

1. INTRODUCTION

1.4. Table of Contents

1.1.	Proposal Surety	
1.2.	PERFORMANCE SECURITY COMMITMENT LETTER	
1.3.	RECEIPT OF SIGNED ADDENDA	1-13
1.4.	TABLE OF CONTENTS	
2.	EXECUTIVE SUMMARY	2-1
3.	QUALIFICATIONS	3-1
3.1.	KEY STAFF	3-11
3.1.1.	OWNERS	3-14
3.1.2.	Management Staff	
3.1.3.	Subcontractors / Affiliated Companies	
3.2.	SUMMARY QUALIFICATIONS	
3.3.	References	
3.3.1.	CITY OF OAKLAND	
3.3.2.	CITY OF SAN JOSÉ	
3.4.	LITIGATION HISTORY	
3.4.1.	Past	
3.4.2.	Current / Threatened	
3.4.3.	Enforcement Actions	
3.4.4.	Revocation/Suspension	
3.4.5.	CLAIMS	
4.	STATEMENT OF FINANCIAL QUALIFICATIONS	
4.1.	FINANCE:	
4.2.	LABOR AGREEMENT:	
5.	Technical Proposal	
5.1.	Transition Plan	5-2
5.1.1.	TIMELINE	
5.1.2.	Carts and Bins	
5.1.3.	Vehicles and Routing	
5.1.4.	LABOR, MANAGEMENT, AND COORDINATION	
5.1.5.	FACILITIES	





I. INTRODUCTION

5.1.5.1.	MRF	
5.1.5.2.	VEHICLE MAINTENANCE AND SUPPORT	
5.1.5.3.	Interim Vehicle Parking	
5.1.6.	SFD AND MFD PROGRAMS IMPLEMENTATION	
5.1.7.	CITY PROGRAMS IMPLEMENTATION	5-13
5.1.8.	COMMERCIAL NON-EXCLUSIVE RECYCLABLE MATERIAL PROGRAMS IMPLEMENTATION	5-13
5.1.9.	Public Education and Outreach	5-15
5.1.10.	COORDINATION	5-18
5.1.11.	COMBINED SERVICES	5-20
5.2.	Collection Services Operations Plan	5-20
5.2.1.	VEHICLES	5-22
5.2.2.	Containers	5-26
5.2.3.	Route Operations	5-28
5.2.4.	COMMERCIAL RECYCLING COLLECTION AND PROCESSING SERVICES	5-32
5.2.5.	FACILITIES	5-35
5.2.5.1.	Oakland Gateway Facility	
5.2.5.2.	1 OTH ST. MAINTENANCE FACILITY	5-45
5.2.5.3.	1 OTH STREET MRF	5-46
5.2.5.3.1	. FACILITY SCHEDULE AND LABOR	5-47
5.2.5.4.	Facility Operations	
5.2.5.4.1	. LOAD SCREENING	5-50
5.2.5.4.2	SORTING PROCESS	5-51
5.2.5.4.3		
5.2.5.4.4		
5.2.5.4.5		
5.2.5.4.6	. EMERGENCIES	5-57
5.2.5.4.7	. Transportation	5-59
5.2.5.4.8		
5.2.6.	Training	
5.2.6.1.	Driver Training	
5.2.6.2.	RISK MINIMIZATION AND ENVIRONMENTAL SAFETY	
5.2.7.	Reporting	





1. INTRODUCTION

5.2.7.	Reporting	5-68
5.3.	Diversion Plan	
5.3.1.	DIVERSION PROGRAMS	
5.3.2.	Oakland Material Recovery Facilities	
5.4.	CUSTOMER SERVICE PLAN	
5.4.1.	CUSTOMER SERVICE TECHNOLOGY PLATFORM	
5.4.2.	CUSTOMER SERVICE PROTOCOL	
5.5.	COMMUNITY OUTREACH STRATEGY	
5.5.1.	PUBLIC EVENTS	
5.5.2.	COMMERCIAL OUTREACH	
5.6.	Employee and Labor Relations	
6.	FORMS	
7.	APPENDICES	
FIGUE	250	
FIGUR		
	3-1 San José Facility	
	3-2 Da Phuoc Integrated Solid Waste Facility	
	3-3 DPI Facilities	
	3.1-1 CWS Organizational Chart	
	4.2-1 Correspondence Illustrating Status of Labor Agreer	
	5.3.1-1 Areas of On-Board FleetMind Connectivity	
	5.2.5.1-1 Gateway Location in Oakland	
	5.2.5.1-2 Location of CWS Facility on Gateway Site	
	5.2.5.1-3 Oakland Gateway Facility Renderings	
Figure	5.3.2-1 Materials Flow Diagram	5-77
TABLE	S .	
Table	1.1-1 Addenda Received	1-5
	3-1 City of San José Diversion	
	3.2-1 Private Companies Serviced by CWS Oakland	
	5-1 Tonnage Projections	
		Service Group 2 - January 9, 2013





1. INTRODUCTION

Table 5.1.2-1 CWS Residential Cart Preferences (Subject to City of Oakland Approval)	5-8
Table 5.2.5-1 CWS MRF Capacity	5-10
Table 5.2.1-1 Emission Reductions for CNG Vehicles Compared to Diesel Vehicles	5-23
Table 5.2.1-2 Vehicle Equipment Metrics	5-24
Table 5.2.5.1-1 Projected Oakland Gateway Facility Development Schedule	5-45
Table 5.2.5.2.1-1 Staffing at 10 th Street MRF	5-47
Table 5.2.5.2.1-1 Staffing at the Oakland Gateway Facility	5-48
Table 5.2.7-1 CWS Reporting Requirements	5-68
Table 5.3.2-1 Diversion Program Action Item Schedule	5-77
Table 5.3.2-2 Tonnages of Recyclable Material Received	5-79
Table 5.3.2-3 Overall Diversion Outcome	5-80

APPENDICES

- Appendix 7-1 Proposal Alternatives and Exceptions
- Appendix 7-2 Additional Relevant Experience
- Appendix 7-3 California Waste Solutions (CWS) Solid Waste companies and facilities in Vietnam
- Appendix 7-4 Bond Financings
- Appendix 7-5 DEI and JRMA Experience
- Appendix 7-6 Bank Letters
- Appendix 7-7 City of San José Reference Letter and Certificate of Commendation
- Appendix 7-8 Letters of Commendation and Reference from Recent Clients and Community Partners
- Appendix 7-9 Timeline (Gantt Chart)
- Appendix 7-10 Additional Vehicle and Cart Information
- Appendix 7-11 Safety and Training Record and Supporting Documents
- Appendix 7-12 Waste Characterization Reports
- Appendix 7-13 Transition Team Background
- Appendix 7-14 Oakland Gateway Facility Supporting Materials
- Appendix 7-15 OMSS Letter





2. Executive Summary

CWS seeks to provide services defined in Residential Recycling (RR) Collection Services (Service Group 2).

CWS - Strong Local Team; Highly Committed to Oakland

With deep roots in Oakland and the Bay Area, CWS strives to provide exemplary and innovative service, protect the environment, exceed customer expectations, maintain a positive and rewarding work environment, and constructively affect communities in which it works. CWS has enjoyed a productive relationship with the City of Oakland since 1993. This partnership will continue with this new franchise during transition and beyond as CWS provides excellent collection and diversion services, thorough tracking and reporting, and continuous communication with City staff and other program stakeholders.

CWS' team of managers and line employees has the extensive backgrounds, experience and expertise to ensure a successful partnership with Oakland. Key team members include: David Duong, President, lead executive and responsible party, with over 25 years' experience in collecting, processing, product development, marketing and brokering, Kristina Duong, Vice President and Executive Director involved in nearly every area of CWS activities including operations interface to ensure support, guidance, and resources for all CWS programs, and Joel Corona, Chief Operations Officer, who manages operation and expansion of collection and processing services and facilities, including development of a new, mixed materials processing facility.

Other team members include Westhoff, Cone & Holmstedt for public finance, D. Edwards, Inc. (DEI) for design, environmental and project management, J.R. Miller & Associates for facility design, site planning, and engineering, Oakland-based Circlepoint, Next Generation, and Kneal Resource System for public education, communications and local communities engagement, and Gershman, Brickner, & Bratton, Inc., (GBB) for solid waste management consulting.

Our Plan - Pathway to Success

Section 5 that details our plan to meet and exceed the City's requirements is highlighted below:

Diversion: Our program will increase diversion through continuous modernization of processing equipment and processes; development and operation of a new, state of the art facility; and implementation of bold, achievable, and consistent public education initiatives. According to our diversion plan and in sync with Oakland's Zero Waste goals, we are confident of meeting a 92% rate by 2025.

Transition: Given that CWS currently collects and processes recyclables for approximately half of Oakland, adding the remaining customers involves expansion of current operations as opposed to initiating a new start-up. Considerable attention will be focused on new customer outreach to assure continuity of service with no perceptible disruption. A Gantt chart in Section 5.1 details planned transition activities.

Collection: CWS, collecting curbside since 1992, maintains a high collected-on-time percentage. Existing and new customers should experience no fundamental change in service. Residents will receive new carts of the same size they currently have and overall, collection days will remain the same. Our collection fleet will be expanded with new, CNG powered vehicles that reduce environmental impacts. CWS will collect the full range of recyclables identified by the City, including specialized targeted materials such as batteries and used motor oil and filters.





2. EXECUTIVE SUMMARY

Processing: CWS currently operates two materials recovery facilities (MRFs) in West Oakland; each processing single-stream and source-separated residential and commercial materials through modern equipment. Oakland's materials will be processed at the existing 10th St. plant until a new state-of-theart Oakland Gateway Facility, that will consolidate of all CWS Oakland processing activities in one location, is developed on the former Army Base. Prior to starting the Oakland RR contract, 10th St. will be upgraded to improve capability, maximize diversion and increase market value of current and additional recyclable commodities.

Special Materials: CWS will team with companies that specialize in handling and disposal of household hazardous waste, used motor oil and filters, batteries, and sharps. Thus, CWS ensures that special materials continue to be properly managed, recycled, and diverted from landfill. The public will continue to be educated about the proper handling and discard of special materials.

Customer Service: Customer service is a priority and CWS will increase the current customer service staff, house their activities in our Oakland offices, comply with all requirements for call answering and response times, and publicize our *1-510-OAKLAND* phone number. Our Visual RAMS-Pro customer service software program details and logs call center transactions and City staff will have access to various reports. CWS will continually review operational data to identify opportunities for service improvement.

Public Education: CWS will pursue creative and compelling public communications and collateral to improve recycling and waste reduction habits. We advocate City approval of a data-driven, innovative and visual campaign that motivates Oaklanders to maximize recycling practices and drives customer change in a targeted manner with ongoing refinements based on actual behavior. Innovative branding, messaging, media, and involvement with students and community-based organizations will be used. Research from behavioral sciences will be incorporated into effective message development.

Employee Training: CWS has a variety of ongoing training programs that address health and safety, proper equipment handling, workplace behavior, etc.

Labor Relations: Employees are currently represented by three unions, thus assuring that they receive living wages and generous benefits under the Oakland contract. We have a goal of hiring the majority of new employees who are Oakland residents.

Synergistic Benefits: Award of both the RR and MMO franchises to CWS will result in a discounted price for these services as well as increased other benefits to the City. Because each will operate exclusively out of an Oakland facility, more well compensated jobs will be available to Oakland residents, public education strategies and implementation will be better coordinated, and the City will have an all-in-Oakland solution

In Summary, CWS – Your Oakland Solution for Zero Waste!





3. Qualifications

Beginning in 1992 as a small company, California Waste Solutions, Inc. (CWS) has evolved and grown into one of the largest recyclers in the Bay Area. CWS owns and operates four materials recovery

facilities (MRF) – two in Oakland, one in San José, and one in Vietnam – as well as a dispatch and repair facility for a fleet of collection and transfer trucks. The following relevant experience highlights CWS' history in the recycling and collection industry as well as the highly experienced and motivated team that CWS has assembled for this proposal. The CWS team has built a business that serves customers and sources materials throughout the western United States and beyond.

CWS proposes to transition from the City of Oakland's current two-district recycling franchise into a citywide franchised residential recycling collection system. CWS will provide the City a seamless transition that is well-managed, trouble-



free, and opportunity rich. CWS further proposes to provide non-exclusive commercial collection services. CWS Citywide service will enable the City of Oakland to achieve and exceed its 75 percent diversion goal by reducing residue sent to the landfill.



1. CWS Vehicle Yard

Over approximately 20 years, CWS has continually grown in our expanded success and ability to educate about, collect, process, and market recyclable materials.

CWS has extensive experience in efficient collection, processing and marketing of recyclables for the highest uses and best prices possible. CWS has pioneered markets in Asia for hard-to-recycle grades of paper generated from emerging singlestream collection programs for greater than Recovered materials are 15 years. selectively sold to environmentally sound global markets for conversion into recycledcontent products. In addition to selling our CWS full-service materials, provides sourcing, processing and brokering of

recyclable commodities that leverage years of operating experience and success in negotiating direct supply contracts with domestic and overseas mills to ensure stable markets and the best prices for large volumes of recyclables.

CWS' innovative and effective operations collect recyclables from approximately 250,000 customers in the Bay Area. CWS customers include residential, multi-family, commercial and industrial customers. Commercial and industrial customers include:





- Large and small business buildings, including high-rise and multi-building campuses
- Large and small multi-family and mixed-use properties
- Institutional facilities, including school and college campuses
- Governmental facilities, including municipal offices
- Manufacturing and distribution companies
- Shopping and retail centers
- Sports and entertainment facilities
- Hospitals and laboratories

CWS' expertise in and success with serving these enterprises is linked to our high level of customer service, communication, and dedication. Features that enable CWS to continue earning business include provision of:

- Highly valued and effective recycling services
- Effective and continual communication, public education and feedback
- Customized recycling services with continuous outreach and waste audit support

CWS developed and invests in innovative collection and processing technology that maximizes safety, efficiency, quality, and environmental sustainability. This investment has earned CWS a leadership role in the recycling industry as the company accomplished a series of "firsts" for its customers and community.

• First single-stream processing facility in the City of Oakland – BHS and Machinex processing

 First use of diesel particulate emission filters in a solid waste collection fleet — Cummins ISM Engines.

 First use of expansive advanced technology, optical sorting systems in a MRF in the western United States – Machinex/Pellenc Systems.

CWS will continue investing and operating the most modern state-of-art equipment to continuously improve proficiency, increase diversion, expand grades and raise quality to ensure successful completing in a global recycling marketplace.



2. CWS Automated Collection Vehicle

Company History of Service

CWS has operated in the Bay Area since 1992. David Duong and his family entered the recycling and waste handling industry in 1985 with their first company, Cogido Recycling. Soon after arriving in the United States from Vietnam in 1983, the Duong family built Cogido Recycling from the ground up with limited working capital and investing a lot of hard labor and long hours. By recognizing a unique opportunity for business development and capitalizing on their family, community, language and cultural ties to the Vietnamese and Chinese markets, the family successfully grew strong post consumer end-use

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markets for various grades of reclaimed materials that were not easily recycled in the United States. The Duong family sold Cogido Recycling to Norcal Waste Systems, Inc. (Recology) in 1989 and subsequently formed California Waste Solutions, Inc.

City of Oakland

CWS was awarded its first public-sector franchise contract by the City of Oakland in 1993, as one of the City's major recycling collection and processing companies. This franchise which continues today has more than doubled in size since the original contract award. Since 1993, the City of Oakland has exercised every option to extend service by CWS. CWS collects residential recyclables from approximately 75,000 single and multi-family/commercial buildings in Oakland and processes these recyclables at its two Oakland MRFs. These MRFs have single-stream and source-separated processing capability that process residential and commercial materials. The company also collects and recycles materials from commercial businesses throughout Oakland in a non-regulated, competitive market. CWS services many large and iconic commercial customers including Kaiser Permanente Hospital, Kaiser Center, Swig Properties and Golden Gate Fields. Other metrics from our Oakland services include:

- 30,200 Multi-family dwelling units served
- 525 Oakland commercial buildings
- 41 Oakland City facilities
- 20+ Commercial Industrial Centers

CWS has expanded the Multi-Family Dwelling (MFD) program to increase the number of enrolled and participating MFDs through enhanced education, outreach and service to the residents. CWS outreach to MFDs has significantly increased since 2005, resulting in enrollment of more than 2,400 newly constructed and serviced properties, for a total of 30,200 MFD units served. New MFD units represent a diverse group of residents at newly constructed larger and smaller properties. The residents and managers of these developments are actively involved and supportive of Oakland's Recycling Program, with weekly participation levels from 95-100 percent and appropriate utilization of containers. CWS local Oakland customer service representatives reach-out to MFD customers to ensure the best service and highest participation possible. CWS maintains profiles about properties that enhance service and communication about diversion and recycling.

All 30,200 MFD units have additional resources available to support easy recycling including proper waste room signage, adequate and ample containers, use of a residential Recycling Caddy to carry recyclable material to on-site recycling stations, customized equipment for on-site transporting, the Oakland Multi-Family Recycling Property Manager Kit, and responsive service from a dedicated CWS Operations & Customer Service team. CWS further expanded services to provide 2 and 3-yard roll-off bins to directed MFD and business customers requiring greater capacity and/or to accommodate space constraints. This change was well received, has helped improve service to the customers and increased waste diversion from landfills.

CWS maintains 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. For existing multi-family customers, CWS works with property managers and residents to reemphasize program standards and the role each resident plays in helping Oakland achieve Zero Waste by 2030. CWS provides recycling





news/tips onsite at community/resident meetings and via online communication resources. For new MFD residents, CWS initiates 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 continue in 2012 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 is also working with the City of Oakland to launch MFD programs at diverse developments that have recently transitioned into the City's. CWS is focused on increased multilingual education to reduce contamination, increase participation, and achieve diversion goals.

In addition to the MFDs, CWS collects recycling from City of Oakland facilities and events, and 525 commercial buildings. CWS business customers receive personalized services that evaluate the opportunity for recycling and the potential for increasing diversion.

CWS has been focused on increased education in its Oakland program through multi-lingual resources and continued its expansion of a public campaign to education increase program awareness, involvement with the residents and business community. In 2011, CWS worked with City Staff to authorize and put together a process to start the Food Scrap Program in 2012.

Below are some of CWS' other public education and participation efforts:

CWS was a sponsor of the City of Oakland Earth Expo. CWS shared a booth with Recology and Waste Management to enhance awareness and support of Oakland's recycling program, instill better recycling habits, provide program literature, share children's educational resources, distribute

seed book marks, and answer questions.



3. Outreach at Public Events

CWS hosted a booth at Oakland's Annual Indie Awards to educate the public on the recycling program and benefits of recycling and distributed give-aways to encourage participation. Additionally, CWS worked with the Oakland Public Works Agency to provide the recycling and

waste service utilizing Clear Stream stations. CWS provided the following services:

- ✓ Setup and took down the Clear Stream stations
- ✓ Maintained stations throughout the event
- ✓ Received/Returned the Clear Stream stations from the City of Oakland
- ✓ Coordinated volunteers to distribute informational materials and provide recycling collection





- ✓ Provided outreach and education stations, as well as distributing literature to single family residents, multi-family residents, and businesses, with the goal of expanding participation in recycling collection services
- CWS was a sponsor of the 8th Annual Temescal Festival. In addition to having a booth to educate
 the community on the benefits of recycling and the Zero Waste Goal in Oakland, CWS sponsored
 the Clear Stream stations throughout the festival and provided the following services:
 - ✓ Setup and took down the Clear Stream stations
 - ✓ Received/Returned the Clear Stream stations from the City of Oakland
 - ✓ Provided 20 yard recycling/recycling roll off service and weight information on the recycling from the festival
 - Coordinated volunteers to distribute informational materials and provide recycling collection
 - ✓ Provided outreach and education stations, as well as distributing literature to single family residents, multi-family residents, and businesses, with the goal of expanding participation in recycling collection services



 CWS was an in kind sponsor of the Oakland Art and Soul Festival. CWS did the following:

4. Outreach at Public Events

- ✓ Provided 20 yard recycling/recycling roll off service and weight information on the recycling from the festival
- ✓ Coordinated volunteers to distribute informational materials and provide recycling collection
- ✓ Provided outreach and education stations, as well as distributing literature to single family residents, multi-family residents, and businesses, with the goal of expanding participation in recycling collection services
- CWS was a sponsor of the Oakland Pride Festival, had a booth to educate the community on the benefits of recycling and Zero Waste Goal in Oakland and sponsored the Clear Stream stations throughout the festival. CWS did the following:
 - ✓ Delivered Clear Stream Stations to event coordinators
 - ✓ Received/Returned Clear Stream stations from the City of Oakland
 - Provided 20 yard recycling/recycling roll off service and weight information on the recycling from the festival
 - ✓ Coordinated volunteers to distribute informational materials and provide recycling collection
 - ✓ Provided outreach and education stations, as well as distributing literature to single family residents, multi-family residents, and businesses, with the goal of expanding participation in recycling collection services
- CWS was a sponsor of the Rockridge Community "Out & About Festival", hosting a booth to
 educate the community on the benefits of recycling and the Zero Waste Goal in Oakland, and
 providing and servicing Clear Stream stations throughout the festival. CWS did the following:
 - ✓ Delivered the Clear Stream Stations to event coordinators
 - ✓ Received/Returned Clear Stream stations from/to the City of Oakland





- ✓ Provided 20 yard recycling and food scraps roll off service and weight information on recycling at the festival
- ✓ Coordinated volunteers to distribute informational materials and provide recycling collection
- ✓ Provided outreach and education stations, as well as distributing literature to single family residents, multi-family residents, and businesses, with the goal of expanding participation in recycling collection services
- CWS sponsors the California Resource Recovery Association's August 2012 conference in Oakland. CRRA is California's statewide recycling association. It is the oldest and one of the largest non-profit recycling organizations in the United States, and is dedicated to achieving environmental sustainability in and beyond California through Zero Waste strategies including product stewardship, waste prevention, reuse, recycling and composting. CRRA's members represent all aspects of California's reduce-reuse-recycle-compost economy. Our members work for cities, counties, municipal districts, and businesses as well as hauling companies, material processors, non-profit organizations, state agencies, and allied professionals.



5. Outreach at Public Events

- CWS sponsors a table at the East Bay Rental Housing Association Annual Trade Expo. We informed and notified property owners about the upcoming mandatory recycling requirements, provided contact information to the attendees, provided information on the types of services available and encouraged early participation. MFD flyer and hangers were provided to property owners to provide to residents in their complexes.
- CWS attended the Monthly Residential Meeting at the Acorn Apartments. We met with many enthusiastic community members about the re-energized push towards compulsory recycling for the community, different types of materials that could be recycled and where the large communal roll-offs are located. This meeting was preceded by distribution of MFD

flyers at each residence. CWS gave out additional information material along with MFD recycling caddies.



Figure 3-1 San José Facility

City of San José

In 2002, CWS expanded its operations to serve the City of San José by constructing and operating a modern single-stream MRF transfer station at 1005 Timothy Drive, San José, shown in Figure 3-1, to process single-stream materials from 160,000 single-family

residential customers in Districts A and C. CWS provided this service as a subcontractor to the City collection contractor Norcal Waste Systems (Recology). In designing the facility, the company worked





closely with consulting engineers, MRF experts, and specialty equipment manufacturers. The result of the effort was a 40+ ton per hour single-stream facility – possibly the largest of its kind in the western United States.

In 2006, San José directly awarded CWS both the single-stream recyclables collection and processing portions of the City contract to serve 160,000 single-family homes in City Districts A and C. Included in the program are used motor oil, oil filters, textile, and "large bulky item" collection and recycling. CWS successfully transitioned into the collection role in 2007.

To improve these services to San José, CWS made a number of significant capital investments and increased its resources in 2007 by adding the following San José site and facility asset and personnel improvements.

- Truck Corporation Yard at 1120
 Berryessa Road, San José. This 6.5-acre
 corporation yard includes a truck shop,
 truck wash, large-item motor oil and oil
 filter processing areas.
- 50 state-of-the-art collection vehicles
- 58 experienced collection truck drivers
- 4 certified mechanics, technicians, welders and support staff at the Berryessa Road Yard
- 4 customer service representatives (CSRs)
- Established customer service redundancy at its Oakland headquarters
- New public education center



6. Manual Sorting at CWS MRF

In 2007, CWS enhanced its San José MRF by adding the following:

- 4 state-of-the-art fiber and plastic optical sorting systems
- 2 new mechanical screens
- 2 new balers
- Pneumatic Film Plastic recovery system
- New glass recovery system

As a result of these facility improvements, CWS has processed approximately 80,000 tons per year in this facility.

Since 2002, CWS has increased San José's solid waste diversion and recycling to levels never achieved by preceding companies and reduced processing residue from greater than 21 percent to 14 percent. This reduction was due to three key factors:

Closely integrated collection and processing operations





- Effective public- and employee-education programs combined with customer feedback
- Investment in and application of innovative and proven processing equipment
- Continual development of markets for established and new product offerings
- Dedicated communication and transparency with municipal contractor colleagues

The waste and recyclables collected, and resultant diversion rates achieved in Districts A and C in the City of San José for 2011 are shown in Table 3-1.

Table 3-1 City of San José Diversion

	District A	District C
Curbside Collection		
Garbage Tons Collected	72,934.83	46,269.19
Recycling Tons Collected	40,899.33	33,732.87
Recycling Tons Sold	33,718.65	27,796.82
Diversion	30 %	35%
Large Item Collection		
Bulky Items Collected	222.95	1 <i>77</i> .12
Bulky Items Recycled	189.99	150.93
Diversion	85%	85%

In June 2010, the City of San José exercised its option to continue receiving service from CWS and extended CWS' contract to the year 2021 as an expression of its confidence in the company's performance.

Thirty days after CWS began providing recyclables collection and processing services in San José, the San José City Council awarded CWS for its leadership in executing the smoothest transition for solid waste services that the City and its citizens had ever experienced during the 14-year history of its Recycle Plus Program. A copy of the commendation certificate from the City of San José is included as Appendix 7-7.

Collection Fleet

CWS operates a combined collection fleet of approximately 80 vehicles. Approximately seventy-five (75) percent of the fleet is from the model year 2008 A specific combination of engine, body, and chassis provides the safest, quietest, least polluting and most reliable collection system available. CWS' innovative fleet is capable of operating on a 20 percent bio-diesel fuel blend (B20).

International Operations

In November 2007, CWS, through Vietnam Waste Solutions (VWS), completed construction of the first private, Subtitle D compliant, state-of-the-art landfill in Vietnam. VWS, a wholly owned subsidiary of CWS, owns and operates the facility, known as the Da Phuoc Integrated Solid Waste Facility (DPI). This project was developed, engineered, constructed and is operated by VWS on approximately 322 acres with total development costs exceeding \$400M.







Figure 3-2 Da Phuoc Integrated Solid Waste Facility¹

The facility was designed by a United States team of experts including Dave Edwards, Inc., Bollegraaf Recycling Solutions and Van Dyk Baler Corp. (firms with which CWS will team to serve the Oakland contract). DPI operates according to United States standards including:

- Professional design, engineering and construction
- Full liner, leachate and methane gas recovery systems
- Professional operating, measuring, reporting and safety standards

DPI hosts the most modern leachate and water treatment system in Vietnam. It was designed and operates according to US EPA Subtitle D environmental and OSHA standards. DPI currently accepts 3,000 tons per day of municipal solid waste from Ho Chi Minh City (formerly Saigon), and possesses capacity to accept greater than 5,000 tons per day. This serves a population of over 8 million in the Ho Chi Minh City area.



Figure 3-3 DPI Facilities

The DPI landfill is large, even by world standards. The facility includes a modern composting operation (2008) and completed its material recovery facility and transfer station building in 2010. In addition to providing the citizens of Vietnam safe and healthy sanitary landfill and recycling facilities, DPI will receive and recycle materials from global markets. DPI will provide western markets an alternative to other Asian markets. In September 2009 VWS was awarded approval to begin development and

¹ An Phong Construction, http://www.anphong.vn



CALIFORNIA WASTE SOLUTIONS

3. QUALIFICATIONS

construction on a new, larger integrated solid waste facility, the Long An campus, exceeding 4,500 acres that will eventually compliment DPI. Additional information on DPI is provided in Appendix 7-3.

Materials Recovery Success

CWS is a material processing company that prides itself on recovering the maximum amount of materials in the waste streams it receives. CWS has successfully diverted over 90 percent of the material collected from Oakland residential and commercial sources. This diversion percentage has been accomplished through diligent processing of the residential and multi-family/commercial customer waste stream at the company's two Oakland MRFs. This includes extensive pre-processing and presorting of materials such as bulky items, non-recyclables, and source-separated materials.

CWS studied waste characterization reports on the Oakland and Alameda County waste stream from the past five years, and has developed a collection strategy and single stream recycling facility to ensure continued recovery of greater 90 percent of the recyclable materials it collects. Features utilized in Oakland in the current CWS Recycling Collection Program have been successful and will be applied further throughout the entire City. These include:

- Waste stream assessment
- Recycling program development
- Public education implementation incorporating feedback from customers
- Continual affirmation and modification of collection programs
- State of the art processing facility design and operation
- Innovative material marketing programs development

CWS has realized considerable success in reducing residue and its disposal in the City of San José Recycle Plus program. Norcal, now Recology, was the City of San José's original collector. While Norcal's common procedure was to collect mixed waste in half of the split packer waste-recycling collection vehicles and after years of recyclables being placed in the wrong side of the split packer, CWS' introduction of a dedicated fleet designed strictly for residential recycling significantly reduced residue from residential recyclables.

CWS will continue and expand the key factors that have contributed to the company's success to ensure minimal processing residue and disposal from City of Oakland recycling operations.





3.1.Key Staff



7. CWS Staff

CWS is a local company that provides efficient and personalized service. CWS prides itself on the high level of professional skills, business and industry experience, as well as for building a diverse management team that includes a variety of professional backgrounds. As it does with its other clients, CWS will create a team that is well versed in all details of services provided to the City of Oakland. City staff will have one contact person to call any time to discuss the operations of this service agreement. Joel Corona, CWS Chief Operations Officer, will lead this team and be the direct contract for the City. CWS management will support every part of this contract with Oakland City colleagues.

The skills of the CWS team include the following:

- Residential collections
- Recycling facility operations
- Transfer station operations
- Commodity sales
- International relations
- Mill processing
- AB 939/AB 341 diversion
- Hazardous waste collection and recycling

- Commercial collections
- Composting
- Regulatory compliance
- Global shipping
- Water treatment
- Motor Oil management
- Alternative Fuels
- Public education program development and implementation

- Industrial collections
- Landfill engineering
- Material Brokerage
- Equipment maintenance
- Facility design
- Program development
- E-waste recycling
- Bulky collection and processing

The core management team (detailed in the CWS organizational chart in Figure 3.1-1) includes:

- David Duong, President and Chief Executive Officer
- Kristina Duong, Vice President, Executive Director
- Victor Duong, Executive Vice President
- Joel Corona, Chief Operations Officer
- Long Tran, CPA, CFO & Vice President, Finance
- (To Be Announced), Oakland Operations Manager
- Tim Tran, Accounting Manager





- Johnny Duong, Director of International Sales
- Leticia Jauregui, Safety and Environmental Manager
- (To Be Announced) Public Education Manager
- Douglas Duong, Processing Facilities Manager, Oakland
- Glenn Ledet, Customer Service and Contract Compliance Manager
- John Lam, Human Resources
- Pari Natarajan, Information Technologies Manager





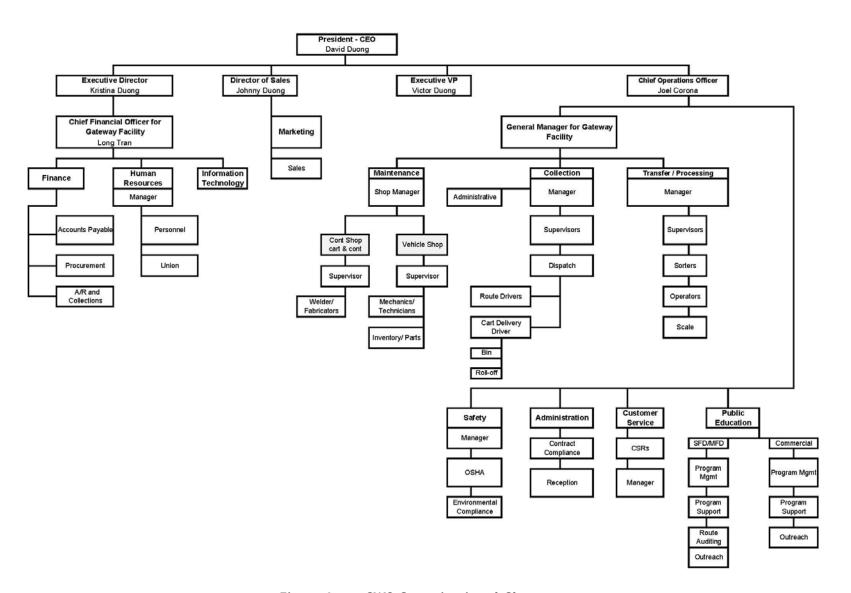


Figure 3.1-1 CWS Organizational Chart





CWS believes that the professional and cultural diversity of its management team results in great innovation, and employee and customer relationships. CWS is proud to provide essential neighborhood services with a global perspective relating to personnel and "World Class Customer Service", equipment design, environmental sustainability and material marketing.

3.1.1. Owners

David Duong - President and CWS Founder

David Duong has over 30 years of experience in collecting, processing, and brokering. He is deeply committed to this proposal and will direct the CWS team. David built CWS from the ground up. He understands equipment, systems, and the financial and regulatory structures that support them. David has personally been involved in all aspects of this proposal and is 100 percent committed to partnering with the City of Oakland to collect solid waste and recycling in the most professional, efficient and service-oriented manner possible.

David has extensive experience in overseas and domestic marketing, sourcing and brokering, small business start-up and funding, and recycling operations. His background includes serving as marketing manager for Norcal Waste Systems (DBA Zanker Resource Management), general manager of Norcal Waste Systems (DBA Cogido Recycling), and president and CEO of Cogido Paper Company. He received his secondary and post-secondary education in Vietnam. In May 2008, David Duong was the recipient of the prestigious Bay Trade Global Award, presented by The Bay Area World Trade Center, for his achievements in world trade and environmental sustainability by building his company around successful and global environmental stewardship principles. He has served as a Commissioner on the Oakland Waste Reduction and Recycling Commission, a Commissioner on the Oakland International Trade Commission, Chairman of the Board of Directors for the Vietnamese American Entrepreneur Association, a Director on the Board of Directors for the Silicon Valley Chamber of Commerce, and a Member of the Sacramento Asian Pacific Chamber of Commerce, and was appointed by President Obama and currently serves as a Board member of the Vietnam Education Foundation.

His responsibilities include:

 All aspects of the company's marketing, administration, profit and loss, financing, procurement, and environmental and contract compliance

Kristina Duong - Vice President, Executive Director

Kristina Duong works closely with the president/CEO on issues related to marketing, administration, profit and loss, financing, procurement, and environmental and contract compliance.

Unlike large firms where finances may be handled out of state, Kristina works directly with management so that decisions are made quickly and appropriately to get the services completed at the highest professional standard. Kristina previously served as an administrative assistant at Sampac Enterprises, where she was involved in monitoring customer-service standards, scheduling domestic and overseas shipments, and marketing products. Ms. Duong attended Heald College in Oakland.

Her responsibilities include:

- Recyclable commodity sales in overseas and domestic markets
- Materials brokering
- Administrative, accounting and human resources functions,
- Financial support assurance for CWS collection and processing programs





Victor Duong - Executive Vice President

Victor Duong, a co-founder of CWS, has been involved in the solid waste and recycling industry for more than 30 years. He has worked with various chambers of commerce, and non-profit groups, such as Salvation Army, Goodwill Industries, Habitat for Humanity, and a broad base of civic groups and neighborhood associations. Victor began his recycling career in the family business and has been employed in that business since, growing with the business.

His responsibilities include:

- Conducting public affairs and community outreach
- Representing company to staff and elected officials in the US and abroad

3.1.2. Management Staff

Joel Corona - Chief Operations Officer

Joel Corona oversees company operations. For more than 20 years in the San Francisco Bay Area, Joel has been a leader in the development of solid waste and recycling collection and post-collection industry. His experience includes the initiation of source-separated, single-stream, commercial, organic solid waste and recycling programs. Joel has written government solid waste legislation for the State of California and served public, private, institutional, and military customers. His previous positions include those of Senior Corporate Profitability and Business Development Manager for Waste Management, Inc. in Houston, Northern California and Nevada; Market Area Recycling Manager for Waste Management Inc.; and Recycling Manager for Richmond Sanitary Service, a collection of, material recovery, and landfill companies. He was a key participant in the Vietnam Waste Solutions development of its modern landfill, transfer station, composting and recycling facility construction and continues to provide operational input. His achievements in the collection and post-collection recycling and disposal industry are complemented by outside activities that include service as a commissioner on the State of California Prison Industry Board and Honorary Group Commander at Travis Air Force Base. Joel received a business degree from the University of Southern California in Los Angeles, and earned a MBA from St. Mary's College of California.

His responsibilities include:

- Obtaining and administering franchise agreements, operating permits, and rates
- Providing long- and short-range plans to guide operations, finances, and new business opportunities
- Negotiating and administering collective bargaining agreements
- Negotiating agreements with customers, vendors, landfill operators, and buyers of recycled material
- Representing CWS to public agencies and the public to maintain goodwill and understanding of our waste management practices and financial requirements
- Ensuring compliance with environmental regulations, employee safety standards, other applicable regulations and corporate policies
- Identifying and responding to new customer service opportunities

Long Tran, CPA, CFO & Vice President, Finance

Long Tran is a certified public accountant licensed in California since 1980. Long has been with CWS since its inception in 1992, starting as its outside public accountant, and employed internally since 2002,





as Vice President-Finance. His experience includes directing finance and accounting functions in addition to taxation and managerial accounting and economics. His expertise includes forecasting and budgeting, financial analysis and reporting, internal controls, process improvements, SOX Section 404 training, asset based lending, cash management, and credit and collections.

Long has a B.A. degree in Accounting and Finance from San Francisco State University and a MBA in Taxation from Golden Gate University.

His responsibilities include:

- Interfacing with banks to structure financing for CWS capital projects
- Financial reporting to independent auditor
- Overseeing CWS tax accounting
- Overseeing bookkeeping and accounting staff

Douglas Duong – Plant Manager, MRF Oakland

Douglas Duong, who began as a driver, has been with CWS for nine years. He currently serves as the MRF plant manager for the company's 10th St. and Wood St. facilities.

He is especially adept at establishing and enforcing work time productivity metrics in a constructive manner. Mr. Duong has a long career as a skilled commercial driver, starting as a container hauler at the Port of Oakland, and then working for the Shell Oil refinery, followed by employment with US Freight Company where he served as a driver and dispatcher. In his spare time, he and his wife own and operate a coffee shop and billiard parlor in Oakland.

His responsibilities include:

- Plant staff oversight and direction, management of all processing employees (Sorters, Operators and Mechanics)
- Product quality and value assurance from all inbound materials
- Plant safety
- Maximizing diversion
- Compliance with safety and environmental regulations
- Regulatory and financial reporting about receipt and marketing of materials
- Support of negotiation with vendors
- Scheduling of product sales and specification to foreign and domestic markets

Johnny Duong, Director of International Sales

Johnny has led significant efforts to expand CWS marketing capacity by fostering strong and stable global partnerships. His keen ability to anticipate market demands has given CWS an edge in gaining new opportunities with domestic and international trading. His achievements with ensuring that CWS finished products meet global quality standards of marketability and demand have benefitted CWS customers through price and diversion stability during a variety of market conditions.

His ability to market products from throughout the United States is complemented by his development of CWS' own global trading offices in China and Ho Chi Minh City, Vietnam. CWS' near-unique ability to serve the continuum of recycling from the point-of-material-generation (our customers) to the point-of-product-reuse (our trading mills) is a special feature that supports solid waste diversion goals.





Leticia Jauregui - Safety and Environmental Manager

Leticia Jauregui began working for CWS in 2007, participating and leading environmental compliance activity for the five CWS domestic sites. During her first year, she developed a new employee safety incentive program and improved safety and environmental compliance. Leticia has successfully managed both CWS collection and material recovery operations in Oakland, leading to increased productivity, revenue and customer satisfaction.

Prior to joining CWS, Leticia worked in administrative and operations at Waste Management Inc. in Alameda and Stanislaus Counties. She brings over 17 years of experience in the waste industry with a rich, well rounded working knowledge in operations, material recovery budgets, human resources, training, safety, and contract compliance. She has a strong background in various lines of business for commercial and residential collection, industrial, Port-Let, recycling, yard waste and C&D services.

Her responsibilities include:

- Maintaining a comprehensive safety program for operations and exposures that complies with regulatory agency and corporate requirements
- Managing occupational safety and health program elements and activities
- Performing job hazard analyses, conducting safety observations and reviewing reports of safety observations performed by others
- Ensuring compliance with governmental regulations and monitoring environmental compliance with applicable regulatory and corporate requirements
- Monitoring permits, including determining that site plans and permits are current and compliant
- Overseeing management and disposal of hazardous waste, preparing manifests for hazardous waste disposal shipments and managing documentation for Hazardous Waste Disposal Fees, Hazardous Waste Generator Fees, EPA ID Questionnaires, and Manifest Fee Returns

John Lam - Human Resource Generalist

John Lam, who has been with CWS for two years, is responsible for all aspects of Human Resources.

John remains current on industry practices regarding employee leave law, labor law, legislation updates, management trainings, compliance training (sexual harassment) and miscellaneous areas including CPR and First aid. Prior to joining CWS, John was Human Resources Generalist at KANA Software. He has a Bachelor's degree from the University of Phoenix.

His responsibilities include:

 Recruitment, On Boarding, Benefits, Employee Relations, Employee Retention, Terminations, and management of Grievances

Glenn Ledet - Customer Service and Community Compliance Manager

Glenn manages CWS Customer Service Call Centers. He is responsible for monthly/quarterly reporting to City Agencies and contract compliance with various departments. Glenn has been handling community outreach. Glenn served on the San José Work2Future Board and the Work2Future Youth Committee that engaged more than 30 local young adults in an environmental education and career development program in 2009. This CWS program was recognized as one of the top eight "Best Practices" in the country for Youth Learning and work experience using America Recovery Relief Act Monies.

Glenn Ledet has been a manager in several industries, including transportation, parking solutions and the solid waste and recycling; and he has worked with various private, public, and governmental agencies, and served his country in the U.S. Army for eight years.



LIFORNIA WASTE 3. QUALIFICATIONS



His responsibilities include:

- Receiving and investigating customer complaints regarding services and rates
- Correcting service problems through or in coordination with appropriate supervisor
- Adjusting rate and billing disputes
- Assisting collection supervisors with unusual problems or incidents in the field
- Developing and implementing processes and procedures to improve and ensure customer satisfaction
- Developing and preparing reports as directed

Pari Natarajan – Technology Manager

Pari Natarajan focuses on application of information technology solutions that improve organization management, performance and efficiency, and diagnosis and resolution of computer, network, and infrastructure issues. He has effective IT skills that complement the advancing computer aided recycling collecting and processing equipment operated by CWS and his expertise with and incorporation of sophisticated computerized equipment and technology services provides to CWS opportunities to continually innovate within the solid waste industry. He managed various contractors and vendors to successfully complete the information technology requirements set forth by the City of San José for the 2006 recycling program.

Prior to joining CWS, Pari managed IT infrastructure and staff for a semiconductor company that develops innovative, chip-based power management. He has a B.S.in Business Administration with a Minor in Management Information Systems from the University of California Riverside and an A.A. from DeAnza College in Computer Information Systems, holds various certificates from Microsoft and is a Microsoft certified small business specialist.

His responsibilities include:

- Monitoring communication, global positioning and telemetry for collection and distribution

 vehicles
- Assuring radio and text communication functionality from remote collection sites and processing sites
- Assuring specification refinement, diagnosis and repair of commuter recognition optical sorting equipment
- Managing service design, modeling and work-load balancing for commercial and residential collection routes
- Managing the CWS computer and software system to enable communication, networking and service profiles for CWS customers

Tim Tran - Accounting Manager

Tim Tran has been with CWS for 10 years, previously serving as Assistant Controller. Prior to joining CWS, Tim was a staff accountant for an international company involved with a specialized recycled commodity. Tim has a B.S. degree in Business Administration with a double concentration in Accounting / Finance and an A.A. degree in Business Administration. He remains up-to date through continued training on payroll, W/C, safety management, and other accounting practices.

His responsibilities include:





- Managing the Accounting Department including A/R, A/P, Payroll, G/L, and banking
- Preparing financial reports and supporting operations with accurate data to increase productivity and reduce costs
- Providing analytical support to all departments, the CFO, COO and upper management
- Coordinating internal and external audits
- Implementing accounting policies & procedures
- Managing budgets and financial planning
- Supervising administrative staff
- Overseeing books and financial reports for four related entities

3.1.3. Subcontractors / Affiliated Companies

CWS brings to this contract a partnership made up of people with extensive backgrounds in collection and processing as well as professional organizations that have joined our team to support CWS efforts and activities and provide the very best service to the City of Oakland.

CWS will do all the collection and processing of the recycling material collected. Once CWS is awarded the contract, the company will undertake all necessary actions to have all subcontractors comply with licensing requirements of the City of Oakland Municipal Code, prior to commencement of services.

Team Firms:

Westhoff, Cone & Holmstedt (WCH)

WCH, established in 1989 and headquartered in Walnut Creek, CA, has ranked as the #1 underwriter in California in the number of solid waste disposal revenue bond issues for 15 years in a row. WCH is FINRA and SEC registered, and is owned and managed by the named principals, all veteran public finance bankers with major Wall Street firms. The firm has arranged financing for four separate acquisitions of independent waste companies by other independent companies in recent years. The firm's knowledge of and relationships with the banking industry has resulted in considerable success soliciting and arranging cost-effective terms. WC&H's bankers have 114 years of combined capital finance experience and have completed financings in excess of \$50 billion. WC&H also assists companies in arranging conventional debt in connection with bond financings. Several examples of bond financings arranged by WC&H are provided in Appendix 7-4 along with the firm's corporate brochure.

D. Edwards, Inc. (DEI)

Based in Brea, California and founded in 1999, DEI is comprised of professionals with extensive public and private sector experience in project and construction management; design and implementation of recycling and solid waste systems; design and operation of materials recovery facilities, transfer stations and waste disposal sites; environmental review, permitting and entitlement processes; compliance programs; asset management; and market, economic and facility valuation studies. DEI also draws on a substantial network of industry professionals, including civil, environmental, mechanical and electrical engineers; legal and political advocates; and community outreach and communications specialists. DEI is partnering with CWS to plan and development the Engineer Road MRF. Additional information regarding DEI experience and services is provided in Appendix 7-5.





J.R. Miller & Associates (JRMA)

JRMA is a design firm offering comprehensive services to private, industrial and public sector clients. Since 1985, JRMA has played an important role in the planning, design, and construction of facilities that efficiently receive, process, and transport solid waste nationwide. In California, JRMA has participated in development of the Shoreway Environmental Center in San Carlos, Puente Hills Transfer Station & MRF in Whittier, Signal Hill Transfer Station & MRF in Signal Hill, CR&R Perris Recycling and Transfer Station in Perris, Zanker Road MRF in San José, Burrtec Santa Clarita Transfer Station and MRF, plus many other sites in California and nationwide. CWS has partnered with JRMA for design and development of its Da Phuoc Landfill, Transfer Station & MRF in Ho Chi Minh City, Vietnam, and will engage JRMA to help design and develop the Engineer Road MRF. Additional information regarding JRMA experience and services is provided in Appendix 7-5.

InterWest Insurance

InterWest will partner with CWS to provide safety, insurance, and training services for its employees and throughout its facilities. As one of the top 10 largest privately-held insurance brokers in the U.S., InterWest is an industry leader offering value-added and specialized services, and provides a wide variety of liability coverages, risk management services, employee training programs, regulatory and compliance support. InterWest has developed customized training programs in hazard management and other safety training areas for CWS employees. CWS's InterWest contract manager is Connie Roberts, InterWest's in-house corporate risk manager in charge of risk assessment, mitigation and corporate safety planning. Connie has had hands-on experience in customizing specialized risk management programs, developing internal training procedures, and directing best practices for safety program implementation and risk assessment. Her role is to work hand in hand with InterWest's clients on their compliance issues with Cal OSHA, Injury and Illness Prevention Plans, Emergency Action Plans, Heat Stress Plans, ergonomics and monitoring employee training and job safety issues.

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. Additional information regarding Circlepoint experience and services is provided in Appendix 7-13.

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 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. Additional information regarding TNG experience and services is provided in Appendix 7-13.





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. Additional information regarding KRS experience and services is provided in Appendix 7-13.

KRS is a city of Oakland certified small local business.

Gershman, Brickner & Bratton, Inc. (GBB)

GBB is an international management consulting firm that helps public- and private-sector organizations of all sizes craft practical, customized and technically sound solutions to complex solid waste management challenges. Since 1980, GBB has assisted hundreds of organizations develop long-term, sustainable solid waste solutions that save money and improve efficiencies. GBB will partner with CWS to support transition activities, and help develop programs that support increased recycling and diversion levels from the City's waste streams.

Robert Brickner, Executive Vice President, has more than 37 years of experience in the solid waste management field and is an expert in solid waste handling systems, including collection and processing equipment, equipment costs and systems analysis. He is well versed in cost allocation methods and economic/financial modeling, and life-cycle costing. Tim Giardina, GBB Vice President, has over 25 years of industry experience with a focus on collection, transfer station, landfill, recycling and medical waste operations. Prior to joining GBB, he spent 13 years with Waste Management, Inc. handling increasing responsibilities ranging from Operations Manager, General Manager, and Senior Manager of Market Planning and Development. He has a highly accomplished and proven track record in operations, P&L management, acquisitions and strategic planning with both distressed and growth companies. Additional information regarding GBB experience and services is provided in Appendix 7-13.

Archie Humphrey – Environmental Consultant/Transition Resources

Archie Humphrey provides strategic solid waste management consulting services to public and private sector clients. He has over 35 years of experience in all facets of waste handling including collection, processing, recycling, composting, disposal and alternate technologies. Archie was the Chief Operating Officer of Recology (formerly Norcal) in San Francisco, California. His achievements at Recology include development and operation of food waste recycling facilities and programs, implementation of San Francisco Fantastic 3 collection program, and construction and operational start-up of the San Francisco Pier 96 recycling facility and C&D iMRF. CWS will draw from his vast experience and knowledge in operational development, transition and implementation.

Paul J. Rottenberg

Paul Rottenberg has for many years supported cities, special districts, non-profits and private companies engaged in solid waste and recycling activities. He focuses on contracts and compliance, materials processing and marketing, equipment specification, economic analysis, facility development, dispute resolution, contract negotiations and government relations. As CWS General Manager between 1992 and 1995, Paul managed the CWS start-up of curbside and multi-unit recycling collection in Oakland and oversaw staffing, equipment specification, financial projections, A/R, A/P, marketing, government relations, plant management, safety, equipment maintenance, computer system design and management, public relations, business development, et al.





Paul has a MBA from the University of San Francisco, a MPH in progress from the University of California Los Angeles, a BA in International Relations from San Francisco State University, has done undergraduate coursework in Economics/Political Science at Georgetown University, and is fully trained and licensed in commercial refuse and recycling vehicles and heavy equipment operation. He has been published and a lecturer on various solid waste issues.

McNeilus Companies Inc.

McNeilus, a leader in solid waste collection equipment since 1975, provides trucks and training to drivers and mechanics on very best practices of operating and maintaining equipment. With 59 branches and authorized service centers, mobile services, and 24/7 customer support, McNeilus services the needs of public and private clients. The cities of Raleigh, North Carolina; San Antonio, Texas; Houston, Texas; and Columbus, Ohio are some of the cities that McNeilus serves. McNeilus has partnered with CWS to provide packers for the chasses and train drivers and mechanics on best practices for using and maintaining the packers.

Western Truck Parts and Equipment

Western Truck Parts and Equipment/Western Peterbilt located in Oakland and specializing in Peterbilt equipment, is a full service commercial vehicle store with parts, service and sales departments that deal with new and used trucks and refuse trucks. Western Truck works daily with truck and body manufactures to ensure that the best balance is realized between initial price, operating costs, and vehicle and equipment durability.

Coast Counties Truck and Equipment Company

Coast Counties Truck and Equipment, established in 1948 and a local San José business, is the oldest franchised Peterbilt Dealer in the nation provides collection truck chasses, warranty work, and preventive maintenance inspections on all new CWS vehicles. Coast Counties Peterbilt can provide the personnel and resources necessary to fully support the Service Agreement.

OTTO Environmental Systems

OTTO, the largest manufacturer of plastic waste and recycling containers in the world with 66 million products used worldwide, will provide the carts. OTTO employs approximately 4,000 people in over 40 countries and its clients include, but are not limited to, the cities of Los Angeles, California; Phoenix, Arizona; Winter Park, Florida; Riverdale, Illinois; Atlanta, Georgia; San Diego, California; Plano, Texas; Spokane, Washington; Milwaukee, Wisconsin; and Disney World.

RouteSmarttm

RouteSmart provides vehicle route optimization software technology for many communities and services, including those related to 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 both residential and commercial service routing all in one seamless environment. CWS can 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 commercial service customers. CWS has experience utilizing RouteSmart in Oakland and San José, and will work with RouteSmart to customize the technology application to seamlessly transition to the demands of serving a greater number of Oakland customers.





FleetMind Solutions, Inc.

FleetMind delivers fully integrated fleet management software solutions that provide the communications and business automation for waste and recycling collection firms to improve their operations and maximize their profit potential. CWS will utilize FleetMind's end-to-end software and hardware offering that includes onboard computers, wireless audio and video communications, driver terminals, automated service verification, fleet tracking, business intelligence systems and more. These technologies will help CWS to ensure complete visibility into fleet and business operations, achieve significant reductions in resource requirements, ensure fleets are operating efficiently and with the least environmental impact possible, and employees are providing services in a safe and consistent manner.

Easy Fuel

Easy Fuel, Inc. is committed to providing the highest quality fuel services and solutions to help companies both cut costs and improve efficiency in the Bay Area. The company offers a wide variety of services aimed at improving fuel management, resource allocation and fuel maintenance, and also provides generator-fueling solutions to help companies avoid costly production downtime and ensure the safety of employees and other building occupants during power disruptions. The company provides fueling and fuel monitoring solutions that aim to reduce labor costs and fueling time, increase productivity, and simplify and control fuel management.

Coast Oil Company

Coast Oil has been part of the Northern California business scene since 1935. The company has grown to become one of the largest distributors of gasoline, clean diesel fuel, bio diesel, and lubricants in the US. With over 875,000 gallons of above-ground storage, 30,000 square feet of warehouse and office space, utilizing modern "Pulsair" blending at the Coast Oil quality-control/test-lab facility located on four acres in East San José, Coast Oil is positioned to continue as one of the premier petroleum distributors in the US. The company provides bulk and packaged lubricants, transportation fleet oils, tank wagon fuel, truck and blending, keep-full programs, equipment programs, and waste oil programs.

SSMB Pacific Holding Co.

SSMB Pacific Holding Company, Inc., doing business as NorCal Kenworth, operates as a heavy and medium duty truck dealership company in California, offering new and used trucks, parts, and services. For parts and equipment, NorCal Kenworth offers complete, on-site inventory management, including bar coding and auto-replenish. NorCal Kenworth's custom designed management programs help customers reduce inventory costs and streamline accounting.

Tire Distribution Systems

Tire Distribution Systems, with a location in Oakland, performs full-service tire work from 44 locations in 8 states. TDS has the right mix of new tire and retread knowledge to ensure the ongoing success of their customers. The company provides new tires, retreads, wheel alignment and balancing, fleet inspections, tire disposal, wheel refurbishing, and scrap tire analysis.

Markus Supply

Markus Supply, located in Oakland, is a full-service commercial, industrial, and retail hardware and equipment supplier. The company will continue to provide CWS with tools, small equipment, and associated hardware and supplies.

Allied Waste Services/Forward Landfill

Allied Waste Services of Stockton operates Forward Landfill in Manteca. Forward Landfill is a private modern landfill facility utilizing technologies to generate energy and best manage landfill capacity for



CALIFORNIA WASTE SOLUTIONS 3. Q



the future. The facility employs natural resources including using goats for weed control and falcons to control bird populations, and technologies including a 3MW energy plant powered by methane that can power up to 300 homes. CWS utilizes this facility for disposal of residue from its Oakland MRFs.

Van Dyk/Bollegraaf

Van Dyk/Bollegraaf designs, provides, and installs high-quality advanced MRF equipment and technologies for CWS' Oakland facilities. Van Dyk/Bollegraaf Recycling Solutions is a leading global engineer and manufacturer of recycling equipment and turnkey recycling solutions. The company has a record of accomplishment of 50+ years in the industry and invests heavily in Research and Development as well as in the latest manufacturing equipment and facilities. Bollegraaf's delivers balers, sorting systems, conveyors, shredders, Star Screens, reel splitters and other related equipment. Bollegraaf has four subsidiaries in Germany, France, England and Spain, for sales and service in these countries, and participates in a dealer organization in the USA and Canada.

Bulk Handling Systems

Bulk Handling Systems (BHS) designs, engineers, manufactures, and installs unparalleled sorting and handling systems throughout the world for the recycling, solid waste, wood products, and power generation industries. BHS custom-designed systems at material recovery facilities (MRFs) efficiently extract recyclables from a variety of waste streams at recovery rates in excess of 99%, greatly minimizing the residue that hits landfills.

Evergreen Environmental

Evergreen Environmental is one of the largest waste oil collectors in California, and the only oil re-refining operation in the western United States. Evergreen is also a major provider of hazardous waste services, offering customers a full range of environmental services to handle all of their waste management needs. Evergreen's commitment to the environment is so complete that every drop of used oil collected and fed into its Re-refining facility is recycled into useful products; nothing is wasted. Evergreen will partner with CWS to recycle oil from City of Oakland customers and CWS fleet and facility operations.

America's Best Battery

America's Best Battery (ABB) brings over 50 years of history, experience, merged with modern technology into today's battery recycling needs. ABB established its current location in 1998 in Hayward, CA, and provides excellent coverage throughout its nine bay area county service area. ABB recycles all varieties of batteries, from household batteries and battery packs for electronics to large flooded cell batteries from utility and telecommunications systems. CWS will provide City of Oakland customers with battery collection services, and will deliver batteries to ABB for recycling.

Stericycle

Stericycle provides disposal services for medical and biohazardous waste, and maintains the nation's largest network of medical waste transport vehicles, collection sites, and treatment facilities for hazardous materials. Stericycle operates internationally, providing medical waste disposal, sharps disposal management, OSHA and HIPAA compliance programs, pharmaceutical returns and disposal, recall readiness training, product recalls and retrievals, hazardous waste disposal, biohazard containers, and mail-back systems. CWS will utilize Stericycle's services for management of sharps, collected pharmaceuticals disposal, and other hazardous material disposal needs.





Goodwill Industries, Salvation Army, and other resale partners

Non-profit organizations, such as Goodwill, will be invited to come together to support CWS as a Reuse Advisory Board for reusable objects collected in the recycling collections. To help accomplish CWS' objective of increasing diversion, the proposal includes a location where reusable items can be easily segregated for transport to a disposal facility. Reusable materials, such as building material and furniture, will be taken from the site by non-profit organizations, such as Goodwill and Salvation Army, where they will be redistributed to individuals and organizations.

List of Lenders

CWS' lending institutions are East West Bank and the Industrial and Commercial Bank of China. A letter of support from each bank is provided as Appendix 7.6. Contact information for our lenders is as follows:

Henry Choi
First Vice President & Manager, Commercial and Trade Finance, Northern California
East West Bank
2350 Mission College Blvd. Suite 988
Santa Clara, CA 95054
408-320-2011
henry.choy@eastwestbank.com

Michael W. Lai
Executive Vice President and Head of California Region
Industrial and Commercial Bank of China
1001 Grant Avenue
San Francisco, CA 94133
415-352-6918
laimw@hkbea-us.com

3.2. Summary Qualifications

Other Related Experience

In addition to services provided by CWS in other communities that are similar to those proposed for the City of Oakland (highlighted in Section 3.2), waste companies with exclusive recycling collection contracts bring to CWS over 50,000 tons per year of residential and commercial recyclables. These materials are processed at the Oakland facilities and CWS remits payment for the incoming tons to the waste companies on a monthly basis:

Table 3.2-1 Private Companies Serviced by CWS Oakland

Customer	Services	Dates
Waste Management, Inc.	Processing of Residential and Commercial Recyclables	2003 to 2012
Republic Services (formerly BFI/Allied Waste)	Processing of Residential Recyclables	1996 to 1998, 2002 to 2010 when acquired by Republic





Recology Systems, Inc. (formerly Norcal Waste)	Processing of Residential and Commercial Recyclables	2000 to 2007
Republic Services	Processing of Residential Recyclables	2001 to present
Waste Connections	Processing Residential and Commercial single-stream	2011-2012
Timber Cove	Processing of Residential and Commercial single-stream from the City of Santa Rosa	2009 to present
Various commercial and industrial customers	Processing of Commercial Recyclables and Industrial Recyclables	ongoing

3.3. References

3.3.1. City of Oakland

CWS was awarded its first public-sector franchise contract from the City of Oakland in 1993, as one of the City's major recycling collection and processing companies. This franchise agreement, which continues today, has doubled in size since the original award. From 1993 to the present, the City has exercised every contract extension and renewal option. CWS collects residential recyclables



from approximately 75,000 single and multi-family/commercial buildings in Oakland and processes these at its two Oakland MRFs. The company also collects and recycles materials from commercial businesses throughout the city in a non-regulated, competitive market.

Since 2005, CWS has expanded the Multi-Family Dwelling (MFD) program to enroll more than 2,400 newly constructed and serviced properties, for a total of 30,200 units served. This was accomplished through enhanced education, outreach, and service to residents. These new enrolled units represent a diverse group of residents who are actively involved and supportive of Oakland's Recycling Program, with weekly participation levels from 95-100 percent and appropriate utilization of containers. MFD outreach efforts continue in 2012 and CWS has worked closely with the City of Oakland to launch MFD programs at many developments that have recently transitioned into the City's program.



8. CWS Oakland Collection Vehicle

In addition to the Multi-Family Dwellings, CWS collects recycling from 41 City facilities and offices, and 525 commercial buildings.

Contact:

Ms. Susan Kattchee Manager of Environmental Services City of Oakland 250 Frank H. Ogawa Plaza





Oakland, CA 94612 skattchee@oaklandnet.com Phone: 510 238-3962

3.3.2. City of San José

In 2002, as subcontractor to San José's collection contractor Norcal Waste Systems (Recology), CWS constructed and began operating a modern single-stream MRF transfer station in San José to process up to 530 tons per day of single-stream materials from 160,000 single-family residential customers.



The City of San José subsequently awarded to CWS a single-stream recyclables collection and processing contract and starting in 2007 CWS began serving the same number of single-family homes



9. CWS Automated Collection

with used motor oil, oil filters, textiles, and "large bulky item" collection and recycling included in the program. CWS approached this work with a focus on timely collection, good labor relations, discouraging contamination, promoting recycling, processing, and strong marketing of post-consumer material. To improve services for the City of San José, CWS made a number of significant capital investments in the San José plant and increased resources by adding personnel, site and facility improvements.

Thirty days after CWS began providing recyclables collection and recycling processing services in San José, the City Council awarded CWS for its leadership

in executing the smoothest transition for solid waste services that the and its citizens had experienced in the 14-year history of its Recycle Plus Program.

A Reference Letter from the City of San José is provided as Appendix 7-7.

Contact:

Ms. Donna Perala Program Manager Integrated Waste Management **Environmental Services Department** City of San José 200 East Santa Clara St.- 10th Floor San José, CA 95113 donna.perala@sanJoséca.gov Phone: (408) 975-2511





3.4. Litigation History

California Waste Solutions (CWS) has provided full disclosure of its claims, settlements and arbitration history.

3.4.1. Past

Included below is CWS's history, for the last ten (10) years, of all claims settlements, arbitrations, litigation proceedings, and civil actions involving \$100,000 or more and all criminal actions in which the company, its parent company, subsidiaries, all partners, or principals were involved:

California Waste Solutions, Inc. v. Norcal Waste Systems, Inc., now known as Recology, American Arbitration Association Case No.: 74 181 Y 00581 04 LMT In the San José Subcontract between Norcal Waste Systems, Inc. ("Norcal") and California Waste Solutions, Inc. ("CWS"), Norcal promised to deliver no more than 10 percent non-recyclable materials. CWS built its recycling facility and purchased recycling machinery based on that promise and expectation that it would not need to operate a solid waste facility. Norcal, however, breached the contract by inundating CWS with, on average, 20-25 percent non-recyclable material. As a result of Norcal's breach, CWS suffered equipment failures and processing difficulties, was fined by the City, and was ultimately forced to obtain a Solid Waste Facility Norcal filed a counter-claim against CWS, alleging that CWS breached the San José Subcontract by failing to process 95 percent of incoming recyclables. The neutral arbitrator rejected Norcal's counter-claim, found that Norcal materially breached the Subcontract, and awarded CWS damages in the amount of \$5,211,489.90. The judgment included repayment to CWS of fines that had been imposed in an enforcement action brought by the City of San Jose (Santa Clara County Superior Court Case No. 1-03-CV002609 filed in 2003). The enforcement action was based on the amount of residue from processing at CWS' San Jose facility and the costs associated with securing a Solid Waste Facilities Permit which was required due to the excessive impurities in the materials delivered to the facility by Norcal.

California Waste Solutions, Inc., OSHA Inspection No. 1225566885 In 2005 CWS suffered a workplace fatality when an employee entered a material baler without using proper safety procedures and was killed. Our deceased colleague acted alone. An OSHA investigation was commenced and a citation was issued (Citation No. 1225566885). CWS appealed the Citation (Docket No. 05-R1D4-3087/3090). CWS was charged with violation of Labor Code Section 6423(a)(2), and resolved the entire matter by paying a \$155,000 fine. In order to prevent another such occurrence, CWS continuously works to prevent accidents through training and procedural safeguards.

California Waste Solutions, Inc., vs. County of Sacramento CWS commenced litigation with the County of Sacramento (California Waste Solutions v. County of Sacramento, Sacramento County Superior Court, Action No. Case No. FCS029737). CWS was a purchaser of unsorted recyclables from Sacramento County. The dispute involved the County's performance under the contract and issues pertaining to the renewal of the contract. After a jury trial in March of 2009, CWS won a judgment against the County of Sacramento for \$340,773 which has been paid in full. The court also found that the contract had been properly terminated.

3.4.2. Current / Threatened

Saddah v. CWS, Case No. RG12661734; Thompson v. CWS, Case No. RG12661731; Baldwin v. CWS, Case No. RG12661727; and Ledit v. CWS, Case No. C-12-6255. The Saddah, Thompson and Baldwin cases are filed in Alameda County Superior Court and the Ledit case is filed in US District Court in the





Northern District of California. The nature of each of the claims is addressed below in CWS' discussion of EEOC complaints at Section 5.8, Employee and Labor Relations. The Saddah, Thompson, and Baldwin complaints were filed on December 31, 2012. The pleadings have been referred to CWS' attorneys. None of the complaints specifies the damages sought by the plaintiffs. As discussed in CWS' EEOC response, CWS does not believe that the claims are meritorious.

3.4.3. Enforcement Actions

Environmental Protection Agency v. CWS The Environmental Protection Agency ("EPA") commenced a series of enforcement actions against CWS, USEPA Docket Nos. CWA-309(a)-07-002 (December 4, 2006) and CWA-309(a)-07-007 (February 2, 2007) (collectively, the "Action"). The Action was predicated on the EPA's Finding of Violation and Order for Compliance issued on February 2, 2007. In the Action the EPA alleged violations of the Clean Water Act at three CWS facilities containing sorting devices, picking lines and balers where recyclables are run across conveyor belts and sorted both manually and by machine and where marketable materials are baled or otherwise packaged for sale into the domestic and global recycled commodities markets. Two of the facilities are located in Oakland and one in San Jose. The EPA also alleged violations at a facility in Oakland where CWS services its vehicles and equipment. CWS entered into a Consent Agreement and Final Order (CA/FO) in early 2009 without admitting wrongdoing. The CA/FO resolved the Action and provided for the payment of \$261,400. There have been no allegations by the EPA of non-compliance with the Clean Water Act since the Action.

State of California Department of Industrial Relations- Citation and Notice of Penalty The California Division of Occupational Safety and Health, in its Inspection No. 310636618 of CWS' facility at 1005 Timothy Drive, San Jose, CA on May 22, 2007 and August 3, 2007, issued its Citation and Notice of Penalty on August 9, 2007. The penalties totaled \$2100 and have been paid in full. The penalties pertained to the maintenance of documentation, the placement of emergency stop equipment, guard rail height, use of protective eyewear, and conveyor guards.

State of California Air Resources Board (1001 I Street, Sacramento, CA 95814) Settlement Agreement and Release. On April 9, 2010, CWS entered into a Settlement and Release Agreement with the California Air Resources Board and paid a civil penalty of \$6500 to resolve allegations regarding violations of Health and Safety Code Sections 44011.6, and regulations contained in Title 13 of the California Code of Regulations pertaining to the testing of diesel emissions. There is no identifying number for the Settlement and Release. It was executed on behalf of the State of California by James Ryden, Chief of the Enforcement Division.

3.4.4. Revocation/Suspension

There have been no actions taken to revoke or suspend any permit, franchise, license, entitlement or business license held by CWS during the last five years.

3.4.5. Claims

There have been no claims against a bid or performance bond provided by CWS, nor any contractual defaults or terminations by CWS in the last 20 years.

There have been no liquidated damages, administrative fines, charges, or assessments that total Ten Thousand Dollars (\$10,000) or greater in any one (1) calendar year during the last five (5) years that have been paid by CWS to a public agency as a result of Collection services provided by CWS.





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4. STATEMENT OF FINANCIAL QUALIFICATIONS

4. Statement of Financial Qualifications

4.1.Finance:

Audited financial statements for years 2009, 2010, and 2011 are <u>included under a separate cover</u>, sealed envelope that accompanies this proposal.

California Waste Solutions, Inc. is a minority, privately held company. As such, the audited financial statements are not filed publicly and are not provided for public use. Disclosure of the financial information contained in the audited financial statements is generally limited to creditors and other users relying on the financial statements as a way to evaluate CWS' financial condition. Public disclosure of CWS' audited financial statements and the information contained therein may put the company at a competitive disadvantage.

CWS requests that the City of Oakland make every effort to treat the audited financial statements as confidential. While we recognize the obligation to comply with the California Public Records Act, we believe that the information contained in the statements should be treated as confidential and should not otherwise be disclosed.

4.2.Labor Agreement:

CWS currently has employees represented by the International Longshore and Warehouse Union Local 6, the Teamsters Industrial Union Local 70, and the International Association of Machinists and Aerospace Workers Union Local 1546. The company has separate collective bargaining agreements with each union. CWS maintains a successful collegial relationship with Teamsters Local 70 and continues abiding by all current wages, benefits and bargaining terms for all our solid waste and recycling drivers. CWS has attached our mutual letter of understanding and awaits a final copy of the Collective Bargaining Agreement that ratifies and extends our agreement though the RR Contract term.

Figure 4.2-1 Correspondence Illustrating Status of Labor Agreement with Local 70





4. STATEMENT OF FINANCIAL QUALIFICATIONS



April 2, 2012

Mr. Dominic Chiovare, President Teamsters Local 70 400 Roland Way Oakland, California 94621

Dear Dominic,

California Waste Solutions (CWS) enjoys a long-term and successful relationship with the members and leadership of Teamsters Local 70 and is in material agreement with the terms of our Collective Bargaining Agreement developed and drafted between Local 70 and the solid waste firms and employees it represents, drafted through the year 2017. CWS and Local 70 abide by our practices and the content of that agreement and continue minor refinements to clarify final features of it.

To address an important matter, CWS respects the ability of Local 70 to transition its drivers within the Local to CWS in the event that CWS earns more business from the City of Oakland solid waste and recycling RFP. CWS welcomes available and qualified colleagues to join CWS. The City of Oakland and CWS benefit from the experience, dedication and continuity of employees from Teamster Local 70.

Especially within the City of Oakland CWS has worked shoulder-to-shoulder with many Local 70 colleagues for many years; and our professional teaming relationship is committed to continuous improvement of safe, efficient, innovative and best quality solid waste and recycling services for residents and businesses in the City of Oakland.

California Waste Solutions looks forward to many years of mutual success for our member-colleagues, organizations and community.

Sincerely,

CALIFORNIA WASTE SOLUTIONS

Kristina Duong Executive Director

cc: David Duong Joel Corona

CALIFORNIA WASTE SOLUTIONS, INC.

 www.californiawastesolutions.com

 1820 10th Street, Oakland, CA 94607 USA
 Phone: 510.832.8111
 Fax: 510.832.8206

 1005 Timothy Drive, San Jose, CA 95133-1043 USA
 Phone 408.292.0830
 Fax 408.292.0833



5. Technical Proposal

CWS will provide the following services to the City of Oakland:

Single Family

- Weekly single stream recyclables collection and processing
- Weekly used motor oil, oil filter, and batteries collection and processing

Multi-family

- Weekly single stream recyclables collection and processing
- Weekly used motor oil, oil filter, and batteries collection and processing

Commercial

 Non-exclusive single stream recyclable materials collection and processing (optional at the discretion of the customer

City

Single stream recyclable materials collection and processing

Base Waste Assumptions

CWS facility planning and proposed operational practices relating to this Service Group are based on City of Oakland and Alameda County waste characterization studies performed in the past five years, provided in Appendix 7-12. CWS has made tonnage assumptions for the contract term, shown in Table 5-1, based on population projections and the impacts of its public outreach, education, and innovative diversion programs (discussed in greater detail in Section 5.3).

Table 5-1 Tonnage Projections

Year	2012	2013	2014	2015	2016	2017
Single Family	28,488	28,516	28,545	29,801	31,009	32,169
Multi Family	6,697	6,751	6,805	8,789	10,658	12,418
Total	35,185	35,267	35,349	38,590	41,667	44,588

Year	2018	2019	2020	2021	2022	2023	2024	2025
Single Family	33,285	34,356	35,386	36,376	37,328	38,243	39,122	39,967
Multi Family	14,077	15,640	17,113	18,502	19,811	21,045	22,209	23,308
Total	47,362	49,996	52,499	54,878	57,139	59,288	61,331	63,275





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



10. San José Certificate of Commendation

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, referenced in the certificate of commendation in Appendix 7-7.

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.

A Gantt chart provided in Appendix 7-9, details transition activities from award of contract to implementation. 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:



11. Cart Delivery

- 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 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, May 2013.
 - → 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 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)
 - → 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

OAKLAND RECYCLES.COM



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 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 make necessary upgrades to the 10th Street facility's maintenance yard and facilities, and prepare the office for service expansion, as this will be the operational headquarters until the Oakland Gateway Facility is completed. This facility will host any new service personnel and be ready six months prior to the start of new services. 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. A sample cart specifications brochure from Rehrig Pacific is provided in Appendix 7-10 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



12. Cart Repair

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.

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

OAKLAND RECYCLES.COM



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				
	SFD -64-gallon carts as default size with 96- 32- and 20-gallon cart options depending on customer need				
Size	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. A brochure from McNeilus showing the model type and accompanying specifications is shown in Appendix 7-9. 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



13. 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 RouteSmartTM, 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 RouteSmartTM 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. RouteSmartTM 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

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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.

5.1.5. Facilities

5.1.5.1. MRF

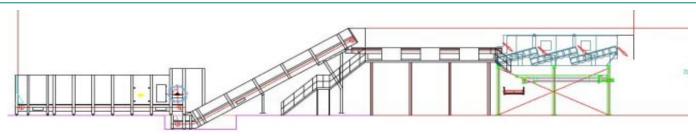
CWS has two processing facilities in Oakland; one on 10th Street and the other on Wood Street. Both are able to receive and process recyclables from single-family, multi-family, commercial, and industrial recyclable waste streams. They currently operate at 50% of full capacity.

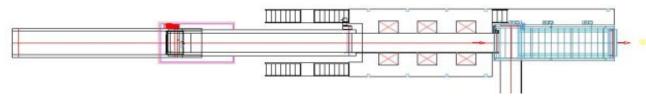
1820 10th Street 3300 Wood Street MRF Features Total Oakland, CA Oakland, CA 400 800 Design Capacity (tpd) 400 72,000 72,000 144,000 (tpy) Current Utilization 200 200 400 (tpd) 40,800 42,000 82,800 (tpy) Recycling Center Recycling Center **Operating Permit** No CUP Required CUP

Table 5.1.5.1-1 CWS MRF Capacity









14. 10th 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, multifamily, business, city, and commercial recyclables.

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 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 on or before January 1, 2016. Once opened, the new Oakland Gateway Facility will have even greater processing capacity than 10th St. As a contingency, CWS can also process recyclable materials at its Wood St MRF facilities in Oakland.







15. 10th St. MRF Facilities

5.1.5.2. Vehicle Maintenance and Support

CWS will continue to use its fully equipped and modern 10th 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 10th 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, 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



CALIFORNIA WASTE SOLUTIONS

5. TECHNICAL PROPOSAL

- 24-hour security and cameras
- 24-hour access for CWS employees
- Access to fueling and service by CWS representatives
- 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

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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. Inperson 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.

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



16. Waste Auditor

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.



CALIFORNIA WASTE SOLUTIONS

5. TECHNICAL PROPOSAL

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. This and the other individual tasks to expand the CWS customer service staff are shown in Appendix 7-9.

Transitioning from one employer to another is a difficult process. CWS wants this transition to be 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. This will follow the schedule shown in Appendix 7-9. 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.



CALIFORNIA WASTE

5. TECHNICAL PROPOSAL

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 in Section 6.

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

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- 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. A brochure from McNeilus showing the model type and accompanying specifications is shown in Appendix 7-10. 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 predicable 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

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refuse vehicles, considering conservative estimates for fuel costs and without accounting for additional savings due to tax credits or fuel rebates.²

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 Vehicles³

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 damage⁴
- 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

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

⁴ www.informinc.org/FS_ST_NYC_Refuse.pdf



² Assumes CNG price of \$2.50/gallon, Diesel price of \$4.00/gallon, fuel usage of 40 gallons/day

 $^{^3}$ 100% Biodiesel = B100; 20% Biodiesel 80% Diesel blend = B20



- 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.

Truck Type **Application Manufacturers** Capacity Number Satellite Side loader (HTS) Ford/Heil 2 Collection Services 10 yd Roll Off Dead Lift **Roll-Off Collection** N/A 1 Peterbilt/Nor Cal Container Carrier (Forklift) Container Delivery Ford/Nor Cal N/A 1 36 Peterbilt/ McNeilus 31 yd Manual/Automated Side Loader Collection Services 40 yd Long Floor Front Loader (FEL) Collection Services Peterbilt/ McNeilus 1 2 Standard Rear Loader (REL) Collection Services Peterbilt/ McNeilus 25 Yd Claw Flat Bed Peterbilt 22' 2 Collection Services Flat Bed with Lift Gate Cart Delivery Peterbilt 2 Collection, Route 2 Supervisor Pick up Management and Customer Ford N/A Service Support

Table 5.2.1-2 Vehicle Equipment Metrics

Additional information regarding the vehicles to be purchased is provided in Appendix 7-10.



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.



17. Vehicle Cleaning

Vehicle Maintenance



18. 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 During the warranty these major warranty repairs will 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



19. Sample QR Code for 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.

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.



20. Cart Replacement and Repair

where requested and appropriate.

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,

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



21. Operations Coordination

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.



22. 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 RouteSmarttm 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

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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

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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 1: Commercial Collection Service Type and Service Levels

	Cart Volume	Metal Dumpsters	Compactor	Roll-Off
	(gallons)	(cubic yards)	Volume	Volume
	(gallons)	(cobic yaras)	(cubic yards)	(cubic yards)
Commercial Recycling	20, 32, 64, 96	1, 1.5, 2, 3, 4, 6,	1, 1.5, 2, 3, 4, 20,	14, 20, 30, and
Services	20, 32, 04, 90	and 7	30, and 40	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. A brochure from McNeilus showing the model type and accompanying specifications is shown in Appendix 7-10.

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"





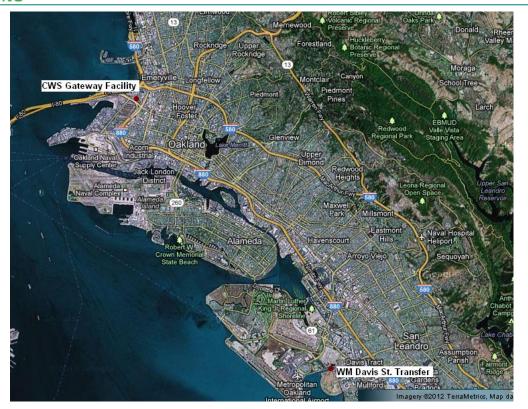


Figure 5.2.5.1-1 Gateway Location in Oakland

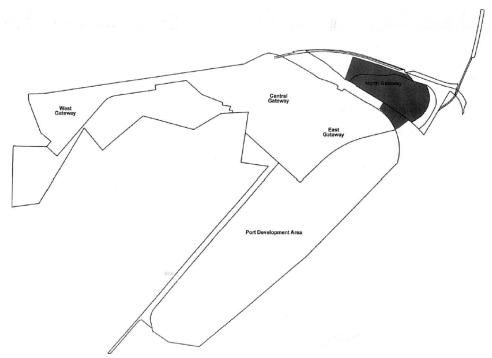


Figure 5.2.5.1-2 Location of CWS Facility on Gateway Site







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



23. 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:



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5. TECHNICAL PROPOSAL

- 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

Presented below and provided in detail in Appendix 7-14 is summary of the development schedule, 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.

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Table 5.2.5.1-1 Projected Oakland Gateway Facility Development Schedule

Activity	Date
Property Acquisition with the City of Oakland	09/30/13
Environmental Review Process	09/30/13
Receive Solid Waste Facility Permit	04/21/14
Detailed Design	04/18/14
Fabrication and Delivery of Equipment	10/22/14
Install Processing Equipment	04/01/15
Complete Facility Construction	05/01/15
Facility Start-up and Training	06/30/15
Continuous Operation	07/01/15
Property Acquisition with the City of Oakland	09/30/13

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 10th Street facility is a modern MRF located at 1820 10th 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
- LDPE natural film
- LLDPE films
- HDPE films
- Specialty polymers
- Wood
- Textiles



24. Sorted Material Bales

- 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 10th 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 if 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 10th Street MRF

Title	Employees	Primary Job Responsibilities
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		Operates one or more types of forklifts
Loader Operator	5	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	2	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 the Oakland Gateway Facility

Gateway Facility Labor Categories	Employees	
Management		
Facility Manager	1	
Project Engineer	1	
Maintenance Manager	1	
Administrative		
Administrative Assistant	1	
Safety	1	
Scale House Attendant	2	
Operations	•	
Shift Supervisors	4	
Control Room Operators	1	
Aux Operators	2	
Sorting Labor	43	
Equipment Operators	9	
Traffic Control	1	
General Laborers	2	
Maintenance		
I&E Tech	1	
Maintenance Mechanic	4	
General Laborers	7	
Total	81	

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.



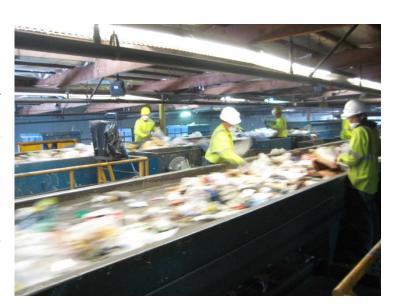


5.2.5.4. Facility Operations

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 10th 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 10th 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 nonrecyclable, contaminated materials



25. Manual Sorting Line

- 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

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

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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.



26. Cardboard and Paper Screening

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

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:

<u>Bollegraaf Drumfeeder Material Metering Bunker:</u> 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

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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.

<u>LUBO Triple Deck OCC star screens:</u> 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.



27. Star Screen

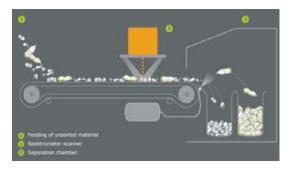
LUBO Double ONP star screens: The Double ONP newspaper screens are similar in design to the OCC separator, but instead recover Newspaper and large dry mixed fibers. The two stacked screens consist of two 20+ feet long by 10 foot wide screens. A horizontal shaft deck with steel shafts and 9 inch diameter 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.

<u>LUBO Mixed Paper / Rigid Container Separator:</u> 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 or fiber and improves the quality and value of the rigid containers.







28. 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 $\frac{1}{2}$ 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.



CALIFORNIA WASTE

5. TECHNICAL PROPOSAL



29. 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

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• 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^{th} 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 10th 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



30. Employee Training

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:

- 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.



31. 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 which is provided as Appendix 7-11, 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



32. 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 mangers. 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 area 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 $HAZCAT^{TM}$, 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
- Medical Wastes
- Paints
- Solvents
- Pesticides
- Used oil and filters
- Car batteries
- Photographic and pool chemicals
- Fire extinguishers

- Computer monitors and televisions
- Oxidizers
- Gasoline
- Compressed gas cylinders
- 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 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 steps 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 HAZCATTM, 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

Continuous Reporting and Data Retention		
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.	
Monthly Reports		
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	





	CWS' processing facility, e.g., old corrugated containers, old newspaper, mixed
	paper, glass, and various plastic and metal commodity grades.
Recycling Residue	Tonnage for all recycling residue from processing of collected materials.
Tonnage Data	
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	CWS will provide monthly updates on its compliance with the local hire requirements
Update	of this contract.
	Quarterly Reports
Processing Facility	The recycling residue rate for all material received by, processed at and shipped
Recycling Residue Rate	from the CWS processing facility.
Public Outreach and	Report on all public outreach and information activities undertaken during the period,
Information Activities	including distribution of outreach materials and other promotional activities.
Processing and Marketing	Report on recyclable materials processing and marketing issues or conditions, if any,
Activities	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	Report on significant changes in collection service or processing operations, instances
Activities	of property damage or accidents, scavenging, or other operational issues.
	Annual Reports
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	CWS will provide the Local Business Presence and Participation report per the
and Participation	contract.
Local Hire Requirement	CWS will provide an annual report on its compliance with local hire requirements of
Annual Report	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	Electronic report of cart and bin replacements provided during the preceding contract
Replacement Reports	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.



33. 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 multilingual 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

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- 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.

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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:



34. Material Bale Transportation

- 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





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 10th Street facility. If excess capacity is needed to process recyclables, the Wood Street facility will be available for use.





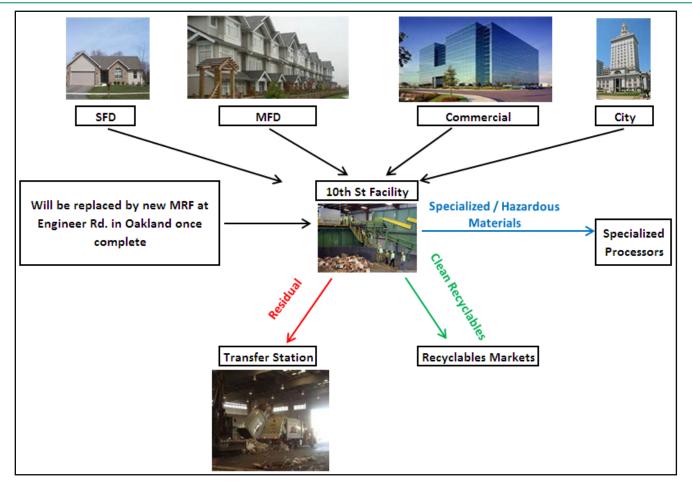


Figure 5.3.2-1 Materials Flow Diagram

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
	Second Half 2014
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.
	First Half 2015
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





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 (www.abagslife.com), a national campaign to reduce bag use, prevent litter, and encourage bag recycling							
Public Education	Roll out carts and other containers							
Second Half 2015								
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							
	First Half 2016							
Recycling Awareness Training and Multi-Service Benefit	Establish and annual qualitative award recognition for drivers whose actions result in improved customer behavior.							
	Annually							
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

Calendar	SFD	MFD	City	Other	Total	Residue	Residual
Year			Services			Rate	Tonnage
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
201 <i>7</i>	11,697	6,127	1,854	15,238	38,687	9.75%	3,772
2018	11,835	6,199	1,876	1 <i>5,</i> 41 <i>7</i>	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	1 <i>5,</i> 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	16,1 <i>57</i>	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 10th 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.





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%

Table 5.3.2-3 Overall Diversion Outcome

5.4. Customer Service Plan



35. 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.

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

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- Continually reduce the number of customer-generated service calls because customers are preinformed 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 division 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 or 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.

5.5. Community Outreach Strategy

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 waste diversion habits through example and influence, and link recycling and waste diversion to broader environmental and civic goals.

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 following campaigns 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).

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 could 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.



36. Customer Outreach

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.

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
- ightarrow General summary of mandated and optional services required under the Franchise Agreement
- → Messages regarding recycling and waste diversion

Visibility

Highly visible outreach techniques will attract attention to recycling services, provide information about recycling, and reinforce consumer and community habits to reduce waste.

Online Efforts

Web: 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.

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: The outreach team will also 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 who use traditional cell phones, and an interactive voicemail system would be provided for those who do not have cell phones. Considering all media of outreach is vital to reaching every Oaklander and achieving significant increases in recycling and waste diversion.





Social Media: The outreach 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 could 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 outreach team will make the connection between new waste services and the community's waste-reduction goals 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 physical 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.

Partnerships

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.

Community Educators: 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 Teams: Our team would partner with local sports franchises like the Oakland A's, Raiders, and Warriors, to raise visibility of the recycling program while at the same time educating fans.





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

Community-Based Organizations, Environmental and Sustainable 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 farming: "farm to fork to farm" habit-creation
- Creek to Bay Day: impact of waste on environment
- Earth Day: An opportunity to bring Earth Day back to Oakland with a key message about conserving and reusing resources
- Bay Area "Stop Junk Mail" campaign, leverage publicity and advertising to educate residents on how to remove their names from direct mail lists
- Burning Man: Local artists in Oakland often create large sculptures from recycled material before the late-summer Burning Man festival
 - 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.

Outreach to Schools

Oakland schools present a unique opportunity for us to reach the next generation and disseminate detailed, in-depth information about recycling and recycling. Using similar techniques 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:

- CWS would invite school groups to tours of their facility, develop a curriculum for in-school education, and provide uniquely pedagogical bins for in-school student use
- 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
- 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
- Partnerships with community-based organizations, not just schools, would be a part of engaging youth as well

Paid Media and Community Spokespeople

The outreach plan will look at all available media to spread the tested messages, but outlays will be cost-effective and data-driven. Visibility is important to the success of a broad community effort, and complements direct and directed outreach. 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:

- 1. Buses & BART
- 2. Billboards
- 3. Local and Public Access TV and Radio
- 4. Newspapers / Media Partnerships
- 5. Online Advertising

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 recycling efforts, improves the efficacy of advertising in driving real consumer habit changes.

- 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

Ongoing Survey, Evaluation, and Program Refinement

To continue the data-driven nature of outreach on recycling and Zero Waste, the team will conduct 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, the team 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. Other media for surveys will be provided to ensure the "digital divide" does not hamper accurate collection of information.





Public Events

CWS will participate in community events in Oakland to build and develop sustainability-themed outreach schedule for public events. The education team will be present at every large community event in Oakland, particularly in areas determined by analysis to be most in need of reinforcement of recycling habits.

The events program would involve creating a family of "green" diversion-specific educational handouts, and a common, customizable booth design that could 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. CWS has CWS, Circlepoint, and The Next Generation will design and fabrication of the costumes, scripting messages and training the actors.

Events may include:

Earth Day, April 2015 and subsequent y ears:
 Each year, CWS will develop a theme based on Earth Day, to increase awareness of and







37. CWS Curby Character

- 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. 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





recycling leadership and highlighting of successes help encourage significant behavior changes in consumers.

• 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.

5.5.1. 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, comarketing 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.
 - → 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 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

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

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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, 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 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: CWS Public Education Team will identify companies to visit
 for outreach education, to manage data collected and to set up commercial recycling 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



CALIFORNIA WASTE

5. TECHNICAL PROPOSAL

- 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

5.6. Employee and Labor Relations

CWS is a minority owned business and is very proud of its broad-based and inclusive workplace and stakeholder diversity.

CWS stakeholders include:

- Owners and employees
- Customers and municipalities
- Consultants, contractors and unions
- Suppliers and buyers of goods and services

CWS attributes much of its success to the diversity of its management and non-management team members. The rich professional and cultural experiences brought to the company by our team contribute a wealth of assorted ideas, perspectives, and innovations that continuously strengthen the services we provide to all of our stakeholders. This wonderful array is seen in the faces of our colleagues and daily practices of our enterprise.

In addition to the rewards of a diverse workforce, CWS supports and abides by the letter and spirit of the Equal Employment and Opportunity Commission (EEOC) and American with Disabilities Act (ADA) that protects our staff and stakeholders from discrimination. Protected categories include or address:

- Age
- Disability
- Equal pay & compensation
- National origin
- Race and/or nationality
- Religion
- Retaliation
- Sexual orientation
- Genetics

CWS policy fulfills the law and spirit of the EEOC through its hiring, training, employee treatment and application of commerce. We in part achieve regulatory compliance by publishing and distributing a CWS Employee Handbook, as well as conducting annual and routine training of our managers and staff. CWS will continue to apply EEOC and ADA standards to our existing, expanding, and new operations and facilities.

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 has emerged. CWS will institute a Threat Assessment Team that will work with management to assess the potential for workplace violence.

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Union Relations

CWS currently has employees represented by the International Longshore and Warehouse Union Local 6, Teamsters Industrial Union Local 70, and International Association of Machinists and Aerospace Workers Union Local 1546. The company has separate collective bargaining agreements with each and excellent relations with all unions. We are willing and able to respect and work cooperatively with all unions and all employees, whether working under collective bargaining agreements or not.





6. Forms







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RR COLLECTION SERVICES FORM 1 MAXIMUM RECYCLING SERVICE RATES PROPOSAL AND PAYMENT TO CITY: SUMMARY AND SIGNATURE

In preparing the RR Maximum Recycling Service Rates Proposal Forms proposers should be aware of the following:

- All RR Maximum Recycling Service Rates proposed on these forms for *City of Oakland* shall be fixed through June 30, 2016, with the exception of the adjustment on July 1, 2015, and should reflect service requirements and all one time and annual payments including franchise fees as specified in the RR Collection Services Contract.
- Proposer must complete <u>RR Collection Services Form 1</u> if they are to be considered for Contract Award.
- Proposer shall ensure that <u>ALL</u> Government fees and charges, effective as of January 9, 2013, are included in the Proposed RR Maximum Recycling Service Rates.

The Undersigned hereby certifies as follows:

- That <u>David Duong</u> has personally and carefully examined the specifications and instructions for the work to be done as set forth in this RFP.
- That <u>David Duong</u> has made examination of the services as applicable to the Proposal, and fully understands the character of the work to be done.
- That <u>David Duong</u> agrees to pay the CITY the Procurement Reimbursement Cost within thirty (30) days of execution of the RR Collection Services Contract.

That, having made the necessary examination, the undersigned hereby proposes to furnish all materials, vehicles, plans, equipment and facilities, and to perform all labor and services that may be required to do said work with the time fixed, and upon the terms and conditions provided in the Contract, at the Maximum Recycling Service Rates set forth on RR Collection Services Form 2 - Maximum Recycling Service Rates Proposal.

Note: Signatures shall be in accordance with Section of this RFP.

PROPOSER	California Waste Solutions, Inc.	4
Signature		
Print Name and Title	David Duong, President/CEO	Marl
Signature		100
Print Name and Title	David Duong, President/CEO	
Firm/Trade Name	California Waste Solutions, Inc.	
Individual: Partnership: Join		
Corporation X, A CA Corporation (S	State of Incorporation)	
Date <u>01/09/2013</u>		



RRCONECTION SERVICES FORMS PROSESSAL BOYOURGEN

KNOW ALL PERSONS BY THESE PRESENTS:

THAT California Waste Solutions, Inc.

*** Hartford Fire Insurance Company

(hereinafter called the principal), as principal and a corporation organized and doing business under and by virtue of the laws of the State of ., and duly licensed for the purpose of making, guaranteeing or becoming sole surety upon bonds or undertakings required or authorized by the laws of the State of California, as Surety, are held and firmly bound unto the City of Oakland, a municipal corporation, (hereinafter called the Obligee) in the just and full sum of One Hundred Thousand Dollars (\$100,000) lawful money of the United States of America, for the payment of which, well and truly to be made, we hereby bind ourselves and each of our successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, WHEREAS, the above bounden principal as aforesaid, is about to hand in and submit the oblige a proposal for RR Collection Services.

In accordance with the plans and specifications filed in the office of the obligee and under the notice inviting proposals therefore.

NOW, THEREFORE, if the proposal as submitted by the said principal shall be accepted, and the contract for such work or supplies be awarded to the principal, and the said principal shall fail, neglect or refuse to enter into a contract to perform said work or deliver said supplies, and furnish good and sufficient bond therefore, then the amount of this bond shall be declared to be forfeited to said obligee City of Oakland as liquidated damages, it being agreed that said City will suffer damages as a result of such failure, neglect or refusal of the principal and that such damages are and will continue to be, impracticable and extremely difficult to determine.

IN WITNESS WHEREOF, said Principal and said Surety have caused	these	presents	to be	duly
signed and sealed this 700 day of January, 2013	\//	/		-

California Waste Solutions, Inc

By

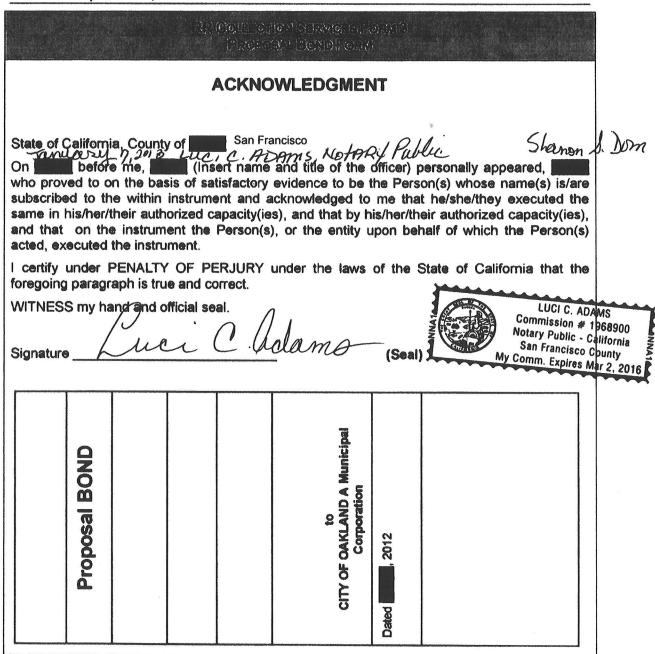
(Acknowledgment of Surety is required.

See reverse side.)

Change O Daw

Attomey-in-Fact





POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD

Bond T-4 **One Hartford Plaza** Hartford, Connecticut 06155 call: 888-266-3488 or fax: 860-757-5835)

KNOW ALL PERSONS BY THESE PRESENTS THAT:	Agency Code:	N/A			
X Hartford Fire Insurance Company, a corporation duly organized under the laws of the S	tate of Connecticut				
Hartford Casualty Insurance Company, a corporation duly organized under the laws of	f the State of Indiana				
Hartford Accident and Indemnity Company, a corporation duly organized under the la	ws of the State of Conne	cticut			
Hartford Underwriters Insurance Company, a corporation duly organized under the la	ws of the State of Connec	cticut			
Twin City Fire Insurance Company, a corporation duly organized under the laws of the	State of Indiana				
Hartford Insurance Company of Illinois, a corporation duly organized under the laws o	f the State of Illinois				
Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana					
Hartford Insurance Company of the Southeast, a corporation duly organized under the					
having their home office in Hartford, Connecticut (hereinafter collectively referred to as the "Compa	nies") do hereby make	, constitute and appoint,			
up to the amount of UNLIMITED :					
L C. ADAMS, PIERRE LE COMPTE, SHANON S. DOM OF SAN FR	ANCISCO,				
CALIFORNIA	_				

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by 🗵, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on August 1, 2009, the Companies have caused these presents to be signed by its Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.

















Wesley W. Cowling, Assistant Secretary

M. Ross Fisher, Vice President

STATE OF CONNECTICUT

COUNTY OF HARTFORD

Hartford

On this 12th day of July, 2012, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



Karhleen T. Maynard

Kathleen T. Maynard Notary Public My Commission Expires July 31, 2016

I, the undersigned, Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of January 7, 2013 Signed and sealed at the City of Hartford.

















Gary W. Stumper, Vice President

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of San Francisco

On January 7, 2013 before me Luci C. Adams, Notary Public

Personally appeared * * * * * * * Shanon S. Dom* * * * * * * *



who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature of Notary

	RR Collection Form 2A MAXIMUM RECYCLING SERVICE RATES City of Oakland, CA Residential Recycling Collection Service											
Α	Residential Recycling Collection Services - Maximum Revenue											
1	Cost Per Collected Ton	\$	621.81	per ton								
2	Projected Tonnage Cap (July 1, 2015-December 31, 2015)		36,000	Tons								
3	Projected Tonnage Cap (January 1, 2016-December 31, 2016)		36,000									
4	Material Diversion Standard		90.00%	Percent of	Coll	ected To	ns					
B Ancillary Services												
1	Additional SFD Recyclable Materials Cart		12.00	each addit	iona	l cart/mo	nth					
2	MFD Cart Excess Frequency Collection		24.13	each addit	iona	l cart/occ	curre	nce				
3	MFD Bin Excess Frequency Collection		75.80	each addit	iona	l bin/occi	urrei	nce				
4	Additional Cart Exchange		60.00	each addit	iona	l cart/occ	curre	ence				
5	Additional Cart Replacement		80.00	each addit	iona	l cart/occ	curre	ence				
6	Additional Bin Exchange		60.00	each addit	iona	l bin/occi	urrei	псе				
7	Additional Bin Replacement	:	250.00	each addit	iona	l bin/occi	urrei	nce				
8	Premium Backyard SFD Recycling Services		34.00	monthly								
С	Push Rates	0-2	5 feet	26-50 feet	51	-75 feet	76-	100 feet	100	+ feet		
1	Push Rate	\$	9.56	\$ 13.51	\$	17.45	\$	25.34	\$	40.34		
D	Bin Cleaning	1-4	CY Bin	5+ CY Bin	1							
1	Cleaning Rate	\$	50.00	\$ 50.00								
Е	Additional Services					Rates						
1	Key Service	\$	12.00	each mon	h/cu	stomer		-		-		
2	Difficult to Service Rate	\$	34.00	each mon	th/cu	stomer		•		_		



	R	R Collecti	on Form 2	2B				
	MAXIMUM	RECYCLI	NG SERV	ICE RATE	S			
		City of Oa	kland, CA					
	Commercial Non-Ex	clusive R	ecyclable	Materials	Collection	1		
Α	Collection		Total Mo	nthly Rate				
1	Recyclable Materials Cart Sizes (gallons)	20	32	64	96			
2	1 collection / week	\$ 28.82	\$ 28.82	\$ 28.82	\$ 28.82			
3	2 collections / week	\$ 57.63	\$ 57.63	\$ 57.63	\$ 57.63			
4	3 collections / week	\$ 86.45	\$ 86.45	\$ 86.45	\$ 86.45			
5	4 collections / week	\$ 115.27	\$ 115.27	\$ 115.27	\$ 115.27			
6	5 collections / week	\$ 144.08	\$ 144.08	\$ 144.08	\$ 144.08			
В	Collection			Tota	I Monthly	Rate		
1	Recyclable Materials Bin Sizes (Cubic Yard)	1	1.5	2	3	4	6	7
2	1 collection / week	\$ 189.49	\$ 205.62	\$ 221.76	\$ 252.89	\$ 286.15	\$ 348.71	\$ 384.63
3	2 collections / week	\$ 351.20	\$ 380.29	\$ 409.37	\$ 466.40	\$ 525.55	\$ 639.91	\$ 701.71
4	3 collections / week	\$ 512.92	\$ 554.95	\$ 596.98	\$ 679.90	\$ 764.95	\$ 931.10	\$1,018.80
5	4 collections / week	\$ 674.64	\$ 729.61	\$ 784.59	\$ 893.41	\$1,004.35	\$1,222.29	\$1,335.89
6	5 collections / week	\$ 836.35	\$ 904.28	\$ 972.20	\$1,106.92	\$1,243.75		\$1,652.98
	Commercial Recyclable Materials - Roll-Off		Total Pull Rate (For					
٥	Box Collection Service			nai i uii ix	ale		Other	
1	Recyclable Materials Roll-Off Box Sizes (cubic yards)	6 CY	10 CY	20 CY	30 CY	40 CY	Sizes)	
2	Roll-Off Box Pull Rate	\$ 702.39	\$ 702.39	\$ 698.39	\$ 876.26	\$ 899.05	\$ 30.00	
3	Compactor Pull Rate (Customer owned Compactor)	\$ 829.53	\$ 829.53	\$ 829.53	\$ 829.53	\$ 895.99	\$ 50.00	
4	Compactor Pull Rate (Contractor owned Compactor)	\$ 966.19	\$ 966.19	\$ 966.19	\$ 992.07	\$1,080.05	\$ 55.00	
D	Push Rates	0-25 ft	26-50 ft	51-75 ft	76-100 ft	100+ ft		
1	Push Rate	\$ 9.56	\$ 13.51	•	\$ 25.34	\$ 40.34		
Ε	Bin Cleaning	1-4 CY Bi	5+ CY Bir	1				
1	Cleaning Rate	\$ 50.00	\$ 50.00					
F	Additional Services				Rates			
	Key Service		each mont					
2	Difficult to Service Rate	\$ 34.00	each mont	h/customer				



	R	R C	ollecti	on	Form 2	2B									
	MAXIMUM						RATE	S							
			,		and, CA										
	Commercial Non-Ex	clu	sive R	_				Co	llectior	1					
Α	Callection			То	tal Mor	nth									
1	Recyclable Materials Cart Sizes (gallons)		20		32		64		96						
2	1 collection / week	\$	28.82	\$	28.82	\$	28.82	\$	28.82						
3	2 collections / week	\$	57.63	\$		\$		\$	57.63						
4	3 collections / week	\$	86.45	\$	86.45	\$	86.45	\$	86.45						
5	4 collections / week	\$ 1	115.27	\$	115.27	\$	115.27	\$	115.27						
6	5 collections / week	\$ 1	144.08	\$	144.08	\$	144.08	_	144.08						
В	Collection						Tota	I M	onthly	Ra	te				
1	Recyclable Materials Bin Sizes (Cubic Yard)		1		1.5		2		3		4		6		7
2	1 collection / week	\$	189.49	\$	205.62	\$	221.76	\$	252.89	\$	286.15	\$	348.71	\$	384.63
3	2 collections / week	\$	351.20	\$	380.29	\$	409.37	\$	466.40	\$	525.55	\$	639.91	\$	701.71
4	3 collections / week	\$	512.92	\$	554.95	\$	596.98	\$	679.90	\$	764.95	\$	931.10	\$ 1	1,018.80
5	4 collections / week	\$	674.64	\$	729.61	\$	784.59	\$	893.41	\$	1,004.35	\$	1,222.29	\$ 1	1,335.89
6	5 collections / week	\$	836.35	\$	904.28	\$	972.20	\$	1,106.92	\$	1,243.75		1,513.48	\$ 1	1,652.98
	Commercial Recyclable Materials - Roll-Off			Total Pull Rate								(For			
Ü	Box Collection Service					, tai	i un ix	att		Other					
1	Recyclable Materials Roll-Off Box Sizes (cubic yards)	•	CY		10 CY	:	20 CY	3	30 CY	4	10 CY		Sizes)		
2	Roll-Off Box Pull Rate	\$	702.39	\$	702.39	\$	698.39	\$	876.26	\$	899.05	\$	30.00		
3	Compactor Pull Rate (Customer owned Compactor)	\$	829.53	\$	829.53	\$	829.53	\$	829.53	\$	895.99	\$	50.00		
4	Compactor Pull Rate (Contractor owned Compactor)		966.19	\$	966.19	\$	966.19	\$	992.07	_	1,080.05	\$	55.00		
D	Push Rates	_	5 ft		-50 ft		-75 ft		-100 ft		• ••				
_	Push Rate	\$	9.56	_	13.51	_	17.45	\$	25.34	\$	40.34				
Е	Bin Cleaning			_	CY Bir	י נ									
1	Cleaning Rate	\$	50.00	\$	50.00										
F	Additional Services							F	Rates						
_	Key Service	\$		_	ch montl										
2	Difficult to Service Rate	\$	34.00	each month/customer											



RR Collection Form 2C City of Oakland, CA **Multiple Service Discount** Agreement Year 1 Proposers proposing to offer RR Collection Services and Disposal Services shall complete line 1 of RR Collection Form 2C to indicate the discount, if any, that will be applied to all proposed rates proposed on RR Collection Forms 2A through 2B* in the event both services are awarded to the proposer. 1 Discount to all proposed rates on RR Collection Forms 2A through 2B* 0.00% Proposers proposing to offer RR Collection Services and MM&O Collection Services shall complete line 2 of RR Collection Form 2C to indicate the discount, if any, that will be applied to all proposed rates proposed on RR Collection Forms 2A through 2B* in the event both services are awarded to the proposer. 2 Discount to all proposed rates on RR Collection Forms 2A through 2B* 1.00% Proposers proposing to offer RR Collection Services, MM&O Collection Services and Disposal Services shall complete line 1, 2, and 3 of RR Collection Form 2C to indicate the discount, if any, that will be applied to all proposed rates proposed on RR Collection Forms 2A through 2B* in the event multiple services are awarded to the 3 Discount to all proposed rates on MM&O Collection Forms 2A through 2B*† 0.00%

^{*} Note to proposers: Award of multiple services will not reduce the total franchise fees due to the City. †Note to proposers proposing on all three services: In the event all three services are awarded the discount on line 3 will apply, in the event a combination of 2 services are awarded, the discount on line 1 or 2 as appropriate will apply.