed to a final sorting line where all commodities can be inspected and finished by CWS personnel.

Near the end of the container recovery module, a final separation of aluminum is done by the Eddy Current. The Eddy current ejects the non-ferrous metals and CRV aluminum cans. A final quality control individual will inspect and hand sort the aluminum for California Redemption Value (CRV) from the bimetal cans and aluminum foil plates to assure the highest possible commodity values. Any remaining



materials on the sorting line may now be returned to another appropriate system for reprocessing and maximum diversion through recycling.



**Product Bale Inspection**

Materials identified, segregated and separated will be stored in bunkers, and await either direct load-out or baling and transport to local, regional, and/or global markets. These materials include:

- Product - for sale to global markets
- Organic material - to Processor
- Residue - to Landfill
- Hazardous or otherwise unacceptable material – to specialized processors

Direct load out is performed by conveyor or loader. Baling and bale handling will be performed by loader, baler, and forklift. Baled product is loaded into containers, trailers,

flatbeds, and vans as well as stored inside to await transport.

### End of day placement

Unprocessed materials that have not been transported to the pre-sort line remain on the tip floor overnight. The following morning, unprocessed materials are moved from the back of the tipping floor area to the front of the tipping floor area, to ensure that they are processed in a timely fashion (the “front” of the tipping area is defined as the area near the pit conveyers and the “back” is defined as the area towards the loading dock). A concerted effort is made to clear all processing lines belts of materials by the end of the shift. All recyclables materials/residual wastes received during an operating day shall be removed from the site within 48 hours of arrival.

### Hazardous and Other Prohibited Waste

During the sorting process, any potentially hazardous or other prohibited wastes will be removed from incoming materials and placed in the designated staging area. As necessary, or at the end of each day's shift, collected hazardous or prohibited wastes will be moved to the designated outside storage area. Hazardous wastes include those materials deemed to be hazardous pursuant to federal, state, or local requirements. Typical characteristics of hazardous wastes include toxicity, corrosivity, flammability, and reactivity. Examples may include: universal wastes, materials that emit radiation, lead acid batteries, cathode ray tubes, compressed gas containers, used oil and filters, solvents, paints, and pesticides. Containers that meet the regulatory definition of “empty” are not considered hazardous. Hazardous materials are stored, recorded, reported and dispensed as defined by regulatory law that maximizes solid waste diversion.

The determination of a hazardous waste is based on visual observations of containers and labels. If suspicious odors or reactions are observed, personnel will utilize caution when investigating the material and follow its hazardous waste protocol.

### **Medical Wastes**

Prohibited medical waste includes materials deemed as regulated medical waste and certain non-regulated wastes. Non-regulated medical wastes can include sharps, needles, and other items from sources exempt from regulation such as households. Regulated medical waste could include biohazardous or infectious wastes from the treatment of humans or animals, and materials used in research or testing that contain body fluids or that display temporary radiation.

### **Solid Wastes**

Any prohibited municipal solid waste detected in the incoming material, either at the tipping area on the presort line, will be removed. Rejected materials are placed either into a storage container or designated bunker. Prohibited solid wastes include any putrescible and nonputrescible solid and semisolid waste material, including garbage and rubbish and any other non-program materials that are not accepted into the City-designated recycling cart.

#### ***5.2.5.4.3. Storage***

CWS stores material in a lawful manner and strives to do so as effectively and efficiently as possible.

### **Incoming Raw Material**

Material is processed according to a first-in, first-out (FIFO) model. Permitted storage areas are designated on site maps that have been approved by the City of Oakland and are a part of the Conditional Use Permit, Fire Permits, and the Hazardous Materials Business Plan. The types of materials received and processed at the facility are not expected to produce significant odors. Potential nuisances are eliminated or minimized by thoroughly cleaning the storage area, prompt loading of wastes into containers or trailers, transferring the wastes to the landfill within forty-eight hours, and implementing litter control programs. A dust suppression system is installed in the unloading area. This system also serves to reduce potential odors and may be used in conjunction with an odor suppressant or neutralizer. The processing area is typically cleaned of potentially odorous material on a nightly basis.

### **Outgoing Product and Residue**

Bales of paper, aluminum and other metals, plastic, textiles, and other recyclable materials are stored awaiting transport to offsite facilities according to any permit or regulatory requirements. Walkways between bales will be at least 44 inches wide.

Outgoing Residue is staged in a designated area of the tipping floor under a canopy, awaiting pickup for hauling to a landfill or alternative disposal facility that meets all environmental regulations.

### **Hazardous Waste**

Any hazardous materials removed from incoming materials will be stored in the designated area. Materials deemed as hazardous waste must be labeled with the contents and accumulation date. Once sufficient quantities are accumulated, CWS will contract with a hauler or a transporter to schedule a removal. Removal records will be retained on site for at least three years.

#### ***5.2.5.4.4. Facility Maintenance***

Given the nature of material recovery operations, the presence of certain amounts of debris on the floor is unavoidable. Internal facility maintenance includes keeping the floor and related work areas free of

excessive debris with special attention given to keeping walkways clear. At a minimum the floor is swept once at the end of each shift. Beyond this set schedule, additional sweeping may occur when it is determined that the level of debris buildup presents an unsafe situation, in which case operations may be stopped to clear walkways. The floor may also be swept during equipment or other operational downtime.

The facility is equipped with a misting system for dust and odor control. Primary maintenance of this system consists of clearing clogs as needed. Spare nozzles are kept on site for immediate repairs. A contractor is brought in as needed to do overall system cleaning and check-up.

CWS utilizes a company-owned 8-foot Lay-Mor Sweeper to circulate around the plant at a minimum of once daily, no later than the end of the first shift.

CWS strives to prevent litter from migrating off-site through the following actions:

- Regular sweeping inside plant to prevent outdoor migration
- Concrete berms are installed hold litter inside
- The areas surrounding storm drains are included in the regular sweeping schedule. Also, weather conditions direct additional efforts related to litter around storm drains. During the summer, particularly during windy conditions, drains may be covered with drain covers to protect them from litter. Storm drains are cleaned and inspected on the regular basis required by our storm water industrial permit.

The following actions address outside litter:

- Employees are dedicated to continuously monitoring the yard, external perimeter and neighboring property during daytime operating hours
- Each employee assigned to this responsibility is directed to pick-up any observed litter near the CWS facility
- CWS works in cooperation with the Oakland Department of Public Works to report illegal dumping in the neighborhood.

CWS regularly monitors the condition of the building exterior and has contractors immediately available to paint and repair as needed.

### ***5.2.5.4.5. Disruptions***

CWS facilities maintain sufficient storage and processing capacity to overcome common disruptions. In the event of significant and sustained operational disruptions CWS will transfer materials to another CWS facility.

CWS managers work diligently to prevent unscheduled disruption and thoughtfully schedule operating downtime to reduce disruptions. CWS recognizes that significant disruptions in processing activity unfavorably affect the company's operations, marketing, labor relations and customer relations. Such disruptions may also cause recyclables to be reduced in value or lost to contamination. CWS takes the threat of operational disruption very seriously, and has well-tested practices in place to ensure that any possible disruptions are resolved effectively with minimal lost time and productivity.

One of the first tasks of the Plant Manager in evaluating a processing disruption is to determine its cause, potential impacts and probable duration. The criteria by which the impact of the disruption is to be judged are as follows:

- Level of associated risk
- Assessment of needed resources to return to safe, full operation
- Assessment of potential, safe, partial operations
- Available space on the tipping floor for material anticipated during the probable disruption duration
- Available outlets for current and anticipated inventories of processed and unprocessed materials during the disruption

Mitigation of the disruption begins immediately upon its discovery. If the situation presents a hazard or potential permit violation, CWS will take all prudent action. The priority steps for handling materials in a processing disruption are as follows:

- If the disruption is significant but partial and processing throughput will be reduced but not ceased, reschedule processing to allow for longer hours at lower throughput sufficient to process all materials
- If the tipping floor has insufficient storage available, ship unprocessed materials for immediate sale as-is
- If markets are not available for as-is material, transport materials to other CWS processing facilities
- If the alternative processing facility is unable to accept the materials, then bale unprocessed materials for later sorting at the plant
- If the plant is unable to bale materials and the three conditions immediately above are also in effect, ship unprocessed materials as-is for baling at another facility for sale or storage and later sorting.

#### ***5.2.5.4.6. Emergencies***

CWS must be prepared in the event of emergency situations. Potential emergency situations would include, but not necessarily be limited to power outages, natural disasters, fire, and hazardous materials releases. Whenever an imminent or actual emergency situation is indicated, the following steps are taken:

- Designated emergency coordinator conducts an assessment of the nature and extent of the emergency
- If determined necessary, emergency communications are activated to instruct employees to evacuate the facility
- Facility shut-down procedures are initiated if necessary
- Emergency response agencies are notified as appropriate and identified in the CWS Emergency Action Plan (EAP)
- Facility emergency personnel take appropriate measures to resolve the situation or minimize the spread to other parts of the facility

- If storm drains might be impacted by any emergency release, specified personnel seal off the potentially impacted drains. Storm Drain emergency response protocols are contained in the Storm water Pollution Prevention Plan (SWPP)

Prior to commencing operations after an emergency situation, designated management personnel will assess the facility to ascertain that the hazard has been mitigated

Designated management personnel will review the incident and determine if any changes to the emergency procedures are necessary.

Prior to the start of operations at the Oakland Gateway Facility, CWS will make available its MRF at 3300 Wood St in Oakland if in the case of an emergency or any other unavailability of the 10<sup>th</sup> St. facility.

The following equipment is available for responding to emergency response situations:

- Fire extinguishers are located throughout the facility
- Emergency exit signage
- Emergency eye wash stations
- First aid kits
- Stormwater spill carts containing absorbent, spill pillows, spill boom, personal protective equipment, baking soda-based absorbent for battery storage area, storm drain cover
- Radios for emergency communication
- Personal protective equipment
- Evacuation notification horns

In addition, loaders and other site equipment can assist with emergency response efforts.

### **Emergency Training**

Training for emergency response situations will be commensurate with an employee's responsibility. Employees will be directed that they are not to respond to any emergency situation where they are not comfortable. Training topics will include:

- Evacuation procedures
- Assessment of response situations
- Facility shutdown procedures
- Use of fire extinguishers
- Spill prevention and response
- Personal protective equipment
- Notification of emergency agencies
- Cleanup and mitigation of spills

Employee training records will be documented and maintained.

**5.2.5.4.7. Transportation**

Traffic driving on the property can generally be classified as: incoming truck loads of unprocessed materials, outgoing truck loads of processed materials, and personnel and visitors vehicles arriving and leaving the facility grounds.

**Inbound Truck Traffic**

Trucks bringing unprocessed materials to the facility constitute the greatest impact on the facility in terms of traffic, noise and hazard. Once on site, collection trucks proceed to the entrance scale. After being weighed, collection trucks maneuver to the unloading area to discharge materials.

**Outbound Truck Traffic**

Trucks arriving empty to remove processed materials are usually 18-wheel tractor-trailer combinations or roll-off trucks. These trucks enter the facility and proceed through the scale to the designated area within the site for loading.

**Closing and Notifications**

If for any reason incoming truck staging is overflowing collection vehicles will be turned away and the gate closed. In the unlikely event that such a closing should occur or appears imminent, CWS will notify all drivers immediately and request that they either keep their trucks the routes or park in the CWS truck yard until the jam is cleared. Trucks will not be allowed to park overnight with full loads and if necessary will be redirected to another CWS MRF.

**Passenger and Light Commercial Vehicle Traffic**

Personnel, tradesmen and visitors will enter the facility, and remain in designated visitor parking areas unless otherwise directed by CWS (for light commercial vehicles making deliveries, mechanics or other facility support personnel making service visits, etc.).

**Hazardous Waste Transport Vehicles**

Only authorized haulers are utilized for removal of any recyclable hazardous, universal, and any other wastes from the facility. CWS will be contractually responsible for arranging the disposal of prohibited wastes. CWS will retain documentation on the removal of these wastes.

**5.2.5.4.8. Permits and Licenses**

A listing of 10<sup>th</sup> St. site and operational permits and licenses is provided below:

- Conditional Use Permit, City of Oakland, CM92-222
- Environmental Protection Identification Number CAL000107864
- California Intergraded Waste Management Board Tire Id #1487017-01
- Bay Area Air Quality Management District Permit #B5739
- Hazardous Materials Business Plan, City of Oakland, Bureau of Fire Prevention
- Oakland Fire Department Permit, City of Oakland, Bureau of Fire Prevention #20-2767



- Air Pressure Tank Permit, District of Occupational Safety and Health, State serial No. A008918-96 N.B. #/Ser #507556
- State Water Resources Control Board, Facility WDID No. 011017552

### Certifications

Facility scales are certified annually by Alameda County Alameda County Department of Agriculture / Weights and Measures according to prescribed standards and methodology.

### 5.2.6. Training

CWS policy is that every employee is entitled to a safe work place. To this end, every reasonable effort is made to provide employees with great information and training. CWS has an excellent safety history and adheres to the highest industry standards and regulatory requirements for personnel training. All CWS personnel will have successfully completed a program specifically tailored to their respective duties to ensure company compliance with all waste management, transport and handling requirements and that is consistent with the high level of customer service to which the company is dedicated.

Safety programs can only be effective if the employees fully understand how to conduct their jobs. CWS has responded to the challenges of implementing a comprehensive safety program for its multilingual workforce. CWS conducts trainings in English, Spanish, and Vietnamese, conveyed in a manner that accommodates all levels of education and literacy. To enhance its multilingual safety programs, CWS empowers key bi-lingual employees as translators.

During the transition period, City of Oakland staff will be offered an opportunity to provide literature and/or to address training sessions to communicate city concerns and policies regarding the importance of good customer service and best job practices.

CWS provides a safe and healthful workplace by maintaining a comprehensive operational health and safety plan, including the identification of hazardous waste and use of protective clothing and safety devices. Procedures include periodic (at least weekly) meetings with all personnel that address safety issues and accident prevention. A process exists for the reporting and monitoring of all industrial accidents.

CWS' comprehensive safety program includes an Injury Illness Preventive Program (IIPP). Safety and environmental training programs are intended to ensure that employees fully understand how to conduct their jobs in a safe and productive manner.

CWS provides training to our employees using established human behavior learning methods, including verbal and visual training tools, interactive discussions, small group



**Employee Training**

discussions and review of scenarios, as well as, hands on one-on-one supervisor and driver ride along checkouts. We provide comprehensive equipment checkout rides, driver safety, and prevention training in commercial settings, including:

- Injury and illness prevention
- Personal Protective Equipment
- Lock-out/Tag-out (Hazardous Energy Control)
- Confined space
- Fall protection
- Heat stress
- Slips trips and falls
- Emergency Evacuation
- Pre-planning for the approach route to service sites and CWS facilities
- Operation in and around all CWS collection, maintenance, and processing facilities

Our system incorporates specific elements to address accident prevention training:

- Route planning for the safest ingress and egress
- Backing & mirror alignment
- Pedestrians & driving distractions
- Space cushioning
- Construction zones
- Highways/intersections

CWS conducts weekly and monthly safety and training meetings among managers and workers. , applying specialized curriculum for collection, processing, office and clerical operations. CWS safety programs include workplace harassment, violence, and drug abuse.



**Employee Training**

CWS has low accident and injury rates with all incidents investigated completely to in part determine the incident root-cause and whether it was preventable. CWS then determines what can be done to continuously improve safety. Conclusions are shared among the entire company to take advantage of a learning opportunity to prevent future accidents or injuries. Employees who have 'near-miss' accidents or injury incidents are counseled and retrained.

CWS has a safety incentive program that measures and ranks safety as a key performance

metric. These metrics include participation in training, reporting of hazards, successful inspections and safe operating behaviors. Awards and recognition are provided on a quarterly basis within departmental segments.

CWS and InterWest Insurance partner for delivery of risk management consulting and safety programs. InterWest is engaged and provides the following training and services:

- Workers Compensation claim management
- Supervisor/Management safety training (Safety One-on-One)
- Facility safety audits, participate in investigations and survey of facilities
- Review of new processes for training needs and establish and create IIPP program
- Observation of work methods and procedures to identify hazardous conditions and recommended improvements
- Assistance with preparing regularly scheduled safety meetings and provision of bi-lingual training material
- Assistance for Supervisors to develop skills in evaluating incident root cause and job hazardous analysis

InterWest has provided a letter of support and commitment to continue partnering with CWS, along with CWS' record of DOT Certificate Successful Inspections 2005 – 2012, CWS' 2012 Workers Comp Safety Audit, CWS' 2007-2012 Company-wide TRIR and LWIR Record, CWS' Company-wide Safety Training Calendar and Safety Orientation Checklist.

CWS' safety and environmental resources team will align with the City of Oakland to ensure proper delivery of CWS' "Best Practices Training" on curbside collection and customer relations to all new employees.

Training programs that have been implemented for CWS' collection, facilities, and office operations include:

- Injury and illness prevention
- Basic safety introduction
- Personal protective equipment
- Lock-out/Tag-out (Hazardous Energy Control)
- Confined space
- Accident investigation
- Equipment maintenance
- Ergonomics
- Handling needles and other medical waste
- Vector and disease awareness
- Emergency evacuation
- Pre- and post-equipment inspection and other vehicle safety requirements
- Defensive driving



**Employee Training**

- Specific solid waste collection training including using Waste Equipment Technology Association (WASTEC) training materials
- Equipment education
- Hazardous, universal, and other prohibited waste protocols
- Prevention of injury on duty

The CWS Human Resource Manager and safety team leads ongoing substance abuse training. All new personnel will take part in an initial training session and supervisors and managers will be provided further education. It is important to have a substance abuse-free work zone and in developing the partnership between the City of Oakland and CWS, the City representatives will be afforded the opportunity to address each of the sessions. Managers and supervisors will be specifically trained on the following:

- Why it is important to have a substance abuse free work zone
- Statistics on workplace drug abuse
- Identifying workplace drug-use: performance, behavioral, physical, paraphernalia
- The appropriate and legal manner in which to approach employees suspected of drug abuse
- The appropriate and legal manner in which to drug test based on reasonable suspicion

CWS requires certain physical examinations for employees and prospective employees that are designed to protect the employees and provide assurance to CWS that employees are capable of meeting the strenuous demands of recyclables collection. As CWS maintains a drug-free workplace, there are requirements for periodic drug testing for employees and prospective employees. These are designed to protect the employees, and provide assurance to CWS that its employees are meeting the drug free policy and are capable of meeting the strenuous demands of solid waste collection. Responsibility for managing these requirements rests with the CWS Human Resources Manager, aided by individual supervisors and line managers. CWS policies on physical examinations and drug testing meet all federal and State of California requirements.

CWS will provide training to minimize the risk of work place violence. All employees will be trained in Alternative Dispute Resolution. This will help employees understand that there are alternative methods to resolve disputes when a conflict is identified. CWS will institute a Threat Assessment Team that will work with management to assess the potential for workplace violence.

#### ***5.2.6.1. Driver Training***

CWS drivers are continually trained to always operate safely, proficiently and efficiently. Part of our exemplary worker safety history is based on CWS operating the best and newest equipment available for all of our operations that frequently incorporates the latest in ergonomic design features to help our employees continuously maintain safe operations.

A successful, multi-faceted driver education program has been developed that stresses both safety and service to the customer. CWS is proud of its driver safety record as documented elsewhere in our proposal. All new employees are required to participate in a driver orientation and safety program, which familiarizes the driver with the vehicle, and the importance of providing outstanding service.

Each driver will be required to attend training that involves operation of solid waste collection vehicles. The WASTEC group of the Environmental Industry Associations publishes the Manual of Recommended

Safety Practices and training materials designed specifically for the waste industry. These materials will be utilized by CWS as the core of their training program. These will be supplemented by other materials as appropriate.

Specific areas covered include:

- Customer service orientation
- Personal protective equipment
- Defensive driving techniques
- Spill response procedures
- Hazardous material recognition
- Injury and illness prevention
- Truck equipment familiarity
- Recycling Program Goals and Objectives
- Company procedures and benefits

Following successful completion of the training program, a collection driver is assigned to a route and a route trainer spends several hours per day for up to six weeks before the driver is qualified to drive the route alone. During this period, the driver becomes familiar with the unique characteristics of his or her assigned route areas and customers.

CWS trains and requires their drivers to perform a pre-trip inspection prior to operating their vehicles and post-trip inspections prior to completing their day. These inspections are primarily related to safety equipment, such as brakes, lights, and tires on the vehicle. All required inspection checklists are filled out and signed by the driver. CWS has designed a specific form for each collection vehicle operated. CWS is proud that its own procedures exceed both State and Federal inspection guidelines. These inspection forms are filled out for the vehicle at the beginning of the day and a post-trip inspection is done at the end of the shift, as required by law. Drivers are trained not to take the vehicle on route until any concerns are addressed and cleared by the maintenance department. CWS has developed a specific vehicle operating form for its front loader, and roll-off trucks that requires drivers to explain any concern and certify that they thoroughly inspected the vehicle and properly completed the checklist before starting or ending daily collection duties.

### **Driver Proficiency**

During the hiring process, prospective drivers are required to provide the company with a recent copy of their commercial driving record and drivers' medical certificate. An additional background investigation is performed by Employment Research Services, which contacts previous employers to review the applicants previous D.O.T. related performance. Once applicants complete other pre-hire requirements, they are evaluated in the field by an experienced collection supervisor. Drivers are then immediately enrolled in the DMV Pull Notice Program. Every CWS driver is incorporated into the company's Driver Safety Observation Program. In this program, drivers are observed without prior notice by the collection supervisor, safety manager or operations manager approximately six times per year. The results of the observations are reviewed with each driver and used as a teaching tool for continued improvement. Drivers also participate in formal monthly safety training, which covers topics such as defensive driving; the nationally recognized Smith System Driver Safety Training Program may be implemented by CWS in the future to further hone our drivers' abilities.



Drivers are also trained to observe and report conditions and opportunities to improve safety, service, and solid waste diversion for their customers. These observation and opportunities are entered into the RAMS software and customer database and can be used to recommend service enhancements.

### ***5.2.6.2. Risk Minimization and Environmental Safety***

CWS is committed to best practices in its operations and risk minimization to its personnel, the public, its equipment and the environment.

#### **Management of Hazardous Waste and Universal Wastes**

CWS' Hazardous and Universal Waste Protocol was developed to ensure employee safety, protect the surrounding community, and meet local, state and federal guidelines for handling hazardous and other prohibited waste discovered in incoming recyclables as well as hazardous wastes generated from facility operations and maintenance.

Ecology Recovery/Gary Tompkins, Chemist manages CWS' hazardous waste handling for unauthorized liquids and chemicals placed in the recycling stream at our MRF Facilities that need identification and/or additional assessment, including basic chemical qualitative test such as HAZCAT™, is conducted by Gary Tompkins .

- Ecology Recovery's comprehensive hazardous waste management plan includes:
- Control systems for hazardous waste storage and matter control
- Universal Waste (thermostats, batteries, & fluorescent light tubes
- Establishment of EPA Identification number
- Material manifests & profiling
- Lab Packing Segregation
- Bill of Lading Receipts
- Department of Transportation descriptions, Hazard Classes, Packing Group, Reportable Quantity, EPA Codes, State Codes, Emergency Response Number, EPA Identification Number

The CWS Protocol first sets the parameters to determine whether a material is hazardous or otherwise prohibited from being collected and processed. Drivers, inspectors at the facility and sorters are trained on types of hazardous, universal, and other prohibited wastes.

Typical waste types that fall under these categories are:

- |                                   |   |
|-----------------------------------|---|
| • Universal wastes                | • Computer monitors and televisions             |
| • Medical Wastes                  | • Oxidizers                                     |
| • Paints                          | • Gasoline                                      |
| • Solvents                        | • Compressed gas cylinders                      |
| • Pesticides                      | • Pharmaceuticals                               |
| • Used oil and filters            | • Decommissioned and other radioactive material |
| • Car batteries                   | • Florescent lighting tubes                     |
| • Photographic and pool chemicals | • Flammable materials                           |
| • Fire extinguishers              |   |



Public education is an integral part of preventing hazardous and other prohibited waste from entering the recyclables stream. CWS proposes to provide information through our website and in written publications to residents pertaining to the proper material to set out. CWS proposes to use route auditors who will train and assist drivers to provide notice to and work with residents who happen to place prohibited material in the recyclables stream.

For CWS' load checking program to be effective, residents need to be informed of safe disposal options for accumulated prohibited waste. CWS will work closely with the City to educate residents on safe disposal options, including use of Alameda County's household hazardous waste program and other collection options.

Educating customers is essential to minimizing potential contamination of recyclables and protecting worker safety. CWS will work to educate customers about hazardous and other prohibited wastes in the set-outs.

Drivers, tip floor employees, sort line personnel and all supervisors will have mandatory training and continuing education on hazardous and universal waste. Training is directed to address specific employee safety issues and includes the following as appropriate:

- Procedures for identifying prohibited materials and containers, including asbestos, PCBs, caustics, solvents, flammables, infectious wastes, etc.
- Notification and response procedures
- Record keeping requirements
- Education on the effects of hazardous substances on human health and the environment
- Overview of relevant regulations and definitions of prohibited waste
- Waste handling procedures
- Procedures and equipment for safety and emergency response
- Personal protective equipment
- Emergency response training

Drivers will be trained to look for hazardous, universal, and other prohibited wastes while collecting acceptable material. They will look for fluid or other signs that indicate potential presence of prohibited wastes. With any indication that material may pose a hazard or contain prohibited waste, drivers will step out of their trucks to assess the situation. If the material is suspected of being inappropriate for collection, drivers will leave a notice. If necessary, drivers will immediately call a supervisor for assistance. In an emergency situation, drivers will request response from emergency services.

When a supervisor arrives at the address, a visual and physical assessment of material is conducted. The supervisor, wearing protective equipment, will examine the product label and observe physical signs such as material thickness, odor, and color. If the supervisor concurs with a driver, then the supervisor attempts to contact the resident. In the event that the resident cannot be reached, the supervisor verifies that an education tag, including the CWS customer service number for further information, is left with the material. This notice will inform the resident to take advantage of the County's household hazardous waste program. The supervisor then notifies customer service staff of the situation and address.

When the collection vehicle enters the MRF, the driver unloads the truck in a specific area where a tip floor worker can visually scan the material. If the tip floor worker observes signs that the material may be hazardous or contain universal waste, then the physical assessment described above takes place.

If the material cannot be identified by sight or odor then additional assessment, including basic chemical qualitative test such as HAZCAT™, may be implemented.

To minimize the liabilities of landfilling hazardous wastes, recycling and treatment of prohibited wastes must be a priority. CWS' Compliance Team will collect any prohibited wastes discovered and convey those wastes to the designated location(s) for appropriate temporary storage.

Our facilities are equipped with the appropriate containers, signage and labeling for disposal of universal waste. CWS contracts for offsite transportation and disposal of such materials to a universal waste transporter. As part of the annual training plan, CWS provides personnel training to employees about the California Universal Waste Rule.

CWS' Spill Prevention Control and Countermeasures (SPCC) Plan is designed to prevent releases of oil and to mitigate the effects should an oil leak or spill occur. The facility plans are in accordance with regulations of 40 CFR 112. As part of our training plan we provide training to new employees and ongoing education with annual training of employees conducted to present updated information and to maintain a level of employee awareness regarding spill prevention and response.

CWS has a safety committee that meets monthly to review all safety procedures and address incidents that may have occurred, including those involving hazardous wastes. If there are no incidents to review, the protocol is generally considered on a regular basis to ensure that hazardous and universal waste protocols remain dynamic.

### **Environmental Review and Compliance, and Permitting Processes**

CWS operations are subject to numerous environmental review, compliance, and permitting processes and the company has engaged in extensive efforts to comply with these requirements. CWS has a comprehensive understanding of Oakland's environmental review and permitting process. This is important should facility upgrades be needed in response to changing conditions with Oakland's recyclables. Working cooperatively with City agencies, CWS maintains compliance with these requirements. CWS monitors California waste regulators and other agencies, assists with AB 939 planning issues and solid waste permitting concerns, and is experienced and attentive to reviewing its best practices to assure that it is compliant with all regulations and permitting restrictions.

Some of the regulations and requirements with which CWS complies, in addition to addressing environmental review and safety issues, include:

- California Environmental Quality Act
- Conditional use permit
- Hazardous materials business plan
- Hazardous waste generator requirements
- Load checking/ hazardous waste recognition
- Storm water pollution prevention plan
- Emergency response

CWS is committed to continuing full and aggressive compliance with the environmental requirements of managing recyclables. CWS will work closely with the City of Oakland to assure compliance with all Federal, State, and Local regulations applicable to relevant activities.

### 5.2.7. Reporting

CWS will provide the City of Oakland with consistent and detailed reports that clearly document recyclables tonnages, residue tonnages, quantities of materials diverted to other processors (including batteries, waste oil, and materials diverted for reuse), tonnages sold, purchasers of those materials, and other performance metrics, as discussed in this section.

CWS has a successful material tracking computer program that has accurately recorded and reported material by origin and type from the City of San José for nearly a decade. A large part of CWS' program success originates with flexibility and report writing features developed by CWS along with the City of Oakland's OPWA team.

Recyclable materials processed through the MRF will be tracked by inbound and outbound material types, designating both recyclables shipped to market and residual materials for disposal. These inbound and outbound volumes will be used to calculate the diversion and residual materials being shipped for disposal to calculate diversion for the recyclable stream.

CWS employs the Scrapware brand scale system software to track all inbound recyclables and routing into the MRF. As part of the FleetMind vehicle and collection service software, CWS will track route statistics, which include all weight tickets for materials delivered to the MRF. CWS will enter all weight tickets that are direct-hauled. CWS will total monthly volumes by material types to summarize collection, processing, and disposal. This program provides accurate inbound and outbound weight of materials, by material type. Reports will be prepared for daily, monthly, quarterly, and annual achievements. Operating and report results will be used to evaluate the effectiveness of collection and public education programs and program modifications. Importantly, our reports system will enable CWS to forecast program needs and achievements into the future.

The schedule of required reports and a brief summary of the contents of each report category are shown in Table 5.2.7-1.

**Table 5.2.7-1 CWS Reporting Requirements**

<b>Continuous Reporting and Data Retention</b>	
Accounting Records	Full, complete and separate financial, statistical and accounting records, pertaining to cash, billing, and provisions of all recycling collection services provided, prepared on an accrual basis. CWS will maintain and preserve all cash, billing and disposal records for a period of not less than five (5) years following the close of each of CWS' fiscal years.
Tonnage Records	Records of the incoming and outgoing quantities of recyclable materials collected, processed, composted, purchased, sold, donated or given for no compensation and recycling residue disposed.
Relational Database	Data from all required reports for the term of the contract. The City will be provided full access to the database.
<b>Monthly Reports</b>	
Collection Service Account Data	Number of SFD and MFD buildings and units served; number of commercial and city facilities served, number of containers in service by SFD, MFD commercial and City facilities, by container size, and by container service location (e.g., curbside or premium backyard service and ancillary service), number of non-collection notices issued by SFD, MFD commercial and City facilities and by reason for non-collection.
Collected Tonnage Data	Tonnage for all materials collected by SFD, MFD, commercial and City facility categories, with used oil containers and used oil filters, with containers reported by item count
Processed Materials Data	Tonnage of each material produced through the processing of collected materials at

## 5. TECHNICAL PROPOSAL

	CWS' processing facility, e.g., old corrugated containers, old newspaper, mixed paper, glass, and various plastic and metal commodity grades.
Recycling Residue Tonnage Data	Tonnage for all recycling residue from processing of collected materials.
Customer Service Data	List of customer contacts, e.g., phone calls or electronic communications, including customer name, service address, and by date and topic.
Local Hire Requirement Update	CWS will provide monthly updates on its compliance with the local hire requirements of this contract.
<b>Quarterly Reports</b>	
Processing Facility Recycling Residue Rate	The recycling residue rate for all material received by, processed at and shipped from the CWS processing facility.
Public Outreach and Information Activities	Report on all public outreach and information activities undertaken during the period, including distribution of outreach materials and other promotional activities.
Processing and Marketing Activities	Report on recyclable materials processing and marketing issues or conditions, if any, occurring during the previous quarter.
Customer Service Activities	Report on customer service and call center issues or conditions, if any, occurring during the previous quarter.
Operational Issues and Activities	Report on significant changes in collection service or processing operations, instances of property damage or accidents, scavenging, or other operational issues.
<b>Annual Reports</b>	
Customer Data	List of all customers serviced under this contract including and sortable by SFD, MFD commercial and City facilities, customer name, service address (street number, street name, zip code), type of service (e.g., curbside or premium backyard service, and ancillary service), number of containers and container size.
Local Business Presence and Participation	CWS will provide the Local Business Presence and Participation report per the contract.
Local Hire Requirement Annual Report	CWS will provide an annual report on its compliance with local hire requirements of the contract.
Gross Receipts	CWS will provide a summary of the prior year's gross receipts received.
Equipment Inventory	Updated complete inventory of collection vehicles used pursuant to this contract, by vehicle chassis identification number, vehicle body identification number, license number and model year.
Business Tax Certificate	Copy of current business tax certificate.
Annual Cart and Bin Replacement Reports	Electronic report of cart and bin replacements provided during the preceding contract year.

CWS will provide the City with any additional data and information as requested and as is reasonable. Upon request, CWS will provide call center records, updated maps whenever route changes include a change to day of service, collection vehicle global positioning system (GPS) reports, and other route information.

Monthly reports will be delivered to the City no later than fifteen (15) calendar days after the end of the prior month, Quarterly reports will be delivered no later than twenty (20) calendar days after the end of the reporting quarter, and Annual reports will be delivered no later than thirty (30) days after the end of each preceding calendar year. Monthly, quarterly and annual reports will be provided electronically in forms and formats that are acceptable to the City.

CWS agrees to collaborate with the City in developing performance audits and performance metrics to verify the levels of the effectiveness of our collection and processing operations and associated programs. CWS will collaborate with the City in developing and implementing regulations and/or programs such as a State mandatory commercial recycling requirement, and agrees to perform at a

minimum a biannual, informal waste characterization study for each year of the franchise. These studies will be conducted at times that are mutually agreed upon by CWS and City representatives.

CWS and the City may mutually agree to conduct pilot programs that temporarily change the collection method, equipment, or the type of service to customers for up to ten percent (10%) of the total collected material. A pilot program shall be limited to a term of not more than eighteen (18) months, unless otherwise specifically agreed in writing by CWS and an appropriate City representative. In addition, CWS will perform any additional record keeping required by a pilot program. CWS and the City representative shall execute a letter of agreement setting forth the terms of the pilot test program including program costs, program operating parameters, and program duration.

### **5.3.      *Diversion Plan***

CWS intends to make a major contribution to the City's goal of reducing annual tons sent to landfills, from approximately one hundred eighty five thousand (185,000) tons in 2011 to approximately forty-thousand (40,000) tons by 2030.

The CWS Diversion Plan implements action at multiple levels to achieve the greatest diversion growth and sustained diversion possible. The CWS plan includes:

- Effective communication with customers
- Strong public education tools and outreach
- Strategic routing of collection services
- Observant and reactive collection operations
- Responsive customer services representatives
- Employment of quality trained personnel
- Investment in and operation of a state-of-the-art processing facility
- Continual and exploratory new product marketing
- Operational Connectivity (OC) that combines all CSW resources toward this goal

CWS is a company that has built its foundation and market share on recycling. CWS does not own landfills in the United States and therefore focuses on achieving as much diversion as possible. Every ton diverted saves landfill fees and supports the overall company goal of maximizing diversion. Our internal and consulting teams will be working with each customer type to determine the best recycling service options to meet the City's goal.

Based on our collection and processing strategies and approaches presented throughout this document, CWS is confident of achieving the diversion mandate and exceeding the goal. Our higher than industry standard material recovery rates clearly demonstrate that our focus is on recycling. Our diversion program will be focused on changing the way that the public thinks about the waste stream and the strategy CWS is planning will take the recycling process a big step forward.

CWS understands that this diversion goal is extremely ambitious and relies on the meticulous implementation of a well-executed plan. CWS believes it is the contractor that can achieve this goal for the City of Oakland, and increasing investment in local and regional processing capacity for recycling will support the City's Zero Waste goal. Achieving this high diversion goal requires thoughtful and deliberate action keeping in mind the following elements:

- Planning
- Training
- Public education
- Capital investment
- Operational implementation
- Recording and reporting of vital information
- Continual involvement from City of Oakland OPWA colleagues

### ***5.3.1. Diversion Programs***

#### **Recycling Awareness Training (SFD, MFD, City, and Commercial)**

CWS will train its collectors to be cognizant of residences not participating in service, inappropriate setouts that result in contaminated recyclables, and opportunities to educate and inform residents about opportunities to recycle. Based on past experience with recycling awareness training in Oakland and San José, CWS estimates that it will annually reduce the residue in the City's recyclables.

#### **Multi-Service Benefit (SFD, MFD, City, and Commercial)**

CWS is a company with a vertical business model with extensive Asian post-consumer markets, a processor of recyclable material, and a collector. In Oakland, California, CWS currently collects the material at the curb from seventy thousand residents and processes that material. Overall, recyclables CWS collects in Oakland have an 8.5 percent contamination rate. CWS has a business incentive to limit the contamination, diminish the amount of trash set out, and increase the amount of recyclables and the number of setouts at each household, on each block, in each neighborhood.

CWS' drivers and supervisors understand the importance of the company's vertical business model. CWS will work with the Service Group 1 contractor to communicate when trash and recycling collections are in conflict; Drivers will note areas that place too much trash and not enough recycling out at the curb. The CWS education team will be alerted and the area will be targeted for a campaign to reduce trash and increase recycling.

For residential customers, CWS will also offer the City the option to develop an incentive-based recycling outreach program, Recycling Perks, where local businesses offer discounts and other incentives for residents who recycle, based on measurement of their setouts and resident participation in diversion programs. This program can be established with individual SFD customers as participants as well as MFD property managers.



**1. MFD Customer Type**

#### **Multifamily Recycling Service Expansion (MFD)**

CWS has experienced significant success with multi-family collections in its current Oakland service area by reaching out to the multifamily community to overcome challenges related to lack of recycling and access to traditional recycling containers and vehicles, manager and tenant turnover, lack of education and outreach aimed at residents and contamination issues. CWS will continue these efforts to boost participation and diversion of recyclables from multifamily residences by:



**Ongoing Outreach** - Successful MFD programs require regular outreach. Reminders about recycling should occur at least twice a year to mitigate tenant transiency. Image-based messages help reach multi-lingual groups and those with varied literacy levels. To streamline efforts, messages should include signage in collection areas and color-coded and labeled bins and carts. Move-in /Move-out kits can be provided to MFD owners and managers to help bridge the gap in tenant transience.

**Targeting MFDs** - CWS will initially identify high priority MFDs, including large buildings, MFDs with engaged on-site property managers, owner-occupied MFDs or those where residents pay for MM&O and RR services, and direct immediate outreach activities to these complexes.

**Working with Property Owners and Managers** - Successful programs depend heavily on the level of commitment from property managers. Problems unique to each MFD can be solved by working directly with owners and property managers. CWS will personally contact the property owners or managers of multi-family complexes to promote recycling services. CWS will attend homeowners' association (HOA) meetings and communicate with property management to distribute recycling services educational materials.

**Conducting Site Visits and Right Sizing** - Site visits provide face time with resident and managers, and opportunities to distribute educational materials and/or assess collection services. On these visits, CWS will verify service, assure adequate recycling capacity and troubleshoot problems that MFD account managers are having with their collection services. MFD accounts will be audited periodically to verify services/service levels.

MFD Recycling program participation is difficult to assess as not all units take advantage of the same level of service. While many buildings have been set up for recycling service at one point in time that does not mean that recycling containers are being utilized or that residents are actively participating. Site visits will help CWS to assess the need for future education and outreach activities aimed at boosting participation and diversion.

### Residue Reduction (SFD, MFD, City, and Commercial)

The residue from CWS processing facilities in Oakland is currently disposed of at Forward Landfill in Stockton, CA without diversion credit. Although the use of residue as alternative daily cover on a landfill does not qualify as diversion towards the City of Oakland's goal, CWS will continue to investigate alternative methods of reuse that may be more beneficial. CWS will continually strive to reduce residue at its MRF and search for alternative higher use outlets for the remaining residue.

CWS material processing plan aims to reduce the remaining residual to as small a volume as feasible based on the MRF processing equipment capabilities. Several of our strategies to reduce overall residuals out of the processing system include:

- Diverting loads of materials that clearly contain non-recyclable materials from entering the MRF
- Pre-sorting some non-recyclable materials on the tipping floor
- Re-running residual components through the processing line
- Recording and reporting of MRF performance daily so that beneficial tactical adjustments can be initiated quickly. Daily performance is analyzed to help CWS make beneficial strategic performance improvements

- Aggressive and on-going public education and outreach programs designed for commercial customers to train them in the proper use of containers and associated material types for disposal into the correct containers
- Maintenance of MRF equipment to ensure that all components operate at peak efficiency and recovery
- Application of CWS Continual Improvement Process (CIP) and Operation Connectivity (OC) programs that frequently bring together CWS managers and external resources to maximize operating efficiency

CWS' marketing operation has led the industry at developing sustainable recycling markets for difficult to market materials, and CWS has enhanced markets that are already considered mature and stable. CWS benefits from having its own trading operation and believes this feature provides it a competitive advantage. As part of our comprehensive marketing plan, CWS will seek out specialty secondary processors who can reuse hard to recycle items for sale to markets.

CWS maintains strong and continuous relations with all of its product buyers and continually seeks ways to improve the quality of products it produces to derive the greatest revenue. The company will work to identify and minimize secondary residue in materials provided to secondary recyclable processors such as papermills, glass processors, plastics repelletizing plants, etc.

As an example, CWS recently developed a method for segmenting glass product into different sizes so it may market different sizes and qualities of glass that will be used for different purposes. As this process is tested and refined it could be applied to other CWS MRF operations.

### **Plastic Bag Recycling at the MRF (SFD, MFD, City, and Commercial)**

To capture recoverable plastic film still present in the stream following Alameda County's plastic bag ban, CWS will install a vacuum system over the fiber sort line that will terminate in a small baler. Sorters will only be required to lift plastic bags high enough off the belt to be caught by the air current. This will result in less contamination in fiber product and a baled film plastic product that can be marketed.

### **Textile Bag Program (SFD, MFD)**

CWS would like to introduce an optional program for the collection of textiles. Residents can place textiles and shoes in their recycling cart double-bagged, in clear plastic bags. The CWS driver will place them in the truck with the rest of the recyclables. The recyclable material will be unloaded onto the tip area and sent up the conveyer belt. The visible and clean bags of textiles will be sorted away from the rest of the material. CWS will partner with reuse stores in the area (e.g. Goodwill) to divert the reusable materials in these bags. Dirty or non-saleable textiles and shoes will be sold by CWS to materials markets. This additional recycling service is offered at no additional cost.

### **Large Sized Cardboard from Residences (SFD, MFD)**

Residents may place OCC in the recycling container as part of standard collection and any excess cardboard may be placed outside of the container, flattened and in tied bundles not to exceed 3'x2'. As a customer convenience, CWS offers a special, optional and scheduled service to collect large amounts of cardboard (OCC) from residences. This service provides an option to customers who want to recycle but also want to limit the amount of cardboard placed at the curb so that pedestrian or automobile traffic is not blocked, or to prevent littering or material damage due to weather. This additional recycling service is offered at no additional cost.

### Household Batteries, Motor Oil, and Motor Oil Filter Collection (SFD, MFD)

Collection drivers will collect household batteries that have been placed in sealed clear plastic bags on top of recycling carts. CWS will deliver these batteries to America's Best Battery for recycling.

Residents may request CWS delivery of gallon jugs for motor oil collection. Filled jugs and bagged oil filters may be set out alongside recycling carts. CWS will partner with Evergreen Environmental for the recycling of these oils and filters. These additional recycling services are offered at no additional cost.

### Commercial Outreach and Technical Assistance

The CWS commercial diversion plan implements multi-faceted action to achieve increased and sustained diversion. The CWS commercial outreach and technical assistance diversion program may include:

- Mailers to introduce new company and new services options
- Site visits to work through service level changes
- Phone calls to certain customers before roll-out to determine service level changes and coordination of site visits as needed
- Visits with select customers to validate service

Our Diversion Plan will include CWS staff who will work directly with commercial diversion initiatives and provide phone and on-site customer training and diversion program development. CWS may engage consulting staff to provide additional multiple language support and specific diversion expertise.

Our philosophy with this new commercial contract will be to expand our efforts and focus on diversion and other environmental reduction ideas. As our teams will be discussing waste stream reduction opportunities with each unique commercial customer, we feel it is a perfect opportunity to also discuss source reduction methods, as well as energy and water reduction ideas. Our goal is to provide an overall assessment and follow-up for each commercial customer to help improve on these issues every year. The top 100 of the customer base by volume will be visited and have follow-up every year.

### Audit Procedures

Audit results inform future waste diversion initiatives by identifying materials that are not being diverted to their full potential. Through strategic periodic sampling, assessment of the efficacy of current diversion initiatives, subsequent analysis and planning, CWS will develop ways to incorporate diversion of those materials into our diversion program.

CWS will conduct audits of material in residential carts and containers on a regular basis. With the goal of increasing participation and realizing "clean recycling", CWS will inspect the material, commend residents for participation and provide further recycling education through collection notices, brochures and personal contact. Those with severe contamination will be visited by CWS staff. Findings will be reported to the City of Oakland and will include:

- Residential type (Single-Family or Multi-Family)
- Name, Address and contact information
- Audit results and findings
- Educational materials shared
- Personal contact made, if available

All audit criteria and scheduling will be reviewed and approved with the City of Oakland prior implementation.

As discussed in the Reporting discussion in Section 5.2.6, CWS employs the Scrapware brand scale system software to track all inbound recyclables and routing into the MRF. As part of the FleetMind routing software and collection services, CWS will track route statistics, which include all weight tickets for materials delivered to the MRF. CWS will enter all weight tickets that are direct-hauled. CWS will total monthly volumes by material types to summary over collection, processing, and disposal. This program provides accurate inbound and outbound weight of materials, by material type. Reports will be prepared for daily, monthly, quarterly, and annual achievements. Operating and report results will be used to evaluate the effectiveness of collection and public education programs and program modifications. Importantly, our reports system will enable CWS to forecast program needs and achievements for future months and years.

In the event CWS correctly implements all planned processes, but is unable to achieve its forecasted diversion goal, we will examine all of our operations and seek improvement wherever possible, and make changes to sustain and increase diversion. These changes may involve how:

- Materials are collected and processed
- CWS materials are marketed and sold
- Customers are educated and motivated
- Consuming industries evolve and develop
- Consumers purchase and use recyclable products

CWS may anticipate a possible need for reprocessing of some materials and will explore adjustment of the operation of equipment to ensure optimal performance.

CWS believes that the City of Oakland possesses the characteristics that are intrinsic to continuing population growth and the growth and success of businesses and therefore wants to continue investing in the City of Oakland. CWS believes that the characteristics that inspire commercial business growth and success in the City of Oakland include:

- Proven track record of prior success
- Ambitious and industrious community
- Strong governmental leadership and vision
- High emphasis on education and vocational development
- Desire for efficient and productive manufacturing and services
- Motivated and professional workforce throughout the labor continuum
- Ability to develop and implement innovative ideas in the market place

For these reasons and other reasons, CWS has already anticipated a growth in the number of recyclables tons generated in the City. Therefore, CWS is already planning for process and equipment



**Material Bale Transportation**

enhancements and upgrades at a new mixed waste processing facility and MRF in the City of Oakland. This new facility's operation will increase processing capacity and material processing selectivity to accommodate the growth in the amount of materials and emerging recyclable material markets. In addition, CWS believes that its own industry technology and technologies of alliance industries will enable greater diversion through new product developments.

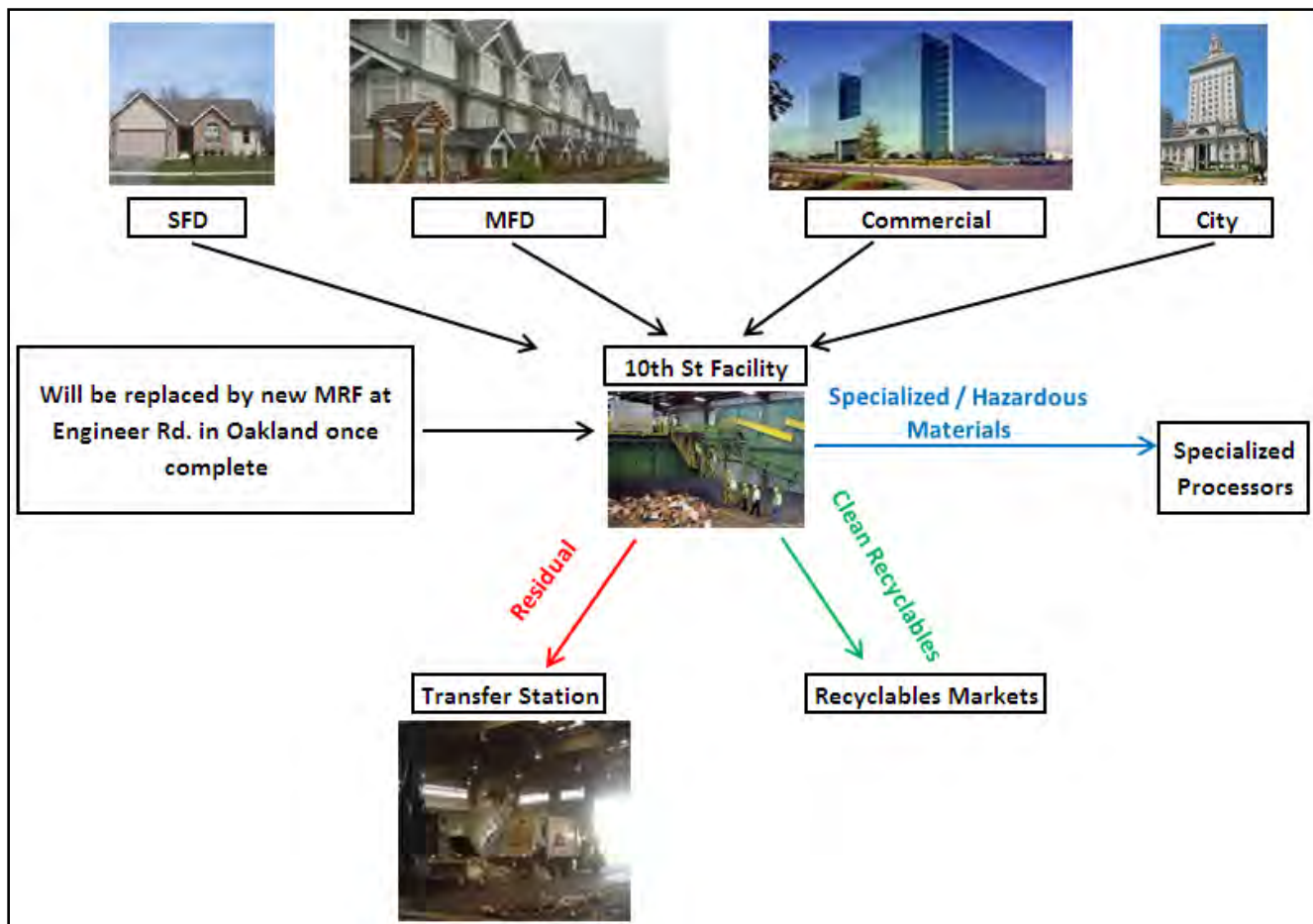
At the City's request, CWS may periodically conduct additional reviews of the SFD, MFD, and CITY Recycling collection service programs to assess performance indicators, including but not limited to: average volume of recyclable materials per setout per Service Address and per unit, SFD and MFD recycling service participation levels, contamination levels, etc. Prior to the program review, CWS will meet with the City to discuss the purpose of the review and the method, scope, time frame for completion and the specific data to be collected and reported by CWS. CWS will then prepare and submit to the City a written plan for review and approval. If the City wants to collect program data, perform fieldwork, conduct waste generation or characterization studies, conduct route audits to investigate customer participation levels and setout volumes and/or evaluate and monitor program results related to recyclable materials collected in the City by CWS, CWS will cooperate with the City and/or its agent(s), including StopWaste.Org.

### ***5.3.2. Oakland Material Recovery Facilities***

Until the CWS Oakland Gateway Facility is operational, SFD, MFD, Commercial, and City recyclables collected in the City will be transported to and processed at the CWS 10<sup>th</sup> Street facility. If excess capacity is needed to process recyclables, the Wood Street facility will be available for use.



## 5. TECHNICAL PROPOSAL



**Figure 5.3.2-1 Materials Flow Diagram**

As CWS institutes programs to increase diversion in the City of Oakland, we will take a step-by step approach with each diversion program to customize its application to Oakland customers, in an effort to maximize its effectiveness and maximize diversion rates. The schedule of action items and program milestones for each diversion program that CWS will employ are shown in Table 5.3.2-1

**Table 5.3.2-1 Diversion Program Action Item Schedule**

Diversion Program	Action Item
<b>Second Half 2014</b>	
Recycling Awareness Training and Multi-Service Benefit	Develop training, evaluation, and reward program for collection vehicle operators for the purpose of identifying the best and worst participating locations, including sites with both high and low levels of participation and excellent and poor quality of participation.
<b>First Half 2015</b>	
Recycling Awareness Training and Multi-Service Benefit	Identify and maintain a collection vehicle driver position on any outreach and education project team.
Large Sized Cardboard	Create a web site interface where customers can request special large-volume cardboard collection
Household Batteries and	Distribute information about the programs



## 5. TECHNICAL PROPOSAL

Sharps	
Household Batteries and Sharps	Create a web site interface where customers can request collection materials for batteries or sharps
Textile and Plastic Bag Recycling programs	Become a partner in A Bag's Life ( <a href="http://www.abagslife.com">www.abagslife.com</a> ), a national campaign to reduce bag use, prevent litter, and encourage bag recycling
Public Education	Roll out carts and other containers
<b>Second Half 2015</b>	
Public Education	Target outreach and education to neighborhoods or regions where participation is below average.
Household Batteries and Sharps	Identify customers frequently requesting materials and investigate changing them to a more bulk-style collection container with fewer needed deliveries and collections
<b>First Half 2016</b>	
Recycling Awareness Training and Multi-Service Benefit	Establish an annual qualitative award recognition for drivers whose actions result in improved customer behavior.
<b>Annually</b>	
Recycling Awareness Training and Multi-Service Benefit	Reduce contaminated loads
Recycling Awareness Training and Multi-Service Benefit	Increase number of sites participating
Multifamily Recycling Service Expansion	Speak with each property manager or property management company at least once per year
Multifamily Recycling Service Expansion	For properties with greater than 100 units, visit and evaluate the property at least once every two years.
Multifamily Recycling Service Expansion	At properties with below-average participation, provide information to residents and property staff on proper material preparation, use of the recycling system, and evaluate the system for user-facing problems.
Multifamily Recycling Service Expansion	Offer to attend or speak at HOA meetings; create a web site interface where customers can request a speaker at a community meeting; attend meetings at a minimum of 25% of total number of properties each year.
Textile and Plastic Bag Recycling programs	Provide outreach to residents and businesses about plastic film and textile recycling, including dry cleaners, pack-and-ship stores, clothing vendors, and other specialty retailers.
Textile and Plastic Bag Recycling programs	Promote to residents how much plastic film and textiles is being recovered at the MRF, translated into number of bags as a reference point

Through the result of CWS' efforts to best tailor the diversion programs to its Oakland customers, development of and improvements to its facilities and workforce training, as well as population growth and increase in economic activity, the amount of recyclable materials diverted in Oakland will increase each year of the RR Collection Services Contract. Tonnages for Recyclable Material delivered and

processed, and the estimated Residual Tonnages for each calendar year of the RR Collection Services Contract beginning with calendar year 2016 are shown segregated by SFD and MFD services in Table 5.3.2-2.

**Table 5.3.2-2 Tonnages of Recyclable Material Received**

<b>Calendar Year</b>	<b>SFD</b>	<b>MFD</b>	<b>City Services</b>	<b>Other</b>	<b>Total</b>	<b>Residue Rate</b>	<b>Residual Tonnage</b>
2015	11,457	6,001	1,816	14,926	38,000	10.00%	3,800
2016	11,560	6,055	1,832	15,060	38,342	10.00%	3,834
2017	11,697	6,127	1,854	15,238	38,687	9.75%	3,772
2018	11,835	6,199	1,876	15,417	39,035	9.50%	3,708
2019	11,974	6,272	1,898	15,599	39,387	9.25%	3,643
2020	12,115	6,346	1,920	15,783	39,741	9.00%	3,577
2021	12,258	6,421	1,943	15,969	40,099	8.75%	3,509
2022	12,402	6,496	1,966	16,157	40,460	8.50%	3,439
2023	12,548	6,573	1,989	16,347	40,824	8.25%	3,368
2024	12,695	6,650	2,012	16,539	41,191	8.00%	3,295
2025	12,844	6,728	2,036	16,733	41,562	7.75%	3,221

According to the East Bay Economic Development Alliance, forecasted growth for Oakland over the next 5 years shows a growth rate on par with the US average. The key to Oakland's continued population growth is international migration. In addition, Oakland receives net positive inflows of households from San Francisco and San José. The EBEDA estimates an 0.9% annual average growth rate for the metro area over the 2009-2014 period. This population growth results in an increase in recyclable materials generation each year. CWS will continually take action to inform new City residents about its recycling program and services, and ensure that all multi-family establishments receive informational materials regularly, as occupancy changes.

CWS currently achieves a low residue rate for materials collected from its Oakland residential and commercial customers at its 10<sup>th</sup> St. facility. As CWS begins to collect material from the entire franchise area, the material quality in the expanded service area is expected to be lower than what CWS currently achieves, and CWS projects that approximately 10% of residual material will remain and will be sent to landfill when service begins.

As CWS continues to make technological improvements to its facilities, it diverts additional materials away from the recycling stream before it is accepted at CWS processing facilities (bundled cardboard, used oil, batteries, etc.), and supports correct disposal and recycling practices with significant public information and education outreach, it will experience reductions in the residue rate for all Oakland customers. Each year, from 2017 through 2025, CWS will divert an additional 0.25% of the total of all collected tons of SFD, MFD, City, and Commercial recyclable materials, reducing its tonnage sent to landfill by 0.25% annually.

Considered as a contribution to the diversion rate for the sum of the City of Oakland's residential, City, and small business recyclable materials, organic materials, and waste materials, this is a final 92.50% diversion of recyclable materials in 2025.

Table 5.3.2-3 Overall Diversion Outcome

Year	Minimum Diversion Rate
7/1/2015 – 12/31/2015	90.00%
1/1/2016 – 12/31/2016	90.00%
1/1/2017 – 12/31/2017	90.25%
1/1/2018 – 12/31/2018	90.50%
1/1/2019 – 12/31/2019	90.75%
1/1/2020 – 12/31/2020	91.00%
1/1/2021 – 12/31/2021	91.25%
1/1/2022 – 12/31/2022	91.50%
1/1/2023 – 12/31/2023	91.75%
1/1/2024 – 12/31/2024	92.00%
1/1/2025 – 6/30/2025	92.50%

#### 5.4. Customer Service Plan



##### Customer Service Representative

Customer service involves not only the front line interaction of our crews, but also our customer call center. CWS currently operates a customer call center in Oakland, California and San José, California. Each center focuses on the customers in the prospective territories. By having the separate call centers CWS is able to provide redundancy, to ensure any extended outages will result in customers will continue receiving the best possible service available. For its Oakland call center, CWS has reserved **1-510-OAKLAND** as a call-in number, a memorable number for its customers.

Our Customer Service Representatives are trained to treat customer calls with the utmost professionalism and accommodation. CWS wants every caller to feel that CWS understands their needs and responds appropriately. To achieve the goal CWS uses the “World Class” Customer service and marketing model. This involves extensive training on how to best respond and resolve all customer calls, including customers who may be challenging to work with. Developing, implementing and maintain extremely high levels of customer service skills are critical in maintaining and increasing customer satisfaction. All representatives are trained and empowered to resolve customers’ needs without the need for further follow up by the customer, or letting the customer feeling that CWS does not take their needs seriously. This level of customer satisfaction is achieved through proper training, empowerment, and supervision. The pro-active “World Class” service model will also be all encompassing and ensure that the customer are always provided the most current and correct program information to ensure that customers are part of the solution in achieving the solid waste diversion goals for their personal household, their community and the City of Oakland.

To achieve the goal a successful “World Class” service model, the Customer Service Technicians must be effectively trained in how best to respond. A Customer Call Center Coach will continually motivate the Customer Service Technicians to provide the customer support anyone would want: courteous, helpful, and quick to resolve any customers’ needs and to be pro-active. The Customer Service staff will be consistently evaluated to ensure that staffing levels are maintained to provide the highest service levels and to exceed contract level requirements.

CWS ensures it meets the “World Class” Service model by ensuring fluid communication between all departments, from Billing, Collection, Processing and Management. Additionally this extends to CWS’ other operations: Information Technology, Contract Compliance, Human Resources, and Public Affairs. CWS ensures that in addition to service level changes the customers’ billing needs are integrated, to ensure that Customer Service Technicians can directly respond to and adjust customers’ billing needs as well. When CWS says our Customer Service Center is a “One Stop Shop” it’s not just a slogan it’s a reality.

#### ***5.4.1. Customer Service Technology Platform***

The CWS Customer Service Representatives, and all other CWS operations, have access to the valuable Route Accounts Management System (RAMS) computer software tools. This package provides faster speed than comparable systems, flexibility to modify and adapt to changing needs, exceptionally stable database management, and most importantly accurate and real-time billing. This software is backed by over 25 years development enhancements and experience within the waste industry. This software is developed by waste industry specialists for the waste industry. This means that the software from the base platform up uses the needs and details this industry requires as its basis.

RAMS does not only allow for real-time information, but is built on the basis that everything is real-time. From the customer service representative all the way to the driver in the truck, up to the minute information about a customer’s profile, specific needs and current billing status can visually be seen. Because of the flexibility of the system, even persons off-site, with proper security access can view and update these files anywhere in the world with access to the internet. In this way, even the field supervisor, sales staff, and City staff can view and update files as necessary.

RAMS capabilities include secure customer billing, customer payments, intra-departmental communication, routing/dispatch, reporting, route modeling, rate changes, container inquiry/inventory, customer inquiry, customer entry/maintenance, route audit tracking, work order generation, real-time route changes, direct communication to drivers in the field, remote access worldwide, internet payment and billing information.

Because of the adaptability and flexibility of RAMS, additional features can be developed quickly and easily, making RAMS the most powerful software packages for the Waste Industry. Additionally the way that RAMS is built, report generation is flexible and fast. RAMS major software modules include:

- **Customer Service Profile:** Data entered here feeds the rest of the system; the functions for this module are rate information and service location data including key contacts, container information, and billing information. This area allows CWS to access any part of the customers’ profile.
- **Routing and Route Model:** With these modules, permanent routing can be created based on information keyed into Customer Maintenance. Efficiency is maximized through automated grid routing and search capabilities to locate a service location for easy route maintenance all the way down to geo-coding of the actual containers. This manual draws the route for the driver similar to a standard GPS system but is much more powerful. The system documents when service is completed both visually and using GPS and RFID tagging.
- **Dispatch:** With CWS using RAMS, daily dispatch will be smooth, efficient and easy. Drivers log into their touch screen computer panel inside the truck and the route is drawn for them. Changes can be made even while the driver is in the field without the complication of printing paperwork and other more cumbersome communication methods. The driver has an interactive computer

panel in the truck that updates the route real time. Missed collections are virtually eliminated due to someone forgetting or lack of familiarity of a route. The system prevents the misses because the driver is not permitted to log out until the route is completed and any adjustment or service changes are addressed as well. Customers can log into the system to see if they have been service, if there were any challenges or if they are still pending.

- **Container Inventory:** This module ensures that container inventory is up-to-date, automatically updating the dispatching system when container delivery/removal routes are updated.
- **Report Capabilities:** Using SQL language RAMS offers unlimited report writing capabilities. If it is in the system, it can be retrieved in many types of report formats to include Excel. Because of the flexibility and ease of use, development of the reports takes hours vs. typical report writing systems, which require weeks or days for an IT programmer to create them.
- **Accounts Receivable, Invoicing and Billing:** RAMS permits any type of invoice formats, billing periods, and restriction of service. In this way customers can rest assured that billing accuracy and integrity are maintained at all times.

At CWS, RAMS has proven to especially facilitate and support Operational Connectivity (OC) because it enables us to:

- Know and greet our customer
- Anticipate the needs of our customer
- Identify opportunities to improve customer service, performance and reduce expense
- Apply, add, and adjust services to better satisfy the customer's needs and changes

In summary, CWS has been very successful at recycling and increasing the diversion of recyclable materials because it effectively and efficiently practices highly integrated Operational Connectivity among all CWS operations, daily. CWS tests the effectiveness of its alignment and support by exercising the connectivity between departments. The Customer Service system has been and will continue to be tested, refined, and adjusted to ensure that all Customer Service Technicians are competently trained before they take their first call and their ongoing training does not stop for their career time at CWS. Our approach and philosophy will be to:

- Achieve the highest level of customer satisfaction as possible by successfully implementing and supporting our customers
- Earn excellent program participation and compliance by all customers so to maximize diversion in the City of Oakland
- Motivate customers to participate in achieving the communities Green-vision and Citywide solid waste diversion goals
- Achieve and sustain an effective level of customer education about programs, materials and material preparation
- Continually reduce the number of customer-generated service calls because customers are pre-informed about program options, expectation, and program benefits
- Increase the number of CWS-generated service calls to ensure that we promote the program services that increases solid waste diversion, program efficiency, and reduced collection rates

- Establish a Direct Engagement and interaction with customers regarding their recycling service communication

In order to ensure that any customer calling is able to communicate effectively with our staff, CWS uses and will continue to use Language Line Personal Interpreter Services. These highly qualified interpreters are just a phone call away and virtually any language is available 24 hours a day. Once CWS determines the language the customer communicates in, our representatives will use this service to have a live person translate their conversation back and forth. In this way each customer no matter their potential language barriers will be able to experience the “World Class” Service model. Additionally CWS will maintain a Teletypewriter Telecommunications Device for the Deaf (TDD) service for our customers who utilize this service to ensure that their service needs are met with the same level of professionalism.

#### ***5.4.2. Customer Service Protocol***

CWS will operate a customer call center that provides toll-free telephone and email access to all residents and businesses in Oakland, and is staffed by trained and CSRs. At a minimum, the call center will be open 8:00 AM to 6:00 PM Monday through Friday and on Saturdays when SFD or MFD recycling services are scheduled to be provided. The call center will, with the aid of the Language Line Personal Interpreter Services and multi-lingual CSRs, be able to respond to calls in multiple languages, including, but not limited to English, Chinese (Cantonese), Vietnamese, and Spanish.

When customer calls are received, CWS Customer Service Representatives using the RAMS customer service and billing system will determine the type of inquiry, e.g., service-related, billing problem, container exchange, etc. During the call, the following information will then entered by the CSR who will print a standard two-part automated service call work order at the Dispatch office.

- Date and time of customer contact with CWS plus; date and time response was provided; date and time resolution was provided; description of CWS’ resolution of service issue or complaint, or response to inquiry; CWS’ employee identification codes for employees inputting the complaint or inquiry as well as the resolution
- Customer’s name and contact information: phone numbers, e-mail address, account address; service address; occupant address
- Service location information: including where applicable, number of units; number, size and type of recycling containers; collection service day; route number; backyard service status; special handling service status; and bulky item collection history (e.g., number of annual services performed, date requested, date provided)

The customer’s request for service is handled at the time the customer contacts CWS.

During the call, the CWS Customer Service Representative listens while reviewing the customer’s account for previous service request history. As the customer is making their request, the Customer Service Representative enters the appropriate computer codes, route and priority number for processing. The request is processed electronically so that it appears immediately in the system and is available on-line in real-time to Dispatch. The work order is printed out immediately and assigned a priority number, and is held in a batch file for printing or viewing in real-time, together with other similar requests. Work orders can be categorized in various ways, including by route, by type, and by status (pending, open or closed).

Complaints and missed collections are addressed the same day whenever possible and no later than the next day if the call request is made after business hours. If the response time for the request is the same



day, the online feature of the CSR system allows dispatchers to quickly assess outstanding work orders and immediately relay them to drivers in the field.

If the response time for the request is the next day, the work orders are printed as part of the route sheet and given to the drivers at the start of their shift for completion that day. Completed work orders are input by Dispatch, which enters the resolution and closes out the call. Resolution codes can include information to show how long it took to complete the work order. Customer service staff provides all information needed for customer follow-up on the work order.

Both hard copies of work orders and electronic data are kept on file as part of the monthly reporting requirements to the City. All customer calls are noted in the system and all information is kept confidential. The computerized database allows requests to be catalogued for reporting purposes. All customer service inquiries that have been received on the voice mail system after office hours are transcribed onto a work order by a CWS Customer Service Representative. A special note is made indicating when the customer requires a return phone call.

The minimum customer service standards for customers in the City of Oakland will be as follows:

- A minimum of ten (10) incoming calls can be received at one time at the call center
- All incoming calls are personally answered within five (5) rings before a message is taken
- Customer on-hold waiting time will be three (3) minutes or less based on a daily average
- During any on-hold waiting time and when the call center is closed, customers are offered the option to leave a voice message
- Any call “on-hold” in excess of one and one half (1.5) minutes will have the option to remain “on-hold” or to be switched to a message center where the customer can leave a message
- Customer voice messages are returned in the order received and at latest by the close of the workday following the day the voice message is received
- Customer emails are responded to in the order received and at latest by the close of the workday following the day the email is received
- All customer complaints received prior 2:00 p.m. will be resolved on the same day; complaints received after 2:00 p.m. will be resolved on the next business day
- All new accounts will be contacted after their first service day to verify container delivery and driver courtesy, and to answer any questions
- Our CSR staff will receive quality-based performance reviews and continuous training in the latest customer service techniques

CWS will provide a local telephone number (**1-510-OAKLAND**) that allows callers to be automatically transferred from the MM&O Contractor, as appropriate, and CWS will ensure that the transferred callers do not experience any changes in volume or clarity as they transfer to or from the MM&O Contractor.

CWS will upgrade its website to provide its Oakland customers with a one-stop resource for news, information, and education on CWS’ collection and recycling services. The site will provide in-depth information on programs and environmental initiatives; sections include tips and resources for maximizing residential and business recycling, information for commercial customers to boost diversion rates, and specifics on how to responsibly dispose of e-waste, hazardous household materials, and other

environmentally harmful materials, find answers to frequently asked questions, view rates for residential recycling collection services, find listings and descriptions of collection service schedules and maps, and other related topics. CWS' locally managed and updated website will enable customers to securely pay their bills online, and identify whom to contact at CWS with service issues or questions. The website will have a link to the City's website and a link to the MM&O Collection Contractor's website. CWS will work with the City to ensure that the City's website has a link to the CWS Oakland homepage, and a link that customers can use to email the CWS customer service team directly. Similarly, the CWS website will feature a simple contact form and e-mail that customers can use to send comments and inquiries and request services or service changes to CWS.

# CITY OF OAKLAND



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Oakland Public Works  
Bureau of Facilities and Environment

FAX (510) 238-7286  
TDD (510) 238-3254

## ADDENDUM NO. 4

June 30, 2014

**Subject: Best and Final Offer Submittal Instructions**  
**To: All Eligible Proposers**

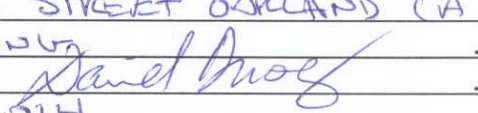
The clarifications, additions and/or deletions contained in this **ADDENDUM** shall be made a part of the best and final offer for the Zero Waste Services RFP.

1. Clarification: Replace the Best and Final Offer Term Sheet SG1 REVISION #2, dated June 11, 2014, with the attached Best and Final Offer Term Sheet SG1 REVISION #3; and replace the Best and Final Offer Term Sheet SG2 REVISION #2, dated June 11, 2014, with the attached Best and Final Offer Term Sheet SG2 REVISION #3. The revised documents incorporate the following clarifications regarding Charges and Rates:
  - From July 1, 2016 onward, annual adjustment to the Franchise fee will be by Consumer Price Index – All Urban Consumers, Series ID 1367 cuura422sa0, Not Seasonally adjusted, San Francisco-Oakland-San Jose, CA
  - Franchise fee and government fees will each be a separate cost category (i.e., not included in the All Other cost category), included in the RRI weighted average, and not subject to any cap or carry-forward

Sincerely,

  
for Susan Kattchee

Zero Waste Services RFP Project Manager

ADDENDUM NO. 4	DATED: 6-30-14
COMPANY / AGENCY NAME:	CALIFORNIA WASTE SOLUTIONS
COMPANY ADDRESS:	1820 10TH STREET OAKLAND CA
REPRESENTATIVE'S NAME:	DAVID DUONG
SIGNATURE:	
DATE:	JULY 1, 2014



*Date: Sent to City on Tuesday, July 1, 2014. Received from City on June 27, 2014*

*Please review and respond to the questions below. Your response by July 1 would be appreciated.*

**City Question 1:**

*For costs related to increases in Local 6 wages and benefits, please provide rate impacts by percentage for each service sector.*

**CWS Response to City Question 1:**

As mentioned in CWS's June 30, 2014 response to Question #1, based on further clarification by ILWU, the wage rate ILWU is looking for is \$20.94 by 2019. CWS believes this rate is consistent with the City Council resolution.

The updated tables below are similar to the tables provided in CWS's BAFO submitted June 13, 2014 and reflect the rate impacts due to a \$20.94 wage rate by 2019.

In Table 1, the ILWU rate begins at \$13.97 on 1/1/15, and increases to \$20.94 by 2019.

Tables 2, 3, and 4 show the number of current and new employees, total cost increase over four and a half years, and the percentage increase in rates due to the wage and benefit change for the RR contract only, MMO contract only, and both RR and MMO contracts. The percentage increases are to be applied to the collection service rates in Part A of each City Rate Form. The percentage increases represent the average increase that is to occur each year until 2019.

**Table 1 Wage and Benefit Change Rate Impacts - \$20.94 by 2019**

	01/01/15- 06/30/15	07/01/15- 12/31/15	01/01/16- 12/31/16	01/01/17- 12/31/17	01/01/18- 12/31/18	01/01/19- 12/31/19
Increases		\$ 1.71	\$ 1.18	\$ 1.26	\$ 1.36	\$ 1.46
Wage	\$ 13.97	\$ 15.68	\$ 16.86	\$ 18.12	\$ 19.48	\$ 20.94

**Table 2 Wage and Benefit Change Rate Impacts to RR Contract Only**

48 Current + 35 New = 83 Employees			
Total Increase Over 4.5 Years = \$2,970,015			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	60%	40%	0%
Cost increase per allocation	\$1,782,009	\$1,188,006	\$0
Percentage Increase in Rates Due to Wage and Benefit Change	3.20%	3.20%	0%

**Table 3 Wage and Benefit Change Rate Impacts to MMO Contract Only**

48 Current + 47 New = 95 Employees			
Total Increase Over 4.5 Years = \$3,399,415			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	15%	10%	75%
Cost increase per allocation	\$509,912	\$339,941	\$2,549,561
Percentage Increase in Rates Due to Wage and Benefit Change	0.28%	0.49%	2.95%

**Table 4 Wage and Benefit Change Rate Impacts to RR and MMO Contracts**

48 Current + 87 New = 135 Employees			
Total Increase Over 4.5 Years = \$4,830,747			
	SFD units	MFD units	Commercial
# of accounts projected	102,274	62,965	5,724
Cost allocation	15%	10%	75%
Cost increase per allocation	\$724,612	\$483,075	\$3,623,060
Percentage Increase in Rates Due to	0.30%	0.46%	4.19%

Wage and Benefit Change			
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**City Question 2A:**

*Please confirm rate proposal for collection of source separated organics from MFDs, under the scenarios requested by City Council.*

*A. Default service as required in RFP; Green cart provided upon customer request; Cost embedded in MF rates*

**CWS Response to City Question 2A:**

CWS confirms the cost for the default service as required in RFP where MF green cart is provided upon customer request is embedded in MF rates. Please see Table 5 below.

**City Question 2B:**

*Alternative as required in RFP "Opt-In;" Green cart provided upon customer request; Cost not embedded in MF rates; subscription rates provided*

**CWS Response to City Question 2B:**

CWS confirms the cost for the alternative as required in RFP "Opt-In" where MF green cart is provided upon customer request is not embedded in MF rates. Subscription rates are provided for MF green cart. Please see Table 5 below.

**City Question 2C:**

*Council-requested alternative No. 1 "Opt-Out;" Green cart provided unless customer opts out; Cost embedded in MF rates*

**CWS Response to City Question 2C:**

CWS confirms the cost for the Council-requested alternative No. 1 "Opt-Out" where MF green cart is provided unless customer opts out is embedded in MF rates. Please see Table 5 below.

**City Question 2D:**



*Council-requested alternative No. 2 “No-Opt Out;” Green cart to all customers; Cost embedded in MFD rates*

**CWS Response to City Question 2D:**

CWS confirms the cost for the Council-requested alternative No. 2 “No-Opt Out” where MF green cart is provided to all customers is embedded in MF rates. Please see Table 5 below.

Table 5 below is an updated table similar to the table provided to the City by CWS on April 17, 2014.

**Table 5 MFD (32 Gallon) Green Cart Alternatives**

				<b>ALTAMONT 06/13/14</b>	<b>VASCO 06/13/14</b>
Mixed Material Processing	Green Cart Provisions		How to represent costs	CWS rates 32gal default service	CWS rates 32gal default service
RFP Default	Yes	Customer provided green cart upon request Cost is bundled in MFD rate	Bundled MFD rates	\$31.03	\$30.68
RFP Alt. 1	Yes	Customer provided green cart upon request Additional subscription cost	Base MFD rates plus Rates for green cart subscription	\$29.73	\$29.27
Alt. 2	Yes	Customer provided green cart unless customer opts out Cost is bundled in MFD rate	Bundled MFD rates	\$31.03	\$30.68
Alt. 3	Yes	All customers provided w/green carts (“mandatory”) Cost is bundled in MFD rate	Bundled MFD rates	\$31.03	\$30.68
Subscription for Organic	Yes	Green cart as a subscription service link to Alt. 1	Additional organic subscription rate	\$36.56	\$36.56

**Service Group 1**  
**Best and Final Offer Terms – REVISION #3**

Alternative Contract Terms	Accept	Initial
<u>Term of Contract</u>		
1. First extension for 5 years shall be amended to provide notice to contractor allowing contractor to accept or reject extension. If rejected, one year would be automatically added to term.	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	<u>DT</u>
2. Second extension for 5 years shall be amended to provide notice to contractor allowing contractor to accept or reject extension. If rejected, one year would be automatically added to term.	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	<u>DT</u>
<u>Service Standards</u>		
1. In year one of contract, 20% of each cart type shall be replaced with new. Following years of contract replacement shall be up to 3%.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	<u>DT</u>
2. To further address potential high levels of contamination in the recycling and organics carts, City and company will meet to discuss and, if necessary, City can direct company to remove organics or recycling containers to abate a nuisance.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	<u>DT</u>

### Service Group 1

## Best and Final Offer Terms – REVISION #3

### Charges and Rates

### 1. Changes to Refuse Rate Index

- a. The annual RRI ceiling will be 6% and anything less than 8% will carry forward to next year, except in the final year when the RRI ceiling will be 8%
- b. Floor will be -5%
- c. From July 1, 2016 onward, annual adjustment to the Franchise fee will be by Consumer Price Index – All Urban Consumers, Series ID 1367 cuura422sa0, Not Seasonally adjusted, San Francisco-Oakland-San Jose, CA.
- ~~e.d.~~ Franchise fee and gGovernment fFees will each be a separate cost category (i.e., not included in the All Other cost category), included in the RRI weighted average, and not subject to any cap or carry-forward.
- ~~e.e.~~ The Bureau of Labor Statistics Index Series ID: ceu6056210008 – Service Producing Industries used to calculate changes in the RRI Labor Category will be replaced with the actual changes in the Labor and Health and Welfare Benefits of a specific employee category in each of the Collective Bargaining Agreements utilized to provide services under the MM&O Contract.
- ~~e.f.~~ Any rate increase in Local 70 Labor Cost Category that is greater than what would be allowed under current Local 70 CBA will be included equally over three years. Differential increase will be exempt from annual cap and carry-forward.

YES ☒

NO ☐

YES ☒

NO ☐

YES ☒

NO ☐

YES ☒

NO ☐

### Quality of Performance of Contractor

1. Liquidated damages (per **Attachment A to SG1 Best and Final Offer Terms**)
2. Prior to assessing certain liquidated damages, e.g., for failing to meet public outreach standards, City will give Contractor notice and offer to discuss correcting performance per attached.

YES ☒

NO ☐

YES ☒

NO ☐


## Service Group 1

### Best and Final Offer Terms – REVISION #3





<p><u>Indemnification</u></p> <p>Contract language requires company to indemnify City across a broad group of items. Indemnification does not extend to maximum service rates. During a pendency of service rate challenge, the City will bear its losses and the company theirs. The company is required to provide service. Contract provides that if service rates are impacted due to court action, contractor and City will meet and confer over requirement to pay Franchise Fees until determination.</p> <ol style="list-style-type: none"> <li>1. If Contractor demonstrates actual losses due to service rate lawsuit, City will take immediate action to attempt to recover proven losses for the services rendered. This could include: modifications to program requirement; adjustment to maximum service rates.</li> <li>2. Should Contractor not be able to recover their losses in 2 years following a trial court determination affecting its ability to obtain rates set forth in agreement, it could provide 12-month notice to cancel the contract.</li> <li>3. Should the City find it necessary to procure services, it shall procure services from Contractor at commercially reasonable rates.</li> </ol>	<p>YES <input checked="" type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>YES <input type="checkbox"/></p> <p>NO <input checked="" type="checkbox"/></p> <p>YES <input checked="" type="checkbox"/></p> <p>NO <input type="checkbox"/></p>	<p><u>DT</u></p> <p><u>DT</u></p> <p><u>DT</u></p>
<p><u>Defense of Contractor's Rights</u></p> <ol style="list-style-type: none"> <li>1. City shall set forth, through municipal regulation, Contractor's rights under franchise, to include impounding violator's equipment, and allowing fees to address such actions.</li> </ol>	<p>YES <input checked="" type="checkbox"/></p> <p>NO <input type="checkbox"/></p>	<p><u>DT</u></p>



# **Service Group 1** **Best and Final Offer Terms – REVISION #3**

<p><u>Obligation to Provide Service</u></p> <p>1. Force Majeure – Force Majeure only applies if:</p> <p>Contractor provides a labor plan prior to July 1, 2015 for restoring services in the event of a labor disruption, and meets and confers with City within three (3) days of a labor disruption with regard to implementation of the approved labor plan.</p> <p>Within three (3) days of any labor disruption, Contractor provides essential services meaning collection of Mixed Materials and Organics as needed from public facilities, such as hospitals, airports, ports and certain government facilities, where a failure to so collect would impede critical public services.</p> <p>Within three (3) days of a labor disruption initiated by Contractor, Contractor also provides Basic Collection Services including residential and commercial garbage and commercial organics in accordance with normal collection intervals</p> <p>Within ten (10) days of a labor-initiated disruption, Contractor provides Essential Collection Services and Basic Collection Services (residential and commercial garbage and commercial organics) in accordance with the normal collection intervals.</p> <p>Regardless of labor disruption cause, within twelve (12) days CONTRACTOR also provides in addition to essential and basic collection services, provide Residential Organics Services, Bulky Waste Service, and active cleanup of any accumulated waste which has been set out for collection and not properly picked up during the Labor Disruption.</p> <p>Liquidated Damages shall not commence until 5 days after Contractor-initiated lockout or 15 days after a union initiated strike, if Contractor provides the services as outlined above.</p>	<p>YES <input checked="" type="checkbox"/></p> <p>NO <input type="checkbox"/></p>	
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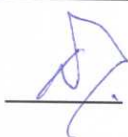





**Service Group 1**  
**Best and Final Offer Terms – REVISION #3**

<p><u>Default of Contract</u></p> <p>1. Failure to meet Exhibit 8 annual diversion requirement by more than 5%, City may put Contractor on corrective action plan to achieve compliance. Failure to meet corrective action plan may result in liquidated damages not to exceed \$150 per day.</p> <p>2. <i>Repetitive Compliance Issues</i> will replace the term <i>Habitual Violator</i>. Under the circumstances of repetitive material compliance issues, City and contractor will meet and confer; contractor will implement a remedial action plan with a compliance date. Only after failure during this process lead to default.</p>	<p>YES <input checked="" type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>YES <input checked="" type="checkbox"/></p> <p>NO <input type="checkbox"/></p>	 
<p><u>Contract Modifications and Changes in Law</u></p> <p>1. Should there be a change in the Mixed Materials and/or Organic Materials quantity, composition, or quality that affects the Contractor's ability to meet the Diversion Requirements, City will negotiate with Contractor, an appropriate modification to the annual Diversion requirement. Should Contractor dispose of material in a landfill, no additional cost will be borne by City rate payers. Should disposal of the material be in conflict with applicable laws, City and contractor shall meet and confer. Should contractor provide demonstrated additional costs, City shall take action to address.</p> <p>2. Should there be a change in the recycling commodities markets that affects the Contractor's ability to meet the Diversion requirements, City will negotiate with Contractor a reasonable modification to the annual Diversion requirement. Should Contractor dispose of material in a landfill, no additional cost will be borne by City rate payers. Should disposal of the material be in conflict with applicable laws, City and contractor shall meet and confer. Should contractor provide demonstrated additional costs, City shall take action to address.</p>	<p>YES <input checked="" type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>YES <input checked="" type="checkbox"/></p> <p>NO <input type="checkbox"/></p>	 


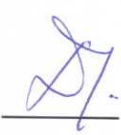


## Service Group 2

### Best and Final Offer Terms – REVISION #3

Alternative Contract Terms	Accept	Initial
<u>Service Standards</u>		
1. Cart replacement of up to 10% per year for 10 years.	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
2. In year one of contract, 20% of carts shall be replaced with new. Following years of contract cart replacement shall be as needed, up to 3% replacement annually.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
3. Use of existing trucks as spares in the fleet.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
4. Lower pricing with a Call Center out of county and higher pricing with a Call Center in county.	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
<u>Charges and Rates</u>		
1. Changes to Refuse Rate Index <ul style="list-style-type: none"> <li>a. The annual RRI ceiling will be 6% and anything less than 8% will carry forward to next year, except in the final year when the RRI ceiling will be 8%</li> <li>b. Floor will be -5%</li> <li>b-c. From July 1, 2016 onward, annual adjustment to the Franchise fee will be by Consumer Price Index – All Urban Consumers, Series ID 1367 cuura422sa0, Not Seasonally adjusted, San Francisco-Oakland-San Jose, CA.</li> <li>c-d. Franchise fee and Government fees will each be a separate cost category (i.e., not included in the All Other cost category), included in the RRI weighted average, and not subject to any cap or carry-forward.</li> <li>d-e. The Bureau of Labor Statistics Index Series ID: ceu6056210008 – Service Producing Industries used to calculate changes in the RRI Labor Category will be replaced with the actual changes in the Labor and Health and Welfare Benefits of a specific employee category in each of the Collective Bargaining Agreements utilized to provide services under the MM&amp;O Contract.</li> <li>e-f. Any rate increase in Local 70 Labor Cost Category that is greater than what would be allowed under current Local 70 CBA will be included equally over three years. Differential increase will be exempt from annual cap and carry-forward.</li> </ul>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
2. Per-unit per month payment instead of per-ton payment.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	

**Service Group 2**  
**Best and Final Offer Terms – REVISION #3**

<u>Other</u>		
1. \$1 million incentive payment to City for a 20-year contract.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
2. \$1.5 million incentive payment to city for a 30 year contract.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	

### **1. Service Group 1 Negotiated Term Sheet**

CWS has completed the Modified Service Group 1 Best and Final Offer Terms, and has the following comments regarding each of the seven (7) Alternative Contract Terms, as follows:

#### **Term of Contract**

1. First extension for 5 years shall be amended to provide notice to contractor allowing contractor to accept or reject extension. If rejected, one year would be automatically added to term.
2. Second extension for 5 years shall be amended to provide notice to contractor allowing contractor to accept or reject extension. If rejected, one year would be automatically added to term.

CWS is responding “NO” to the above two items. CWS is agreeable to the conditions of the contract term in the RFP, which gives the City the sole right to extend the contract for two additional five-year terms. CWS does not desire to put the City in a position of risk regarding whether the City would have to re-procure services and be subject to significant changes in price that are likely to occur in a re-procurement of services. In this way, the ratepayer is protected from price hikes, potential service interruption, and additional procurement costs the City would incur under a rejected contract term arrangement this change could allow.

To help ensure rate stability and labor peace, any labor rate increases incurred by CWS at the extension of any agreement with the City shall be pass-throughs to the City above any amount not covered by the RRI.

CWS is also proposing a base term of 15 years if the City were to allow CWS to utilize its trucks, carts, and radios for a 15-year life. CWS could amortize these assets over a longer term and reduce its rates through the offering of a first year discount. Alternative pricing is provided regarding this alternative in Section 2.11.

#### **Service Standards**

1. In year one of contract, 20% of each cart type shall be replaced with new.  
Following years of contract replacement shall be up to 3%.
2. To further address potential high levels of contamination in the recycling and organics carts, City and company will meet to discuss and, if necessary, City can direct company to remove organics or recycling containers to abate a nuisance.

CWS is responding “YES” to both of these service standards. CWS has included savings in its new BAFO here that provides for the cart replacement service standard. In addition, CWS finds it acceptable to address high levels of contamination in recycling and organics as now outlined in the above language.

### Charges and Rates

1. Changes to Refuse Rate Index
  - a. The annual RRI ceiling will be 6% and anything less than 8% will carry forward to next year, except in the final year when the RRI ceiling will be 8%
  - b. Floor will be -5%
  - c. From July 1, 2016 onward, annual adjustment to the Franchise fee will be by Consumer Price Index – All Urban Consumers, Series ID 1367 cuura422sa0, Not Seasonally adjusted, San Francisco-Oakland-San Jose, CA.
  - d. Franchise fee and government fees will each be a separate cost category (i.e., not included in the All Other cost category), included in the RRI weighted average, and not subject to any cap or carry-forward.
  - e. The Bureau of Labor Statistics Index Series ID: ceu6056210008 – Service Producing Industries used to calculate changes in the RRI Labor Category will be replaced with the actual changes in the Labor and Health and Welfare Benefits of a specific employee category in each of the Collective Bargaining Agreements utilized to provide services under the MM&O Contract.
  - f. Any rate increase in Local 70 Labor Cost Category that is greater than what would be allowed under current Local 70 CBA will be included equally over three years. Differential increase will be exempt from annual cap and carry-forward.
2. Diversion requirement adjustment impact will be limited to one year.
3. In any year when Contractor gross revenues decrease from the prior year, substantiated by billing audit funded by Contractor the City will not increase the Franchise Fee component of RRI.
4. First franchise fee payment will be due August 15, 2015. Following payments will be due on 20th of the month.

CWS has answered “YES” to #1 above with a proposed modification, as follows: CWS proposes that customer rates be increased over the initial five-year term of the agreements in the first year by the RRI, then for next four years by the RRI plus a fixed 1.5 percent increase (the “Service Level Adjustment”), and in years following back to the RRI without any adjustment. The Service Level Adjustment will bring the rates to the level necessary to sustain full processing of Mixed Materials at the North Gateway Facility – thus giving the ratepayers the benefit of a reduced cost program up front and a full service program after five years. As a condition to the Service Level Adjustment, CWS will demonstrate, annually, that the completion of its North Gateway Facility is on track. By this means, CWS and the City can assure ratepayers that rate adjustments will ultimately be accompanied by an increased service level.

CWS is also agreeable to the other items (2, 3, and 4) and has kept these changes in mind as it modified its BAFO generally.

### **Quality of Performance of Contractor**

1. Liquidated damages (per Attachment A to SG1 Best and Final Offer Terms)
2. Prior to assessing certain liquidated damages, e.g., for failing to meet public outreach standards, City will give Contractor notice and offer to discuss correcting performance per attached.

CWS has reviewed the extensive changes to the CONTRACTOR Liquidated Damages Payments table provided by the City, including the additional stipulation regarding failing to meet public outreach standards. CWS answers “YES” with one exemption to all the changes and the public outreach stipulation. The one exception is:

- #34 – CWS will not have alternate processing capacity for MM as this damage provision implies; new language will need to be developed that reflects the interim and long-term operations plan CWS proposes and will be consistent with the incremental increase in services and the resulting lower initial rates that CWS has proposed. CWS expects – and is agreeable to - revised language that will provide the City reasonable assurance that it can enforce the obligations of CWS with respect to interim operations.

### **Indemnification**

Contract language requires company to indemnify City across a broad group of items. Indemnification does not extend to maximum service rates. During a pendency of service rate challenge, the City will bear its losses and the company theirs. The company is required to provide service. Contract provides that if service rates are impacted due to court action, contractor and City will meet and confer over requirement to pay Franchise Fees until determination.

1. If Contractor demonstrates actual losses due to service rate lawsuit, City will take immediate action to attempt to recover proven losses for the services rendered. This could include: modifications to program requirement; adjustment to maximum service rates.
2. Should Contractor not be able to recover their losses in 2 years following a trial court determination affecting its ability to obtain rates set forth in agreement, it could provide 12-month notice to cancel the contract.
3. Should the City find it necessary to procure services, it shall procure services from Contractor at commercially reasonable rates.

CWS answers “YES” to numbers 1 and 3 above. CWS has kept these changes in mind as it modified its BAFO generally.

For #2, CWS responded “NO” because it does not want to have the option to cancel the contract by providing a 12-month notice in the event of not being able to recover losses in 2 years following a trial.



CWS would like to develop an alternative method of recovering the losses from other sources/funds the City accumulates during the course of the Franchises and through rate adjustments. CWS wants to assure the City and its ratepayers of continued service under essentially all circumstances.

### **Defense of Contractor's Rights**

1. City shall set forth, through municipal regulation, Contractor's rights under franchise, to include impounding violator's equipment, and allowing fees to address such actions.

CWS answers "YES" to this change. CWS has kept this change in mind as it modified its BAFO generally.

### **Obligation to Provide Service**

1. Force Majeure – Force Majeure only applies if:
  - a. Contractor provides a labor plan prior to July 1, 2015 for restoring services in the event of a labor disruption, and meets and confers with City within three (3) days of a labor disruption with regard to implementation of the approved labor plan.
  - b. Within three (3) days of any labor disruption, Contractor provides essential services meaning collection of Mixed Materials and Organics as needed from public facilities, such as hospitals, airports, ports and certain government facilities, where a failure to so collect would impede critical public services.
  - c. Within three (3) days of a labor disruption initiated by Contractor, Contractor also provides Basic Collection Services including residential and commercial garbage and commercial organics in accordance with normal collection intervals
  - d. Within ten (10) days of a labor-initiated disruption, Contractor provides Essential Collection Services and Basic Collection Services (residential and commercial garbage and commercial organics) in accordance with the normal collection intervals.
  - e. Regardless of labor disruption cause, within twelve (12) days CONTRACTOR also provides in addition to essential and basic collection services, provide Residential Organics Services, Bulky Waste Service, and active cleanup of any accumulated waste which has been set out for collection and not properly picked up during the Labor Disruption.

Liquidated Damages shall not commence until 5 days after Contractor-initiated lockout or 15 days after a union initiated strike, if Contractor provides the services as outlined above.

CWS finds the definition of Force Majeure in the RFP generally acceptable provided that it is "apples to apples" with the definition in the City Staff – WMAC negotiated Option 1. CWS is agreeable to further negotiations on the definition of Force Majeure to assure fair treatment of labor over the term of the contract. Based on the foregoing, CWS answers "YES."

**Default of Contract**

1. Failure to meet Exhibit 8 annual diversion requirement by more than 5%, City may put Contractor on corrective action plan to achieve compliance. Failure to meet corrective action plan may result in liquidated damages not to exceed \$150 per day.
2. Repetitive Compliance Issues will replace the term Habitual Violator. Under the circumstances of repetitive material compliance issues, City and contractor will meet and confer; contractor will implement a remedial action plan with a compliance date. Only after failure during this process lead to default.

CWS answers “YES” to both these changes. CWS has kept these changes in mind as it modified its BAFO generally.

**Contract Modifications and Changes in Law**

1. Should there be a change in the Mixed Materials and/or Organic Materials quantity, composition, or quality that affects the Contractor’s ability to meet the Diversion Requirements, City will negotiate with Contractor, an appropriate modification to the annual Diversion requirement. Should Contractor dispose of material in a landfill, no additional cost will be borne by City rate payers. Should disposal of the material be in conflict with applicable laws, City and contractor shall meet and confer. Should contractor provide demonstrated additional costs, City shall take action to address.
2. Should there be a change in the recycling commodities markets that affects the Contractor’s ability to meet the Diversion requirements, City will negotiate with Contractor a reasonable modification to the annual Diversion requirement. Should Contractor dispose of material in a landfill, no additional cost will be borne by City rate payers. Should disposal of the material be in conflict with applicable laws, City and contractor shall meet and confer. Should contractor provide demonstrated additional costs, City shall take action to address.

CWS answers “YES” to both these changes. CWS has kept these changes in mind as it modified its BAFO generally.

CWS expects that any and all terms and conditions negotiated and recommended between the City and WMAC shall be equally offered to CWS.

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## ***2. Service Group 2 Negotiated Term Sheet***

CWS has completed the Modified Service Group 2 Best and Final Offer Terms and has the following comments regarding each of the three (3) Alternative Contract Terms, as follows:

### **Service Standards**

1. Cart replacement of up to 10% per year for 10 years.
2. In year one of contract, 20% of carts shall be replaced with new. Following years of contract cart replacement shall be as needed, up to 3% replacement annually.
3. Use of existing trucks as spares in the fleet.
4. Lower pricing with a Call Center out of county and higher pricing with a Call Center in county.

CWS has answered “NO” to #1 above since it is answering “YES” to #2. An adjustment in the rates has been made as a result of lowering the cart replacement requirements.

For #3, CWS has answered “YES” to use its existing fleet as spares. An adjustment in the rates has been made as a result of being able to do this.

For #4, CWS has answered “NO” since it has already assumed a call center to be located in the City of Oakland, and not either in the County or out of the County in another state. For apples to apples, CWS believes that WMAC rates should be increased for an in-City of Oakland call center requirement and an out of county and out of state call center not be allowed.

### Charges and Rates

1. Changes to Refuse Rate Index
  - a. The annual RRI ceiling will be 6% and anything less than 8% will carry forward to next year, except in the final year when the RRI ceiling will be 8%
  - b. Floor will be -5%
  - c. From July 1, 2016 onward, annual adjustment to the Franchise fee will be by Consumer Price Index – All Urban Consumers, Series ID 1367 cuura422sa0, Not Seasonally adjusted, San Francisco-Oakland-San Jose, CA.
  - d. Franchise fee and Government Fees will each be a separate cost category (i.e., not included in the All Other cost category), included in the RRI weighted average, and not subject to any cap or carry-forward.
  - e. The Bureau of Labor Statistics Index Series ID: ceu6056210008 – Service Producing Industries used to calculate changes in the RRI Labor Category will be replaced with the actual changes in the Labor and Health and Welfare Benefits of a specific employee category in each of the Collective Bargaining Agreements utilized to provide services under the MM&O Contract.
  - f. Any rate increase in Local 70 Labor Cost Category that is greater than what would be allowed under current Local 70 CBA will be included equally over three years. Differential increase will be exempt from annual cap and carry-forward.
2. Per-unit per month payment instead of per-ton payment.

CWS has answered “YES” to #1 above with two proposed modification, as follows:

CWS proposes that customer rates be increased over the initial five-year term of the agreements in the first year by the RRI, then for next four years by the RRI plus a fixed 1.5 percent increase (the “Service Level Adjustment”), and in years following back to the RRI without any adjustment. The Service Level Adjustment will bring the rates to the level necessary to sustain full processing of RR Materials at the North Gateway Facility – thus giving the ratepayers the benefit of a reduced cost program up front and a full service program after five years. As a condition to the Service Level Adjustment, CWS will demonstrate, annually, that the completion of its North Gateway Facility is on track. By this means, CWS and the City can assure ratepayers that rate adjustments will ultimately be accompanied by an increased service level.

CWS proposes that the language be modified to replace MM&O with RR, as follows:

The Bureau of Labor Statistics Index Series ID: ceu6056210008 – Service Producing Industries used to calculate changes in the RRI Labor Category will be replaced with the actual changes in the Labor and Health and Welfare Benefits of a specific employee category in each of the Collective Bargaining Agreements utilized to provide services



under the ~~MM&O~~ **RR** Contract.

Regarding #2, CWS has answered “YES” changing the payments to per unit instead of per-ton payment. An adjustment in the rates has been made as a result of being able to do this.

CWS has kept these changes in mind as it modified its BAFO generally.

CWS expects that any and all terms and conditions negotiated and recommended between the City and WMAC shall be equally offered to CWS.

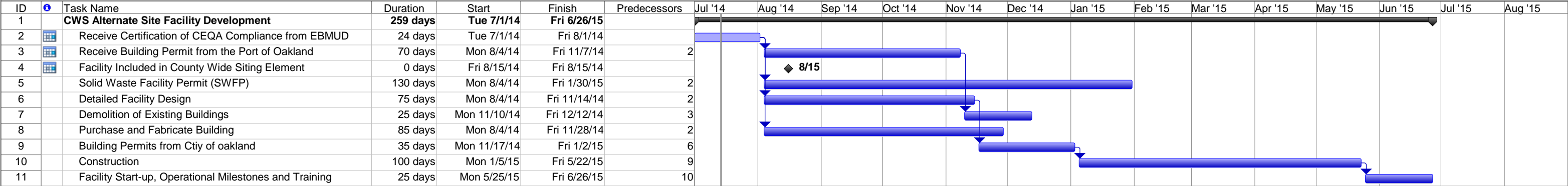
**Other**

- |   |
|---|
| <ol style="list-style-type: none"><li>1. \$1 million incentive payment to City for a 20-year contract.</li><li>2. \$1.5 million incentive payment to city for a 30 year contract.</li></ol> |
|---|

CWS has answered “YES” to both of these “Other” changes.

CWS is also proposing a base term of 15 years if the City were to allow CWS to utilize its trucks, carts, and radios for a 15-year life. CWS could amortize these assets over a longer term and reduce its rates through the offering of a first year discount. Alternative pricing is provided regarding this alternative in Section 2.11.

California Waste Solutions  
Interim Facility Development Project Schedule  
January 13, 2014



California Waste Solutions  
Interim Project Development Schedule Revision Date 07142014

Task

Split

Milestone

Summary

Project Summary

External Tasks

External Milestone

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

Progress

Deadline





D. Edwards, Incorporated

PROJECT MANAGEMENT

ENVIRONMENTAL SERVICES

July 14, 2014

Joel Corona  
Chief Operating Officer  
California Waste Solutions  
1820 10<sup>th</sup> Street  
Oakland, CA 94607

Subject: Project Schedule for the Proposed CWS Interim Material Recovery Facility

Dear Mr. Corona:

Please find attached a Microsoft project schedule for the above mentioned project. I have reviewed the time line and the logic for the preparation of the schedule and find that it is an aggressive but achievable schedule. The key tasks that are critical for success are the certification of CEQA compliance to be issued from East Bay Mud and the receipt of a "Building Permit" from the Port of Oakland. If these two tasks can be completed on the schedule provided, the balance of the agency permits are standard timelines and can be achieved.

The schedule is reliant upon parallel path task initiation and completion, including building demolition, and also requires that CWS initiate design and building purchase tasks prior to completion of the Solid Waste Facility Permit, which again is acceptable with some risk for project change following the review by the local enforcement agent and CalRecycle.

With consideration of these facts, it is my opinion that while aggressive, the schedule takes into consideration a logical agency review cycle, an appropriate purchase and delivery schedule for the fabric building and an achievable construction schedule for the project and is feasible.

Please give me a call with any questions.

Sincerely;

A handwritten signature in blue ink, appearing to read 'David Edwards', with a long, sweeping horizontal line extending to the right.

David Edwards  
President

---

**D. Edwards, Inc.**

<http://dedwardsinc.com>

Corporate Headquarters: • 500 S. Kraemer Blvd. Suite 180 • Brea, CA 92821 • Main Line: 714-582-3288 • Fax: 714-653-9830 • [info@dedwardsinc.com](mailto:info@dedwardsinc.com)  
Northern California: • 821 University St. • Healdsburg, CA 95448 • 707-395-0213 telephone • 707-395-0034 fax



# 中国工商银行 (美国)

INDUSTRIAL AND COMMERCIAL BANK OF CHINA (USA) NA

July 14, 2014

Mr. David Duong  
President & CEO  
California Waste Solutions, Inc.  
1820 10<sup>th</sup> St.  
Oakland, CA 94607

Re: City of Oakland Request for Proposals for Zero Waste Services issued 9/5/12 (The RFP)

Dear David:

On January 7, 2013, Industrial and Commercial Bank of China (USA) NA ["ICBC-USA"] had expressed strong interest in providing financial backing to the proposals of California Waste Solutions, Inc. ["CWS"] to the City of Oakland, for a new Mixed Materials and Organics (MM&O) collection and services (Service Group 1) contract.

We want to re-iterate our continued interest in pursuing this financing opportunity, which includes the financing of proposed transition activities, improvements at CWS's Materials Recycling Facilities in Oakland, purchasing the necessary rolling stock to provide the collection services, and other equipment and technology for office support, logistics, and maintenance.

The fact that you have engaged world class engineers, equipment suppliers, and consultants to assemble and execute your technical and business plan and proposal to the City of Oakland gives us confidence that the project would be viable. The undersigned had supervised the financing of CWS' prior projects while at East West Bank, CWS primary bank since 2001; and was most impressed to see CWS grows to become an award winning environmental company, with consistently strong operating and financial performances.

ICBC-USA has a strong presence in California and is interested in supporting good causes in California. We are part of the largest international banking group in the world by asset size and have the means to support the financing associated with the subject MM&O contract proposal to the City of Oakland.

Please note that while we are strongly interested and are committed to make a strong effort to provide the credit enhancement for the project, this is NOT a binding commitment to lend. Such a commitment would come only after the terms of the contract are finalized, we have fully reviewed/underwritten every aspect of the project, established terms and conditions for such financing and obtained internal credit approval. I am available to confirm ICBC-USA's strong commitment to work with CWS on its performance under its proposal to the City of Oakland. I can be reached at 415-352-6918 (direct line) or [laimw@us.icbc.com.cn](mailto:laimw@us.icbc.com.cn).

Sincerely,  
**Industrial and Commercial Bank of China (USA) NA**

Michael W. Lai  
Executive Vice President and Head of California Region





# 中国工商银行 (美国)

INDUSTRIAL AND COMMERCIAL BANK OF CHINA (USA) NA

July 14, 2014

Mr. David Duong  
President & CEO  
California Waste Solutions, Inc.  
1820 10<sup>th</sup> St.  
Oakland, CA 94607

Re: City of Oakland Request for Proposals for Zero Waste Services issued 9/5/12 (The RFP)

Dear David:

On January 7, 2013, Industrial and Commercial Bank of China (USA) NA ["ICBC-USA"] had expressed strong interest in providing financial backing to the proposals of California Waste Solutions, Inc. ["CWS"] to the City of Oakland, for a new Residential Recycling (RR) collection and services (Service Group 2) contract.

We want to re-iterate our continued interest in pursuing this financing opportunity, which includes the financing of proposed transition activities, improvements at CWS's Materials Recycling Facilities in Oakland, purchasing the necessary rolling stock to provide the collection services, and other equipment and technology for office support, logistics, and maintenance.

The fact that you have engaged world class engineers, equipment suppliers, and consultants to assemble and execute your technical and business plan and proposal to the City of Oakland gives us confidence that the project would be viable. The undersigned had supervised the financing of CWS' prior projects while at East West Bank, CWS primary bank since 2001; and was most impressed to see CWS grows to become an award winning environmental company, with consistently strong operating and financial performances.

ICBC-USA has a strong presence in California and is interested in supporting good causes in California. We are part of the largest international banking group in the world by asset size and have the means to support the financing associated with the subject RR contract proposal to the City of Oakland.

Please note that while we are strongly interested and are committed to make a strong effort to provide the credit enhancement for the project, this is NOT a binding commitment to lend. Such a commitment would come only after the terms of the contract are finalized, we have fully reviewed/underwritten every aspect of the project, established terms and conditions for such financing and obtained internal credit approval. I am available to confirm ICBC-USA's strong commitment to work with CWS on its performance under its proposal to the City of Oakland. I can be reached at 415-352-6918 (direct line) or [laimw@us.icbc.com.cn](mailto:laimw@us.icbc.com.cn).

Sincerely,  
**Industrial and Commercial Bank of China (USA) NA**

Michael W. Lai  
Executive Vice President and Head of California Region



### City Requests per email sent July 8, 2014 at 11:28 AM

*1. OMSS may be restricted by its lease with the City of Oakland regarding providing truck-related services to CWS. CWS may wish to investigate and verify its understanding with OMSS on these services*

#### CWS Comments and Responses

CWS is a Port related business because our product is primarily transported and traded through the Port to international markets. OMSS pledged interim capacity for CWS' trucks involved in sourcing material for that trade. CWS will require less than 3 acres for the interim parking of trucks, and CWS proposed investing in a CNG fueling station that can be used by OMSS clients, as well as, and the public.

*2. The City would like more detailed information on CWS' plans for customer billing, including the location where the billing services will be based, and how many employees of what types would be involved. Please differentiate between transitional and ongoing staffing.*

This question is addressed in the response to Question 3.

*3. For each service group, please identify the location where the customer service call center will be based, and the number of customer service representatives, supervisors, and or managers that will be employed. Please differentiate between transitional and ongoing staffing.*

#### CWS Comments and Responses

All customer service and billing activities (for both service groups) will take place at 1819 10<sup>th</sup> St, until the Oakland Gateway Facility is operational, at which point all operations will move to that site.

By having the Oakland call center and the San Jose call center, CWS is able to provide redundancy, to ensure any extended outages will result in customers will continue receiving the best possible service available. For its Oakland call center, CWS has reserved **1-510-OAKLAND** as an easy to remember call-in number for its customers.

The number of permanent customer service representatives for each service group are shown in Table 1 below.

**Table 1: Customer Service Employees**

	MM&O	RR	MM&O + RR
Customer Service Representatives	6	2	8
Senior Customer Service Representatives/Supervisors	2		2
Managers	1	1	2
<b>TOTAL</b>	<b>9</b>	<b>3</b>	<b>12</b>

All customer service employees will be cross-trained during transition to provide services to both MM&O and RR customers, and CWS will modify this staffing level as deemed necessary once it completes transition activities. Customer service staff will be continually trained to address customer concerns from all geographic locations, service types and sizes, and to assist SFD, MFD, and commercial service customers. CWS will add temporary staff during periods of anticipated peak service demand, including after holidays or seasonal cleanup events.

While CWS is in transition, it will employ additional customer service representatives to support the greater-than normal volume of calls expected while residents receive new carts, review communications from CWS, and while residential and commercial customers right-size their services. The number of total customer service representatives for each service group during the transition are shown in Table 2 below.

**Table 2: Transition Customer Service Employees**

	<b>MM&amp;O</b>	<b>RR</b>	<b>MM&amp;O + RR</b>
Customer Service Representatives	11	3	14
Senior Customer Service Representatives/Supervisors	3		3
Managers	1	1	2
<b>TOTAL</b>	<b>15</b>	<b>4</b>	<b>19</b>

Developing, implementing and maintaining extremely high levels of customer service skills are essential in maintaining and increasing customer satisfaction. All representatives are trained and empowered to resolve customers' needs, letting the customer feel that CWS does take their needs seriously. Customer Service Employees include:

- A Customer Call Center Manager for each service group will continually motivate the Customer Service Technicians to provide courteous, helpful, and quick customer support, to resolve any customers' needs and to be pro-active. The Customer Service staff will be consistently evaluated to ensure that staffing levels are maintained to provide the highest service levels and to exceed contract level requirements.
- Senior Customer Service Representatives, who will support the Call Center Manager for each service group.
- Customer Service Representatives, who are the front line for customer contact and support for all Oakland customers.

The CWS Customer Service Representatives, and all other CWS operations, have access to the valuable Route Accounts Management System (RAMS) computer software tools. RAMS capabilities include secure customer billing, customer payments, intra-departmental communication, routing/dispatch, reporting, route modeling, rate changes, container inquiry/inventory, customer inquiry, customer entry/maintenance, route audit tracking, work

order generation, real-time route changes, direct communication to drivers in the field, remote access worldwide, internet payment and billing information.

When customer calls are received, CWS Customer Service Representatives using the RAMS customer service and billing system will determine the type of inquiry, e.g., service-related, billing problem, container exchange, etc. During the call, the following information will then be entered by the CSR who will print a standard two-part automated service call work order at the Dispatch office.

- Date and time of customer contact with CWS plus; date and time response was provided; date and time resolution was provided; description of CWS' resolution of service issue or complaint, or response to inquiry; CWS' employee identification codes for employees inputting the complaint or inquiry as well as the resolution
- Customer's name and contact information: phone numbers, e-mail address, account address; service address; and occupant address
- Service location information: including where applicable, number of units; number, size and type of mixed materials and organics containers; collection service day; route number; backyard service status; special handling service status; and bulky item collection history (e.g., number of annual services performed, date requested, date provided)

The customer's request for service is handled at the time the customer contacts CWS. CWS adheres to the City's requirements regarding wait duration and same day/next day service following requests.

If the customer attempts to contact CWS after business hours (outside the hours of 7AM – 6PM or on weekends), they will reach an after-hours call service – VOIP (digital voicemail) that can be transferred to supervisors or drivers. The customer will be contacted the following day to resolve any service requests or questions.

In order to ensure that any customer calling into the customer call line (**1-510-OAKLAND**) is able to communicate effectively with our staff, CWS uses and will continue to use Language Line Personal Interpreter Services. These highly qualified interpreters are just a phone call away and virtually any language is available 24 hours a day. Once CWS determines the language the customer communicates in, our representatives will use this service to have a live person translate their conversation back and forth. In this way, each customer no matter his or her potential language barriers will be able to experience the "World Class" Service model. Additionally CWS will maintain a TeleTypewriter Telecommunications Device for the Deaf (TDD) service for our customers who utilize this service to ensure that their service needs are met with the same level of professionalism.

Prior to transition, CWS will update its website to provide clear points of contact for all customers. Through this website, CWS will have an online service request form, and on line

chat capability during business hours, both of which customers may use to contact CWS. CWS will work to create a customer- and multi-platform-friendly phone application, where customers can access their collection schedules, receive notifications of holiday changes or other service modifications, and can submit questions and service requests.

In addition to its in-office customer service staff, CWS' drivers are trained to be the front line in resolving customer questions and concerns. Collection drivers report operational issues to a central dispatcher; who in turn provide instruction or issue an electronic work order to customer service and the appropriate route supervisor. Should immediate action be required, the crewmember can connect with the supervisor directly. All vehicles and personnel will be assigned a mobile communications device and an on-board computer, allow communication between supervisors, crews, dispatch, customer service, maintenance, and customer outreach personnel on a real-time basis. On-board systems will be closely integrated with CWS' customer service databases, so drivers can immediately input service inquiries, validate service conditions and circumstances, record improper setouts and engage education and outreach requests.

Billing will be addressed by a Billing Manager and two Billing Representatives, with the support of CWS' third-party billing software manager. CWS's Enterprise Class billing system integrates Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM), and provides both CWS and our customers with real-time access to business-critical data, a wide range of information and the ability to analyze detail. CWS customer service staff housed in Oakland will be the direct point of contact for all customers who call in on billing, payment and collection matters.

Our advanced system can facilitate accurate filing and accounting of customers. It seamlessly integrates ERP and CRM to provide comprehensive up-to-date information. The main features of the system are: General Ledger Management, Controlling and Budget Management, Fixed Asset Management, Compliance Management, Bad Debt Collection, Accounts Receivable, and Accounts Payable. Several new components will be added to CWS's already robust and proven Rams Customer Service System to enhance its current Customer Billing System and provide additional features.

CWS will maintain the same billing cycle and frequency currently in place for all Oakland customers. Every customer will receive a personal profile in our system that contains a unique account number, service classification, related payments and other relevant information. Invoices will be generated by the Rams Customer Service System. Once invoice reports are approved, electronic invoice information will be transmitted in encrypted format to a 3rd party billing company and data receipt will be automatically confirmed to CWS. Information on Bend Mailing, which has been identified as our 3rd party billing company, will use a time tested proven method to send invoices to all of our customers within 48 hours. Information on Bend Mailing is provided below.

CWS will offer customers clear and professional, paper based and online invoices and add the RAMS Online Billing Module to the current Rams System. This Module allows customers to login into a secure web based portal to review accounts online. Through this online portal, customers

can view service and payment history; submit customer service requests, such as change of service, address, etc.; and make online payments. Customers can make payments in person, by phone, online and by mail.

Paperless billing, E-Bill pay and online customer services allow customers to:

- Sign up/change services
- View rates, pickup schedules, collection calendar, and manage their account
- Pay online with PayPal, credit cards, checking or saving account
- Submit a question or report a problem with services
- Submit billing questions
- Access “Frequently Asked” online bill pay assistance questions

Following internal review, billing data will be transmitted using the Rams Customer Service System through a process initiated by the Customer Service Manager. This data will be processed to generate an electronic file that contains all invoice information. This file will be submitted electronically through an encrypted secure method to the 3rd party billing company. The receiving system will verify that the transmitted file was sent without errors and provide an instant electronic confirmation of receipt.

Our Billing System uses a highly robust and industry standard Microsoft SQL database to house all customer service and customer billing information. Use of this highly standard, widely used database allows our other systems to integrate very closely with our Billing System through the use of data queries.

Our System Administration plan includes various fail-safe components including hardware redundancy; remote access and functionality, such that in an emergency CWS can continue servicing customers from one of our other facilities in a manner that is completely transparent to our customers; and nightly encrypted backups to our offsite location of the entire billing and customer data components.

***4. The City requests clarification on whether CWS' proposal for a 1.5% annual rate increase above RRI would start at the end of Year 2 or the end of Year 3.***

CWS Comments and Responses

CWS's proposal for a 1.5% annual rate increase above RRI would start at the beginning of year 2. Please refer to Table 3.



**Table 3: CWS's Proposed Rate Adjustment**

Contract Year	Effective Date	Rate Adjustment (1)
1	7-1-15	CPI
2	7-1-16	RRI + 1.5%
3	7-1-17	RRI + 1.5%
4	7-1-18	RRI + 1.5%
5	7-1-19	RRI + 1.5%
6	7-1-20	RRI
7	7-1-21	RRI
8	7-1-22	RRI
9	7-1-23	RRI
10	7-1-24	RRI

Notes:

(1) Per the RFP, dated November 16, 2012, page 3-9, line 494, "The City will adjust the initial proposed Maximum Service Rates, including the franchise fee, during the month of March 2015 to mitigate changes in costs from the time the proposed rates were accepted by the City and July 1, 2015. The adjustment will be based on the change in the 2014 CPI as described in Article 7 of the MM&O Collection Services Contract." Similar language in the RFP is provided for the RR contract.

***5. Please provide letter of commitment from Republic Services Group to support CWS proposal for Disposal Services.***

**CWS Comments and Responses**

The letter of commitment from Republic Services Group is provided as Attachment A to this response.

***6. Please clarify which of the two proposed landfills is the primary disposal site, and under what circumstances the contingent disposal site would be used.***

**CWS Comments and Responses**

The Vasco Road Landfill will be the primary disposal site is the Vasco Road Landfill. The contingent disposal site will be the Keller Landfill. The circumstances governing use of the contingent disposal site will be the availability of capacity at the primary site. The expectation is that Vasco will receive at least 60% of the material to be landfilled, with the balance sent to Keller.

***7. Are there any exceptions or revisions to the Disposal Services contract? If so, please provide them.***

CWS Comments and Responses

Exceptions to the Disposal contract are provided as Attachment B to this response.

***8. Please provide updated bank guarantees for the CWS proposals for each service group.***

CWS Comments and Responses

Updated bank guarantees for the CWS proposals are provided as Attachment C to this response.

***9. Please provide a letter from a qualified independent professional backing the feasibility of the proposed schedule indicated in Table 3 Schedule for Interim Facility.***

CWS Comments and Responses

A letter from DEI (a qualified independent professional) backing the feasibility of the proposed schedule for the Interim Processing and Transfer Facility, and a project schedule, are provided as Attachment D to this response.

***CWS Comment on New Indemnity Language***

CWS has made the following modifications to the City's proposed indemnity language:

"26.02 Contractor Indemnity Regarding City Approvals. To the maximum extent permitted by law, Contractor shall defend (with counsel **reasonably** acceptable to the City), indemnify, and hold harmless the City, the Oakland City Council, the Oakland Redevelopment Successor Agency, the Oakland City Planning Commission and their respective agents, officers, employees and volunteers (hereafter collectively called "City Parties") from any liability, damages, claim, judgment, loss (direct or indirect) action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to ~~attack~~ set aside, void or annul this Agreement or any City Approvals approved concurrently herewith or any Subsequent Approval or the implementation of the same **based upon an allegation that the City shall have failed to comply with the California Environmental Quality Act**. The City may elect, in its sole discretion, to participate in the defense of said Action at City's **sole cost and expense** ~~and Contractor shall reimburse the City for its reasonable legal costs and attorneys' fees.~~

Within ten (10) calendar days of the filing of any Action as specified in the preceding paragraph, Contractor shall execute a Joint Defense Letter Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Joint Defense Letter of Agreement shall survive termination, extinguishment, or invalidation of the City Approval or any Subsequent Approval requested by Contractor. Failure to timely execute the Letter Agreement does not relieve the Contractor of any of the obligations contained in this Section or other requirements or Conditions of Approval that may be imposed by the City.”

#### **City Requests per email sent July 8, 2014 at 5:35 PM**

*1. Review the City's attached calculations of CWS rates and revenues, which are based on rate sheets submitted by CWS on 6-13-14 (i.e., not including any 1.5% RRI additions) in response to the City's request for revised BAFO proposals following the May 29, 2013 Oakland City Council meeting.*

This question is addressed in the response to Question 2, below.

*2. Confirm these calculations accurately present CWS' proposed rates, at a disposal tip fee of \$46.43 at Altamont Landfill & \$44.25 at Vasco Rd. Revenues. The <<Alt Rev Anal>> workbook tab calculates estimated rate revenues that would be generated by CWS' proposed rates, based on the container counts provided in the RFP. Other workbook tabs correspond to the rate sheets submitted by CWS - please be sure to review rates in tables titled "Final BAFO", including application of Multi-Service Discounts. Note: Since CWS did not propose an out-of-county call center option, rates are the same for "In-County Call Center" and "Out of County Call Center" on all pages.*

#### **CWS Comments and Responses**

- CWS provided MMO rates without any 1.5% RRI additions and with 100% replacement of WMAC carts on 6-26-14, per City request; these rates are used in City analysis.
- CWS provided RR rate of \$10.39 with 50% replacement of carts (carts owned by WMAC) on 6-26-14; this rate is used in City analysis.
- CWS recommends the following changes to the workbook. These changes are highlighted in bright blue in the attached revised workbook:
  - Form 2A, cell E89 should be the same as cell E32 = 18,489.
  - Form 2B, cell E60, Q60, and E158 should be 0.11 instead of 0.06.
  - Form 2D, cell E130 should be 0.04 instead of 0.03.
  - Form 2D, beginning in cell E132, blue highlighted cells changed to match original proposed rates.
  - Form 2E, beginning in cell E201, blue highlighted cells changed to match original proposed rates.
  - Form 2G (1), cell H37 was \$1,100.57 in 6-13-14 submittal and was corrected to \$1,546 in 6-16-14 and 6-26-14 submittals.

- Form 2G (1), beginning in cell E85, blue highlighted cells changed to match original proposed rates.
- RR Rates, beginning in cell D19, blue highlighted cells changed to match proposed multi service discount provided with revised rates on 2-21-14
- Based on CWS's review of the roll-off counts in the RFP Table 2-5, Attachment 5 of the RFP for Commercial Garbage Service Data, and in the City's rates and revenue analysis tab 2G (1), the following was found. Details of the analysis are included in tab "RO Count Comparison". Please provide data source for roll-off counts in City Analysis and please identify preferred roll-off count.

	RFP Table 2-5	RFP Attachment 5	City Analysis
<b>Total Boxes and Compactors</b>	107	130	233

- Please note CWS did not originally include the disposal revenue from roll-off boxes or compactors since it is a pull rate only per Form G.

LAW OFFICES OF  
**SCOTT W. GORDON**  
A PROFESSIONAL CORPORATION  
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LOS ANGELES, CALIFORNIA 90014

ENVIRONMENTAL, LAND USE  
PUBLIC AGENCY PRACTICE  
MUNICIPAL CONTRACTS

REPLY TO: WALNUT CREEK

PHONE: 925-295-3133  
FAX: 925-295-3132

July 10, 2014

Via E-Mail

Mr. Joel Corona  
California Waste Solutions, Inc.  
1820 10th St.  
Oakland, CA 94607

Re: Republic Services' Exceptions to draft Disposal Agreement, City of Oakland Zero Waste RFP

Dear Mr. Corona:

I represent Republic Services of Contra Costa County ("Republic") in connection with Republic's proposal to provide solid waste transfer and disposal services in support of California Waste Solutions, Inc.'s ("Cal Waste") response to the Zero Waste request for proposals issued by the City of Oakland. Republic would be providing transfer and disposal services utilizing its Golden Bear Transfer Station facility located in Richmond, California, the Vasco Road Landfill located near Livermore, California, and/or the Keller Canyon Landfill located southwest of the City of Pittsburg, California.

I have had the opportunity to review the draft Disposal Contract included in section 5 of the City's RFP document, and have identified several contract provisions where Republic would need to take exception and seek alternative language in order to be in a position to execute the final agreement with revisions based on the exceptions. I noted in reviewing the record that Waste Management of Alameda County ("WMI") had also previously noted exceptions to the draft Disposal Contract. All of the exceptions previously noted by WMI are included in my list of Disposal Contract provisions that should either be deleted or revised.

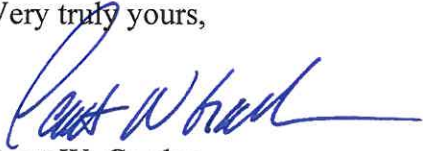
In the interests of time, I have enclosed the WMI exceptions identifying the areas of the Disposal Agreement where revisions are necessary. Please include these WMI exceptions as exceptions to the Disposal Contract that are taken by Republic Services as well in your Best and Final RFP response to the City.



Mr. Joel Corona  
California Waste Solutions, Inc.  
July 10, 2014  
Page 2

Thank you for your attention to this matter. Please let me know if you should have any questions regarding the exceptions.

Very truly yours,



Scott W. Gordon  
Counsel for Republic Services of  
Contra Costa County; Golden Bear  
Transfer Services, Inc.; Vasco Road  
Landfill, LLC; Keller Canyon Landfill  
Company, Inc.

SWG:bmc

Cc: Michael Caprio  
Shawn Moberg  
Rick King  
Peter Nuti  
Richard Norris, Esq.



July 9, 2014

Mr. Joel Corona  
California Waste Solutions, Inc.  
1820 10th St.  
Oakland, CA 94607

Re: Republic Services Participation in California Waste Solutions' Response to City  
of Oakland Zero Waste RFP


Dear Joel:

This letter will confirm that Republic Services of Contra Costa County ("Republic") is partnering with California Waste Solutions, Inc. ("Cal Waste") providing solid waste transfer and disposal services in support of Cal Waste's proposal in response to the Zero Waste request for proposals issued by the City of Oakland. Republic will be providing transfer and disposal services utilizing its Golden Bear Transfer Station facility located in Richmond, California, Vasco Road Landfill located near Livermore, California, and/or the Keller Canyon Landfill located southwest of the City of Pittsburg, California.

Golden Bear Transfer Station, Vasco Road Landfill and Keller Canyon Landfill are all fully permitted, modern franchised facilities with available capacity to handle the City of Oakland's disposal needs. There are no geographic restrictions or permit limitations on any of these facilities that would preclude Republic's receipt, transfer and disposal of the City of Oakland's solid waste. Our landfill facilities are fully authorized to accept City of Oakland solid waste delivered to the Golden Bear Transfer Station for transfer and disposal.

We are pleased to be partnering with Cal Waste in this matter and look forward to providing services to you and the City of Oakland. Please let me know if you have any questions or should need any further information from me, and we will be happy to timely respond.

Very truly yours,

  
Shawn Moberg  
General Manager

SM:oc

**CWS Alternative RR Rate Package for a term of 15 years plus 5 year option** – Clarified, and proposed and submitted on Thursday, July 17 at 3:45PM.

- 1) CWS charges a RR year-1 base rate of \$8.85 per month per unit. The year-1 base rate of \$8.85 includes the 5% discount specified under Section 2.11 of the BAFO multi-service 15 year proposal. During years 2, 3 and 4 that base rate will be impacted with an annual increase of \$0.97 plus RRI, per month per unit. In year-5 through the expiration that rate will be impacted by RRI only.
- 2) CWS begins service with a bio-diesel (B20) collection fleet between the initial year-1 through year-5. In year-6 and through the expiration of the agreement, CWS will re-power its collection fleet and use CNG fuel in its collection fleet.
- 3) CWS's proposal for the Alternative RR Rate Package includes resetting the rates lower in Year 7. The rates in Year 7 would be equivalent to the rate as if the base rate of \$10.39 were escalated as per the RFP. As noted by CWS before, CPI and RRI values for future years are unknown. However, CWS has provided an example below using 2014 CPI and RRI rates to show how to calculate the reset rate in Year 7 highlighted in blue.

Example Table Showing RR Rate in Year 7	
Base Rate	\$10.39
Year 1 (Base Rate + CPI)	\$10.61
Year 2 (Year 1 Rate+RRI)	\$10.74
Year 3 (Year 2 Rate+RRI)	\$10.87
Year 4 (Year 3 Rate+RRI)	\$11.00
Year 5 (Year 4 Rate+RRI)	\$11.14
Year 6 (Year 5 Rate+RRI)	\$11.27
Year 7 (Year 6 Rate+RRI)	\$11.41
Assumptions	
2014 CPI	2.12%
2014 RRI	1.22%

**City Requests per email sent July 17, 2014 at 7:10 PM**

1. *In Section 2.11 on page 29 of the BAFO dated June 13, 2014, CWS proposes several discounts “for year one only” for lengthening the contract term to 15 years. Please confirm whether these “year one” discounts represent a base rate discount that is then carried forward through the end of the contract term.*

**CWS Comments and Responses to Question #1:**

In Section 2.11 on page 29 of the BAFO dated June 13, 2014, CWS’s intention was for the discounts to occur “for year one only” for lengthening the contract term to 15 years. These “year one” discounts **do not** represent a base rate discount that is then carried forward through the end of the contract term. CWS intended for Year 2 rates to include the base rate plus RRI.

2. *In your 7/16/14 email to Zero Waste RFP you state that “CWS has enclosed the Rate and Revenue workbook for MM&O that includes the RRI + 1.5% increases between year-2 through year-5.” However, the attached workbook shows only Year 1 rates. Please provide rate forms that show the proposed rates for Year 2 through Year 5.*

**CWS Comments and Responses to Question #2:**

CPI and RRI values for future years are unknown at this time. However, CWS has provided Table 1 below that includes an example of what the rates might look like for SFD 32 gallon MMO cart using 2014 CPI and RRI.

What are the City’s assumptions for CPI and RRI values for future years?

(Continue to page 2)

**Table 1: Example Table Showing SFD 32 Gallon Cart with RRI+1.5% for Years 2 Through 5 Going to Altamont Landfill**

<b>Example Table Showing SFD 32 Gallon Cart with RRI+1.5% for Years 2 Through 5 Going to Altamont Landfill</b>	
Base Rate	\$28.52
Year 1 (Base Rate + CPI)	\$29.12
Year 2 (Year 1 Rate+RRI+1.5%)	\$29.92
Year 3 (Year 2 Rate+RRI+1.5%)	\$30.73
Year 4 (Year 3 Rate+RRI+1.5%)	\$31.57
Year 5 (Year 4 Rate+RRI+1.5%)	\$32.43
<b>Assumptions</b>	
2014 CPI	2.12%
2014 RRI	1.22%
In Addition to RRI	1.50%