

**Landfill Operations Preliminary Statement of Work
May 10, 2011**

Landfill operations are one of the responsibilities of the City of San Diego's Environmental Services Department.

Functions and Services

The Landfill functions include:

- Landfill Operations
- Greenery Operations
- Hazmat Landfill Load Check
- Fee Booth Operations
- Landfill Maintenance and Monitoring (LMM)

The City of San Diego intends to acquire the services of a provider (City employees or outside vendor) to operate its active landfill operations at the West Miramar Landfill as well as the City's eight closed landfills and eight burn sites. The services that will be considered include:

Activity	Detailed Description
Landfill Operations	
Push, compact and cover waste	Receive and push waste to desired location at landfill face; Compact waste to reach desired density; Cover waste with appropriate daily, intermediate and final cover (i.e., tarp, dirt, alternative daily cover); Maintain commercial and public tipping areas. Excavate, stockpile and transport cover material as needed.
Maintain landfill roads	Pave or surface landfill roads to ensure vehicle access to landfill; Repair roads as needed (i.e., ruts, potholes, cracking).
Install and maintain drainage control devices	Construct drainage control structures; Repair and/or replace structures as needed to protect landfill from erosion.
Manage and maintain leachate collection system	Leachate collection system includes below ground collection tanks, pumps to above ground tanks for storage until discharged into trucks for appropriate application of the operating landfill face.
Perform surface grading and maintenance	Landfill surface shall be graded as needed to prevent erosion, cover exposed trash, assist in drainage, and prevent standing water.
Install and maintain erosion control devices	Install erosion control devices; Repair and/or replace devices as needed to protect landfill from erosion.
Perform control duties	Perform traffic, litter, dust, leachate, vector and bird control.
Install and maintain landfill signs	Install road, traffic control, safety, and facility signs; Repair and/or replace signs as needed.
Landfill Engineering	Design landfill modules, daily cells, special waste areas, wet weather areas and the sequence for filling; Design and oversee construction of temporary and permanent haul roads and access roads; Design drainage and erosion control structures; Survey and stake daily cells; Manage clean fill dirt program; Prepare and submit monthly, quarterly, and annual reports to regulatory agencies as required; Participate in regulatory inspections as City representative; Ensure compliance with permitting requirements; Provide support for Miramar CIP project development (i.e. project estimates, contract specifications, construction management); Serve as liaison with Navy on lease issues and projects; Support departmental construction projects; Review technical documents from contracted consultants (i.e., lab testing,

Activity	Detailed Description
	etc.); Plan and execute topographical mapping at active and inactive sites; Maintain surveying control networks; Advise and survey for drainage maintenance at inactive sites; Establish computer aided design and drafting files, scaled drawings, diagrams, and field notes of active and inactive sites.
Greenery Operations	
Process Materials	Receive and mix food waste with ground green waste; Remove undesirable plants, and physical contaminants; Mix automated yard waste with brush and landscaper waste; Clean contamination from automated yard waste routes.
Grinding material	Grind yard waste to suitable size for windrow composting; Grind custom order and specialty products per customer request; Grind dimensional lumber, wood pallets, stumps, and logs for sale as recycled landscape product; Re-grind materials as needed.
Forming and moving windrows	Create triangle or trapezoidal shaped windrows with 40-50% moisture content; Create windrows in batches of 5,000 cubic yards and with the size and shape to accommodate aeration from a straddle windrow turner.
Aerating windrows	Aerate windrows using windrow turner at scheduled intervals.
Add water to composting windrows	Add water to windrows as needed to maintain a 40-50% moisture ratio.
Screen products	Screen compost and other products into specified sizes and to remove physical contaminants.
Air classification cleaning	Use air knife at appropriate setting to remove the majority of light plastic from the final product.
Product blending	Blend custom products as requested by customers.
Color products	Apply water and dye to pre-ground dimensional lumber.
Residue disposal	Remove, dump and replace contamination collection boxes as needed; Remove other composting process residues.
Process drywall	Receive and mix drywall as appropriate to add value to compost.
Process food waste	Receive and mix food waste with ground green waste at appropriate ratio; Place mixture into windrows.
Load customers	Load material purchased by customers into vehicles.
Perform control duties	Perform traffic, litter, dust, leachate, vector and bird control.
Perform quality control functions	Monitor contamination in incoming loads, remove contamination from outgoing products, enforce and assess penalties, and product sampling.
Market material	Provide market value pricing of commodities; Advertise products on City's website, at various community events, and in Curbsider mailer to all curbside customers; Provide material at no cost to open and closed sites for landfill erosion control.
Research and development to increase diversion	Assist and coordinate testing and evaluation of compostable feedstock currently being landfilled.
Hazmat Landfill Load Check	
Conduct solid waste inspections	Conduct inspections at commercial and public tipping, construction and demolition, greens, roadside, and Fee Booth locations; Document inspections and enter into Access database for tracking.
Unacceptable waste identification	Identify unacceptable waste through solid waste inspections; Remove hazardous waste and other prohibited waste; Return waste to generator or take waste into possession and dispose of material at appropriate location.
Investigate incidents involving the disposal of hazardous waste and other unacceptable wastes	Determine origin of unacceptable waste through data obtained on waste, interviews, reviewing disposal documents, or other materials contained in the same load.

Activity	Detailed Description
Public education	Distribute and review educational materials with residential and business customers on proper waste identification and provide options for the proper disposal of unacceptable wastes.
Enforcement	Determine appropriateness of enforcement action and the level of enforcement needed; Provide a verbal warning, issue a Notice of Violation, and/or refer an incident to a regulatory agency or to the City or District Attorney for additional investigation and enforcement. Inspectors will provide incident documentation, draft case reports or incident summaries, and obtain and process samples of prohibited waste for laboratory analysis
Hazardous waste management	Identify hazardous waste including conducting hazardous waste identification testing for unknown substances. Package and manage hazardous waste onsite at the Miramar landfill in accordance with all applicable regulatory requirements, conduct weekly inspections, coordinate disposal, review invoices, manifest and waste diversion tracking.
Special waste review and acceptance	Inspectors will review and process all requests for the disposal of various types of special waste and review supporting documentation such as Materials Safety Data Sheets and laboratory analysis to determine if special wastes can be accepted in compliance with State and federal requirements, Miramar Landfill acceptance criteria, and permit restrictions. Review and process all Special Waste Manifests and enter data into an Access database for tracking.
Emergency response	Respond to, mitigate, clean-up, and complete required regulatory reporting for releases of hazardous substances and provide temporary onsite incident management for situations involving the disposal of explosives and other shock sensitive chemicals requiring a response from City or County Fire, Hazmat, or Metro Arson Strike Teams.
Training	Provide initial and refresher training to landfill staff on hazardous materials recognition, special waste acceptance documentation and processing, spill reporting, and other applicable topics.
Fee Booth support	Respond to daily calls from the Fee Booth to provide waste evaluation and acceptance expertise to customers with potentially unacceptable wastes, prevent the acceptance of prohibited wastes, provide education on proper disposal, and conduct enforcement as required.
Fee Booth Operations	
Inspect material type	Inspect incoming load type and assess appropriate fee.
Assess appropriate tipping fees	Calculate total fees due by the incoming tonnage and load type; Process outgoing transactions such as commodity sales, held transactions, and customer rebilling (when appropriate fee was not applied).
Screen for illegal material	Screen incoming material for items not allowed in landfill; Notify Hazmat Landfill Load Check for assistance in identifying unacceptable waste.
Comply with regulations	Ensure compliance with State minimum regulations (i.e. record keeping, traffic control, scale accuracy, and proper revenue collection).
Collect, input, reconcile data	Collect tonnage and revenue data in Refuse and Disposal (RAD) database (power builder application used for collecting, monitoring, and reporting landfill tonnage and revenue information); Reconcile data as needed.
Cash and check handling and accounting	Collect cash and check payments; Process deferred account payments; Complete deposit slips; Coordinate armored transport; Coordinate with bank to ensure accuracy of daily deposits; Manage deferred accounts.
Customer service	Provide information on commodity sales, unacceptable waste, alternative disposal locations, and general landfill information.
Landfill Maintenance and Monitoring	
Landfill gas [LFG] monitoring & collection	Conduct quarterly LFG surface emission surveys, building methane detector checks, and read monitoring probes; Conduct monthly extraction well

Activity	Detailed Description
	monitoring and adjustments; Read flares weekly.; Manage condensate collection and disposal; Prepare survey result maps and monitoring reports.
Landfill gas [LFG] system maintenance	Repairs to the LFG systems include monitoring probes, extraction wells, well heads, piping, condensate traps, valves, vaults, flare stations, air compressors, pumps, sumps, blowers, controls, etc; Respond to flare system shutdowns and building methane detector alarms.
Groundwater monitoring and maintenance	Assist groundwater consultant to access for sampling groundwater wells; Maintain the integrity of groundwater monitoring wells, including monuments, well heads, pumps and tubing.
Inactive landfill surface maintenance	Maintain, repair and upgrade drainage structures, landfill cover, and access roads located on and adjacent to the landfill sites; Conduct monthly site inspections and prepare and submit monthly reports for City review and submission to LEA; Maintain access to all extraction wells, monitoring wells (probes), and groundwater sampling wells; Manage weed abatement, mowing, fencing, and general site condition.
NPDES sampling	Perform quarterly inspections, and collect samples (as required by specified storm events), analyze data and prepare reports for City review and submission of annual National Pollutant Discharge Elimination System (NPDES) reports.
Burn site management	Inspect burn sites to ensure ash has not been exposed due to erosion of cover material; Cover exposed ash as needed; Maintain drainage structures and implement erosion control methods to protect site against erosion.
Biological Services	Seed mix design/construction, biological site visits, biological surveys, project monitoring.

Services that will not be included in this competition as determined by the Landfill Pre-competition Assessment Report are the Fee Booth activities related to franchise administration and the Landfill Maintenance and Monitoring (LMM) activities related to project management, regulatory compliance, and strategic planning. The remaining activities that make up the Fee Booth and LMM functions are eligible and appropriate for competition. Administrative support services such as budget and information technology administration, group policy and procedure development, and management reporting may be impacted as a result of the managed competition process. It is not clear how administrative service positions will be impacted as a majority of them perform duties in other functions not considered for managed competition.

The budgeted Supervising Management Analyst position provides oversight of the Fee Booth Operation function and serves as the Franchise Administration Program Administrator. The City of San Diego's Non-Exclusive Solid Waste Collection system consists of 21 franchisees that have been granted permission to collect, transport and subsequently dispose of waste within the City of San Diego. This position is also in charge of the development and implementation of Departmental policies regarding administration of the franchise program, and the implementation of new policies and procedures regarding all aspects of the franchise program (i.e., contracts, tonnage and revenue reporting, accounting tasks). The policy decisions made by the franchise administrator have a direct impact upon revenue generated for the City's General, Refuse Disposal Enterprise, and Recycling Funds. As a result, this function was deemed inherently governmental, ineligible, and inappropriate for competition.

Although not deemed inherently governmental, a portion of the activities performed within the LMM function are ineligible and inappropriate for competition as potential risks and increased liability are too high while economic benefits are very low. These activities are performed by 1.00 Sr. Civil Engineer, 1.00 Sr. Mechanical Engineer, and 3.00 Associate Civil Engineers and can be categorized into project management, regulatory compliance, and strategic planning.

Landfill operations require the oversight of a Civil Engineer/Project Manager for regulatory compliance and project management oversight of Capital Improvement projects and ancillary construction projects. These activities are currently performed by a Project Officer II and an Associate Civil Engineer.

In addition, legal limitations may exist on outsourcing enforcement functions related to Landfill operations such as Code Compliance and Hazmat Load Check functions. The City Attorney will provide a legal opinion on whether duties performed by Enforcement Officials, as defined by the San Diego Municipal Code, can be delegated to private contractors.

Locations and Operating Hours

The services described above are currently provided at the following locations with their respective hours of operation:

Function	Location	Hours of Operation
Landfill operations	West Miramar Landfill	The landfill is open 361 days per year (362 days in a leap year) and accepts waste for disposal from 7:00 am to 4:30 pm Monday through Friday and from 7:30 am to 4:30 pm on Saturday and Sundays including most holidays except New Year’s Day, Easter Sunday, Thanksgiving Day and Christmas Day. It is the only disposal site in the County that is open on Sundays.
Greenery operations	West Miramar Landfill	Same as Landfill Operations
Hazmat Landfill load check	West Miramar Landfill	Same as Landfill Operations
Fee booth operations	West Miramar Landfill	Same as Landfill Operations
Landfill maintenance and monitoring	8 closed landfills 8 closed burn sites West Miramar Landfill	Monday through Friday

Technical Delivery Standards

The City of San Diego expects the service provider (City employees or outside vendor) will perform these services while adhering to the following technical standards:

- Regulatory mandates established by federal, State, and local, and agencies including the Environmental Protection Agency (EPA), CalRecycle, Solid Waste Local Enforcement Agency (LEA), Development Services Department, California Department of Fish and Game, United States Fish and Wildlife Service, United States Army Core of Engineers, Air Pollution Control District (APCD), Regional Water Quality Control Board (RWQCB), California Air Resources Board (CARB), , and the County of San Diego Environmental Health Department..
- Requirements established in the long-term ground lease between the City of San Diego and the United States of America through the Department of the Navy.
- Regulations, policies, and fees identified in the City of San Diego Fee Schedule and Regulations for the Miramar Landfill established by San Diego Municipal Code sections 66.0127(c)(4) and Proposition 26.

Performance Standards

The City of San Diego expects the service provider (City employees or outside vendor) to maintain or exceed current service levels, by maintaining current performance standards.

Service Measure/Landfill Functions	Description	Current Service Level ¹	Data Source
Airspace utilization factor/Landfill Operations	Airspace utilization factor is used to determine the available space in the landfill for refuse burial. Monitoring airspace utilization provides the operator with data to ensure the most efficient and effective methods are utilized in refuse burial. This factor is calculated by dividing the tons of refuse disposed by the volume of area in cubic yards consumed in the landfill. The overall goal is to increase the airspace utilization factor by consuming less space at the landfill through enhanced compaction.	0.50	- Refuse and Disposal database (RAD) - Engineering Report
Tons of waste disposed/ Landfill Operations	The amount of tons of waste disposed of at the Miramar Landfill. The dynamic nature of landfills makes it difficult to set goals for tons of waste disposed, but incoming tonnage does depict resources needed in order to push, compact, and bury waste.	909,484	RAD
Ton of material processed/Greenery Operations	Tons of green waste processed into high quality mulch, compost and wood chips which is made available to the public. The tons diverted from the landfill and processed is essential in prolonging landfill life.	103,203	RAD
Total commodity sales/Greenery Ops	Revenue produced from sale of mulch, compost and wood chips.	\$450,071	SAP
No. of State Minimum Standard Notice of Violations (NOVs)	A notice of violation is presented to the jurisdiction when State compliance and/or regulatory standards are not met.	1	Access database

¹ Current service levels are based on FY2010 data. These values may vary annually due to external factors outside the control of the operator.

Service Measure/Landfill Functions	Description	Current Service Level¹	Data Source
received/Miramar Landfill and Greenery Operations			
No. of State Minimum Standard Notice of Violations (NOVs) received/ Inactive Landfill sites and burn sites	A notice of violation is presented to the jurisdiction when State compliance and/or regulatory standards are not met. Regulatory inspections are conducted quarterly as well as annually on all inactive landfills and burn sites	1	Access database
Tons of hazardous waste diverted from the Miramar Landfill/Hazmat Load Check	Hazardous waste such as flammable liquids, pesticides, oxidizers, asbestos, corrosives, shock sensitive chemicals, explosives, radioactive waste, medical waste, and polychlorinated biphenyls (PCBs) are illegal and dangerous to dispose of in landfills and are extremely harmful to the environment.	19.1	Access database
No. of solid waste inspections conducted/Hazmat Load Check	Conduct solid waste inspection in all areas of the Miramar landfill 7 days/wk, 361 days/year	6,600	Access database
No. of customers served at fee booth/Fee Booth	Number of transactions processed annually at the Miramar Landfill fee booth	350,305	RAD
No. of customers served per fee booth employee/Fee Booth	Number of transactions processed annually at the Miramar Landfill fee booth per FTE	21,894	- RAD - FY2010 Budget
Total revenue collected/Fee Booth	The Fee Booth collects and processes thousands of payments annually. A large amount of money is taken in daily (average cash/check intake is approximately \$30k) all of which comes through the fee booth.	\$31 million ²	SAP
Percent of extraction wells sampled annually/LMM	Monitoring gas and groundwater extraction wells is vital in mitigating greenhouse gas migration which could result in NOVs and subsequent regulatory fines.	100%	LMM Access database
Percent of surface water sampling and reporting for NPDES permits complete	Performing sampling, analysis, and preparation and submittal of quarterly and annual reports. 5 sites and 27 sampling points.	100 %	ESD Library
Percent of landfill gas emission and monitoring performed quarterly/LMM	Perform quarterly landfill gas surveys, sampling landfill gas monitoring probes, inspection of building gas detectors and analyze data. (180 gas probes)	100%	LMM Access database
Percent of groundwater well sampling and reporting completed as required under RWQCB Order 97-11/LMM	Perform groundwater sampling, analysis and preparation of quarterly and annually Reports. (56 groundwater wells in total at 5 sites)	100%	ESD Library

² This value is an estimate. Final methodology is currently being developed to calculate this figure.

Service Provider Expectations

Specific methods to measure and monitor service provider expectations will be included in the Statement of Work. These measures will be stored and tracked electronically and data will be audited regularly. Customer satisfaction rates will be tracked via survey, or similar methods. The City currently has multiple surveys in place that can be used to track results.

- Expect service provider to track requests, complaints, other feedback and when this information will be transmitted to the City.
- Expect service provider to provide communication plan to the City about service mishaps or delays and related remedies, as well as overall performance information.
- Expect the service provider to fulfill the reporting requirements of all applicable federal, state and local government regulations and permits.

Please note that more detailed performance data will be included in the more detailed Statement of Work that will be developed in the next phase in preparation for issuing a Request for Proposals. We are describing all current functions, but judgments will be made in the final SOW as to what is “in-scope” vs. “out of scope”, based on our market assessment. Some data is not made available in this public Preliminary Statement of Work document so as to maintain a level playing field between City employees and potential contractors.