SECTION 2.0

WHAT'S THE CITY'S ROLE IN WASTE/RESOURCE MANAGEMENT?

2.0 WHAT IS THE CITY'S CURRENT ROLE IN WASTE/RESOURCE MANAGEMENT?

2.1 EXISTING CITY SERVICES

The mission of the City's Environmental Services Department (ESD) is to provide environmental services to sustain and improve the quality of life in San Diego. This is achieved through the integrity, creativity, teamwork, and the use of technological innovation by dedicated and competent employees who are committed to fully meeting community needs. To accomplish this mission, ESD is divided into three operational divisions: Collection Services; Waste Reduction and Disposal; and Energy, Sustainability, and Environmental Protection which are described in the following section.

2.1.1 COLLECTION SERVICES DIVISION

The City of San Diego has been providing residential trash collection services for over 80 years. In 2008, crews are projected to collect about 380,000 tons of trash from 304,000 residences and small businesses in San Diego. Crews are also anticipated to collect over 80,000 tons of household recyclables and over 30,000 tons of yard waste to be recycled.

The Collection Services Division of ESD is responsible for:

- Refuse collection,
- Curbside recycling collection,
- Curbside greenery collection,
- Special collection, and
- Container delivery.

2.1.2 WASTE REDUCTION AND DISPOSAL DIVISION

The Waste Reduction and Disposal Division of the City's ESD is responsible for:

- Miramar Landfill operations,
- Field operations (illegal dump clean-up, community clean-up events),
- Assembly Bill 939 (AB 939) (California Integrated Waste Management Act of 1989) compliance,

- Green and wood waste recycling and marketing,
- Solid waste code enforcement,
- Public outreach and education,
- Maintenance of inactive landfills,
- Landfill gas and groundwater management, and
- International Standards Organization (ISO) 14001 annual certification.

2.1.3 ENERGY, SUSTAINABILITY, AND ENVIRONMENTAL PROTECTION DIVISION

The Energy, Sustainability, and Environmental Protection Division of the City's ESD is responsible for:

- Hazardous materials management,
- Underground storage tank engineering and environmental monitoring,
- Household hazardous waste,
- Energy efficiency and renewable energy,
- Community sustainability program,
- Asbestos and lead management, and
- Lead safe neighborhood programs.

This division also provides educational outreach programs for City residents and staff. The programs designed and implemented through the Environmental Protection Division are vital to the diversion of dangerous or contaminated substances from the City's land and waterways.

2.2 ZERO WASTE PROGRAMS

The City has a long-standing commitment to achieving zero waste goals through programs, policies, and regulations. Table 2-1 lists all of ESD's zero waste programs and policies that are already in-place and which are being undertaken independent of the LRMOSP effort.

The City has instituted a Leadership in Energy and Environmental Design (LEED) Silver Certification policy for new City facilities and fast-tracking of building and planning permits for private industry LEED projects. In 2001, the City Council implemented the Energy Efficient Products Policy to maximize the purchase of energy-star rated appliances and equipment for all departments in conjunction with the Energy Conservation and Management Policy. In addition, the City's

adoption in 2007 of the Environmentally Preferable Purchasing Policy (EP^3) marks a concerted effort by the City to reduce waste and increase efficiency in its own operations.

Expanding the City's organics diversion has been an important component in its commitment to reducing solid waste disposal and diversion of reclaimable materials, specifically through food/greenwaste composting programs. The following demonstrates the efforts taken by ESD to implement food/greenwaste composting programs:

- Encourage commercial sector to maintain food waste composting and partner in zero waste events;
- Double the size of Miramar Greenery composting facility and upgrade its permit;
- Food waste partnership with Sea World, Petco Park, San Diego State University (SDSU), Point Loma Nazarene University (PLNU), and Del Mar Fair;
- Conduct Backyard Composting Bin Events;
- Compost Bin Demonstration Gardens in partnership with Zoo, Wild Animal Park, and SeaWorld and own site at Ridgehaven Green Building;
- Vermicomposting (worm castings compost) school partnerships with Solana Center (siting vermicomposting bins in schools);
- Master Composter Training;
- Christmas tree recycling; and
- Bagged compost sales.

Outreach and education are key components of waste reduction and conservation policies for the City. As such, ESD has put forth a number of initiatives and programs in the dissemination of knowledge throughout the community about its zero waste goals. The following represents the variety of approaches taken by ESD in educating the community on conservation and waste reduction:

1. Pamphlets:

    - Waste Reduction Guide,
    - Unwanted Mail Reduction,

- Holiday Waste Reduction, and
- Recycle or Else.

2. Environmental workshops and tours,
3. Commercial and multi-family technical assistance and annual award recognition for top-waste reducers,
4. Commercial and Multi-family Waste Audits,
5. Zero Waste Earth Day events in Balboa Park,
6. Support of Zero Waste at San Diego County Fair and Del Mar Fairgrounds, and
7. Ridgehaven Green Building/Xeriscape Demonstration Project.

The City recently approved a Construction & Demolition Ordinance which provides incentives for the recovery of construction, demolition, and inert materials. In order to institute recycling in more sectors of the City, a recycling ordinance was also approved by the City to provide programs and policies for a reduction in disposal of recyclable materials from commercial, single-family, and multi-family properties. A surfboard recycling program was instituted in November 2008 at the Miramar Recycling Center in cooperation with Eco Built Construction, Rerip.com, and the Allan Company.

2.3 WEST MIRAMAR LANDFILL

The City's West Miramar Landfill (WML) is located north of Highway 52 at 5180 Convoy Street in San Diego, California (see Figure 2-1). The site is bounded on the north by the runway area of Marine Corps Air Station (MCAS) Miramar, Interstate 805 to the west, the North Miramar Landfill to the east and San Clemente Canyon to the south. The 476-acre landfill is located within approximately 802 acres of Federal land, leased from the U.S. Department of the Navy, on MCAS Miramar. The WML is a Resource Conservation & Recovery Act (RCRA) Subtitle D compliant facility and is classified as a Class III landfill permitted to accept only non-hazardous waste in accordance with State waste classification regulations.

Additional facilities such as the Miramar Greenery, the Household Hazardous Waste Transfer Facility, and the Miramar Recycling Center are located at the Miramar Landfill. At the Miramar Greenery, greens from the City's curbside

greenery recycling program or greens that are dropped off from gardeners and landscapers are used to create high quality compost, mulch, and wood chips. The Household Hazardous Waste Transfer Facility is located at the Miramar Landfill entrance on Convoy Street, just north of State Highway 52. The facility accepts household hazardous waste on Saturdays from 9 a.m. to 3 p.m., except holidays. The Miramar Recycling Center serves as a drop-off center for many recyclable materials, including large or bulky items that can be recycled but cannot be placed in either the black trash bin or the blue recycling bin. Operated by Allan Company Recycling, the center accepts various types of recyclable materials including paper, aluminum, plastic, and glass. Detailed information can be found at www.allancompany.com.

2.3.1 WEST MIRAMAR HEIGHT INCREASE

The West Miramar Landfill Height Increase project proposes a maximum 20-foot increase in permitted height of the landfill. The proposed project would increase the height of the existing WML from 470 feet above mean sea level (amsl) to 485 feet amsl in the 239-acre Phase I area and from 465 feet amsl to 485 feet amsl in the 238-acre Phase II area. The project does not propose a horizontal footprint increase; there will be no change in daily throughput, no change in operations, and no change in land use. The project would extend the life of the landfill from 2012 to 2017. The total permitted capacity of the West Miramar Landfill would increase from the maximum 1996 permitted airspace volume of 75,210,000 cubic yards (cy) to a total permitted airspace capacity of 87,760,000 cy.

2.3.2 MIRAMAR MATERIAL RECOVERY FACILITY (MRF)/TRANSFER STATION (TS)

The City has been considering a new facility adjacent to the Miramar Landfill to serve its residents. In anticipation of building a material recovery facility (MRF) and/or transfer station (TS), the City entered into a long-term lease agreement with the MCAS to use a 28-acre parcel adjacent to the Miramar Landfills. Recently, a portion of the site (9 acres) was reclaimed by the government to site an aviation fuel storage facility under the lease provision related to national defense activities. The result of this action has reduced the overall parcel available for the MRF/TS from its original 28 acres to about 19 acres.

The BAS Consultant Team was asked to evaluate the feasibility of developing a large scale MRF/TS on the 19-acre portion of the property. The study determined the 19-acres could accommodate the anticipated infrastructure needed for a MRF/TS to meet future solid waste management needs.

2.3.2.1 DESIGN CRITERIA

The following is a preliminary list of anticipated MRF requirements:

1. Full-scale TS to service public self-haul and commercial haulers.
2. Capacity of the TS to be 5,000 tons per day (tpd) with potential for some growth.
3. State-of-the-art MRF for processing source separated materials/or mixed waste.
4. Maintenance center with three bays for rolling stock maintenance.
5. Adequate parking for rolling stock (transfer trailers and commodity trucks).
6. Space for future conversion technology.

2.3.2.2 SITE DEVELOPMENT

The primary consideration for the 19-acre site was to develop adequate capacity to provide transfer station capacity for 5,000 tpd of waste and a state-of-the-art MRF capable of processing between 200 and 400 tpd. The result of the planning exercise demonstrates that the site is adequate to provide a multi-scale entrance and scalehouse facility capable of adequately handling estimated traffic flows.

The footprint can accommodate an 180,000 to 190,000 square foot (sf) building. The building would be divided into a TS of roughly between 80,000 to 90,000 sf and a MRF ranging from 100,000 to 110,000 sf. There is a small area representing 10,000 to 12,000 sf that could be provided for a future conversion technology. This is a very small parcel for this use and will limit the type of conversion technology that can be considered. A conceptual layout of the MRF is presented in Figure 2-2.

It is preferable to construct this complex as a single building to provide for efficiency in operations and construction. The site can easily accommodate all features required by ESD and has adequate space for the maintenance operation, parking for employees, and rolling stock as well as adequate bale storage to accommodate the recycling operations.

The facility can be designed to be compatible with the fuel storage facility operation; however, the entrance facility would have to be designed to reduce conflicts with traffic to both the adjacent sludge reclamation plant, as well as any activity related to the fuel storage facility. The site can also be designed to be screened along Highway 52, which is a required mitigation measure for the site.

2.3.2.3 ESTIMATED CONSTRUCTION COST

JRMA has prepared a preliminary construction cost estimate for the development of a MRF facility on the 19-acre site at Miramar. Construction costs for a 190,000 sf MRF and the necessary support infrastructure is estimated to be approximately $45 million. This includes a design cost of approximately $3 million which includes legal, architectural-engineering, geotechnical, and project management costs.

MRF equipment costs are estimated to range between $7 million and $10 million. Total cost of construction is estimated to range between $51 million and $55 million. This represents a planning level cost estimate and has a 20 percent range of accuracy.

These costs do not include preparation of the California Environmental Quality Act/National Environmental Policy Act (CEQA/NEPA) environmental documentation and environmental mitigation costs. Operational costs are to be determined in Phase II of the Strategic Plan.