

## **Environmental Services**



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The Environmental Services Department (ESD) ensures City of San Diego residents are provided with a clean and safe environment. The Department operates an active landfill and maintains eight inactive landfills and eight inactive burn sites.

### 2018 CIP Accomplishments

The Department has continued to dedicate capital improvement resources towards its mission of providing reliable solid waste management, resource conservation, and environmental protection to preserve public health and ensure sustainable communities for future generations.

- Awarded a design-build construction contract for infrastructure required to utilize aerated static piles at the Miramar Landfill Greenery and Composting Facility.
- Initiated construction of the first of three projects for storm water at the Miramar Landfill.

### 2019 CIP Goals

The Department will continue to promote sustainability and public health through its effective delivery of capital improvement projects. The following are ESD's goals for Fiscal Year 2019:

- Complete design and initiate construction of the second of three planned projects to improve storm water quality at the Miramar Landfill.
- Complete the design, permitting, and construction of a consolidated modular office building and associated site improvements at the Miramar Landfill.
- Construct the final phases of the CNG fueling station at the ESD Collections Yard for the new CNG-powered refuse and recycling trucks.
- Complete design and construction of an aerated static pile system for composting at the Miramar Greenery and Composting Facility.
- Issue a Request for Proposal (RFP) for the design and construction of a Resource Recovery Facility (RRF) at the Miramar Landfill. The RRF will service existing self-haul customers and seek to increase the diversion of recyclable waste streams from the landfill in accordance with the Zero Waste Plan.
- Issue a Request for Expressions of Interest (RFEI) for the design and construction of a Material Recovery Facility (MRF) at the Miramar Landfill. The MRF will focus on commercial and franchise haulers and seek to increase the diversion of recyclable and organics waste streams from the landfill in accordance with the Zero Waste Plan.
- Begin the design of a back-up power source at the Miramar Landfill to ensure continuous operation of the landfill gas collection and control systems.
- Acquire landfill gas system infrastructure to provide the City with improved control of landfill gas collection at the Miramar Landfill.
- Construct a consolidated blower system and landfill gas wellfield improvements to facilitate the development of renewable energy utilization projects.



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# Environmental Services

## Environmental Services: Capital Improvement Projects

Project	Prior Fiscal Years	FY 2019 Adopted	Future Fiscal Years	Project Total
Aerated Static Pile System / S16053	\$ 5,000,000	\$ -	\$ -	\$ 5,000,000
Citywide Energy Improvements / ABT00003	31,003,715	-	-	31,003,715
CNG Fueling Station for Refuse & Recycling / S15000	5,300,000	-	-	5,300,000
Minor Improvements to Landfills / AFA00001	2,834,975	1,000,000	600,000	4,434,975
Miramar Landfill Facility Improvements / L17000	19,200,000	2,000,000	6,000,000	27,200,000
Miramar Landfill Gas Recovery Improvemen / S16052	9,650,000	-	-	9,650,000
Miramar Landfill Storm Water Improvement / S16054	99,999	-	-	100,000
Miramar Landfill Storm Water Improvements / L18002	19,300,000	1,000,000	3,000,000	23,300,000
South Chollas Landfill Improvements / S00684	15,828,624	-	-	15,828,624
West Miramar Landfill - Phase 2 / S00774	1,660,000	-	-	1,660,000
<b>Total</b>	<b>\$ 109,877,314</b>	<b>\$ 4,000,000</b>	<b>\$ 9,600,000</b>	<b>\$ 123,477,314</b>

**Environmental Services**

**Aerated Static Pile System / S16053**

**Landfills**

Council District:	6	Priority Score:	93
Community Planning:		Priority Category:	High
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	2017 - 2019		858-518-3008
Improvement Type:	New		jhay@saniego.gov

**Description:** This project provides for design and construction of covered organics processing system at West Miramar Landfill's Greenery and composting facility. This system will enhance the production and throughput of clean source separated food scraps and yard waste being composted and reduce the occurrence of nuisance odors in the surrounding community.

**Justification:** AB-1826 and the City's zero waste plan dictate significant increases in organic recycling. Stricter air emission and run-off water standards necessitate covered/in-door compost piles.

**Operating Budget Impact:** None.

**Relationship to General and Community Plans:** The West Miramar Landfill is located on federal property and there is no community planning area. This project is in conformance with the City's General Plan.

**Schedule:** The project was advertised and awarded in Fiscal Year 2018. Construction will begin and is anticipated to be completed in Fiscal Year 2019.

**Summary of Project Changes:** The project schedule has been updated for Fiscal Year 2019.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2019	FY 2019 Anticipated	FY 2020	FY 2021	FY 2022	FY 2023	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 4,472,747	\$ 527,252	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000,000
<b>Total</b>		<b>\$ 4,472,747</b>	<b>\$ 527,252</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,000,000</b>

**Environmental Services**

**CNG Fueling Station for Refuse & Recycling / S15000**

**Landfills - Supporting Fac / Struct**

Council District:	1	Priority Score:	55
Community Planning:	University	Priority Category:	Low
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	2015 - 2021		858-627-3311
Improvement Type:	New		cfergusson@sandiego.gov

**Description:** This project provides for the design and construction of a compressed natural gas (CNG) fueling station at the Environmental Services Operations Station located at 8353 Miramar Place. In conjunction with the completion of the fueling station, the division plans to put into service refuse and recycling vehicles that run on CNG eventually replacing the entire fleet of low sulfur diesel refuse and recycling packers. The construction of CNG fueling infrastructure and the replacement of vehicles will be implemented in a phased approach.

**Justification:** This project provides for the necessary infrastructure to convert Environmental Services fleet refuse and recycling vehicles from low sulfur diesel to compressed natural gas.

**Operating Budget Impact:** Provides for a positive operating budget impact by saving fuel costs to the General Fund and Recycling Enterprise Fund.

**Relationship to General and Community Plans:** This project is in conformance with the Conservation Element of the City's General Plan.

**Schedule:** Phase I of construction was completed in Fiscal Year 2017 providing capacity for fueling 50 refuse and recycling packers. Phase II of construction is expected to be completed in Fiscal Year 2019.

**Summary of Project Changes:** The project schedule has been updated for Fiscal Year 2019.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2019	FY 2019 Anticipated	FY 2020	FY 2021	FY 2022	FY 2023	Future FY	Unidentified Funding	Project Total
CIP Contributions from General Fund	400265	\$ 2,998,291	\$ 1,708	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000,000
Grant Fund - State	600001	250,000	-	-	-	-	-	-	-	-	-	250,000
Infrastructure Fund	100012	2,983	27,016	-	-	-	-	-	-	-	-	30,000
Recycling Fund CIP Fund	700049	1,918,724	101,275	-	-	-	-	-	-	-	-	2,020,000
<b>Total</b>		<b>\$ 5,169,998</b>	<b>\$ 130,001</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,300,000</b>

**Environmental Services**

**Minor Improvements to Landfills / AFA00001**

**Landfills**

Council District:	Citywide	Priority Score:	Annual
Community Planning:	Citywide	Priority Category:	Annual
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	2010 - 2024		858-627-3311
Improvement Type:	New		cfergusson@sandiego.gov

**Description:** This annual allocation provides for minor improvements to existing sanitary landfills to comply with operating permits and regulatory requirements. Such improvements may include fencing, access roads, drains, small structures, and environmental protection projects. This project also provides for minor improvements to existing groundwater monitoring networks at all closed and operating landfills managed by the City. Improvements include new facilities as well as engineering reports and/or design specifications necessary to mitigate groundwater issues or modify groundwater monitoring programs.

**Justification:** This project provides the flexibility for timely initiation of minor improvements and construction needed to meet operational and solid waste regulatory mandates such as drainage, grading, and groundwater monitoring improvements.

**Operating Budget Impact:** None.

**Relationship to General and Community Plans:** This project is consistent with applicable community plans and is in conformance with the City's General Plan.

**Schedule:** Projects are scheduled on a priority basis to meet regulatory requirements.

**Summary of Project Changes:** In Fiscal Year 2018, the total project cost increased by \$1.0 million due to anticipated future projects.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2019	FY 2019 Anticipated	FY 2020	FY 2021	FY 2022	FY 2023	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 14,240	\$ 2,820,735	\$ 1,000,000	\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ 4,434,975
<b>Total</b>		<b>\$ 14,240</b>	<b>\$ 2,820,735</b>	<b>\$ 1,000,000</b>	<b>\$ -</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,434,975</b>



**Environmental Services**

**Miramar Landfill Facility Improvements / L17000**

**Landfills**

Council District:	6	Priority Score:	77
Community Planning:	University; Kearny Mesa; Clairemont Mesa	Priority Category:	Low
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	2017 - 2025		858-627-3311
Improvement Type:	New		cfergusson@sandiego.gov

**Description:** This project provides facility improvements at the West Miramar Landfill which potentially including items such as landfill infrastructure (liners, covers, gas-collection and processing, and monitoring systems), materials handling and processing facilities, fee booth/scale facilities, administrative offices/facilities, etc. Active projects include the development of a Resource Recovery Facility for Self-Haul customers at the Miramar Landfill, development of a Material Recovery Facility for commercial customers, and for the paving of haul roads at the Miramar Landfill.

**Justification:** The Environmental Services Department (ESD) is responsible for managing operations, maintenance, and compliance of the West Miramar Landfill. This CIP will allow for the most efficient execution of future facility improvement projects.

**Operating Budget Impact:** None.

**Relationship to General and Community Plans:** This project is located on federal property and there is no community planning area. This project is in conformance with the City's General Plan.

**Schedule:** The Resource Recovery Facility and Material Recovery Facility projects are currently in the planning stage. The Surface Improvements (paving) project is currently in construction.

**Summary of Project Changes:** The Project Schedule was updated for Fiscal Year 2019.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2019	FY 2019 Anticipated	FY 2020	FY 2021	FY 2022	FY 2023	Future FY	Unidentified Funding	Project Total
Recycling Fund CIP Fund	700049	\$ -	\$ 15,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,000,000
Refuse Disposal CIP Fund	700040	2,511,161	1,688,838	2,000,000	-	2,000,000	2,000,000	2,000,000	-	-	-	12,200,000
<b>Total</b>		<b>\$ 2,511,161</b>	<b>\$ 16,688,838</b>	<b>\$ 2,000,000</b>	<b>\$ -</b>	<b>\$ 2,000,000</b>	<b>\$ 2,000,000</b>	<b>\$ 2,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 27,200,000</b>

**Environmental Services**

**Miramar Landfill Gas Recovery Improvemen / S16052**

**Landfills**

Council District:	6	Priority Score:	88
Community Planning:	University; Kearny Mesa; Clairemont Mesa	Priority Category:	Medium
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	2017 - 2019		858-518-3008
Improvement Type:	New		jhay@sanidiego.gov

**Description:** This project provides for a consolidated blower system and well field improvements to ensure all collectable landfill gas is extracted and distributed to energy utilization facilities.

**Justification:** This project is needed to ensure the landfill will meet regulatory requirements concerning gas emissions and greenhouse gas reduction measures.

**Operating Budget Impact:** None.

**Relationship to General and Community Plans:** This project is located on federal property and there is no community planning area. This project is in conformance with the City's General Plan.

**Schedule:** Construction will begin in Fiscal Year 2018 and is anticipated to be completed in Fiscal Year 2019.

**Summary of Project Changes:** In Fiscal Year 2018, the total project cost increased by \$1.8 million due to revised requirements.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2019	FY 2019 Anticipated	FY 2020	FY 2021	FY 2022	FY 2023	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 31,324	\$ 9,618,675	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,650,000
<b>Total</b>		<b>\$ 31,324</b>	<b>\$ 9,618,675</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 9,650,000</b>

**Environmental Services**

**Miramar Landfill Storm Water Improvement / S16054**

**Landfills**

Council District:	6	Priority Score:	90
Community Planning:	University; Kearny Mesa; Clairemont Mesa	Priority Category:	Medium
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	2017 - 2019		858-627-3311
Improvement Type:	New		cfergusson@sandiego.gov

**Description:** This project provides for the design and construction of storm water basin and Best Management Practices (BMP) improvements. To remain in compliance with new Industrial National Pollutant Elimination System (NPDES) requirements.

**Justification:** The storm water basin and associated BMP engineered structures at the Miramar Landfill must be properly designed and constructed to ensure compliance with NPDES requirements and to avoid regulatory violations.

**Operating Budget Impact:** None.

**Relationship to General and Community Plans:** This project is located on federal property and there is no community planning area. This project is in conformance with the City's General Plan.

**Schedule:** This project is currently in the planning and design stage.

**Summary of Project Changes:** This Project is being converted to L18002, Miramar Landfill Storm Water Improvements, and will be closed by the end of Fiscal Year 2019.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2019	FY 2019 Anticipated	FY 2020	FY 2021	FY 2022	FY 2023	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
<b>Total</b>		\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000

**Environmental Services**

**Miramar Landfill Storm Water Improvements / L18002**

**Landfills**

Council District:	6	Priority Score:	90
Community Planning:	University	Priority Category:	Medium
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	2018 - 2025		858-627-3311
Improvement Type:	New		cfergusson@sandiego.gov

**Description:** This project provides for the design and construction of storm water basin and Best Management Practices (BMP) improvements to remain in compliance with new Industrial National Pollutant Elimination System (NPDES) requirements.

**Justification:** The storm water basins and associated BMP engineered structures at the Miramar Landfill must be properly designed and constructed to ensure compliance with NPDES requirements and to avoid regulatory violations.

**Operating Budget Impact:** None

**Relationship to General and Community Plans:** This project is located on federal property and there is no community planning area. This project is in conformance with the City's General Plan.

**Schedule:** This project will be implemented in three phases. Construction of Phase 1 is expected to be completed in FY 2019. Design of Phase 2 is expected to be completed in FY 2019 and construction will begin in FY 2020. Design of Phase 3 is expected to be initiated in FY 2020.

**Summary of Project Changes:** This project started as S16054, Miramar Landfill Storm Water Improvement, and was converted to an L-Project to expedite and implement phased BMPs.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2019	FY 2019 Anticipated	FY 2020	FY 2021	FY 2022	FY 2023	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 2,285,300	\$ 17,014,699	\$ 1,000,000	\$ -	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ 23,300,000
<b>Total</b>		<b>\$ 2,285,300</b>	<b>\$ 17,014,699</b>	<b>\$ 1,000,000</b>	<b>\$ -</b>	<b>\$ 1,000,000</b>	<b>\$ 1,000,000</b>	<b>\$ 1,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 23,300,000</b>

**Environmental Services**

**South Chollas Landfill Improvements / S00684**

**Landfills - Supporting Fac / Struct**

Council District:	4	Priority Score:	85
Community Planning:	Mid-City: Eastern Area	Priority Category:	Medium
Project Status:	Warranty	Contact Information:	Fergusson, Craig
Duration:	2000 - 2020		858-627-3311
Improvement Type:	Replacement		cfergusson@sandiego.gov

**Description:** This project provides for cover material, grading, drainage, and site improvements at the inactive South Chollas Landfill. The project will also result in improvements to the Chollas Operations Yard required by the Regional Water Quality Control Board in order to bring the site into compliance. A Corrective Action Plan has been developed to identify the corrective measures and timelines to mitigate the groundwater issues.

**Justification:** This project is required to maintain compliance with various State and federal regulatory requirements and to avoid code violations.

**Operating Budget Impact:** None.

**Relationship to General and Community Plans:** This project is consistent with the Mid-City: Eastern Area Community Plan and it is in conformance with the City's General Plan.

**Schedule:** Construction was completed in Fiscal Year 2017. However, it has been determined that additional permanent storm water best management practice (BMP) controls will be needed. Efforts are currently being implemented to initiate the design of these required BMPs with construction anticipated to be completed by Fiscal Year 2020.

**Summary of Project Changes:** The project schedule has been updated for Fiscal Year 2019.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2019	FY 2019 Anticipated	FY 2020	FY 2021	FY 2022	FY 2023	Future FY	Unidentified Funding	Project Total
CIP Contributions from General Fund	400265	\$ 5,049,279	\$ 84,720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,134,000
Fleet Services CIP Fund	400676	1,396,378	257,649	-	-	-	-	-	-	-	-	1,654,028
Refuse Disposal CIP Fund	700040	5,726,716	584,985	-	-	-	-	-	-	-	-	6,311,702
Water Utility - CIP Funding Source	700010	2,358,950	369,943	-	-	-	-	-	-	-	-	2,728,894
<b>Total</b>		<b>\$ 14,531,324</b>	<b>\$ 1,297,299</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 15,828,624</b>

**Environmental Services**

**West Miramar Landfill - Phase 2 / S00774**

**Bldg - Other City Facility / Structures**

Council District:	6	Priority Score:	N/A
Community Planning:	University; Kearny Mesa; Clairemont Mesa	Priority Category:	N/A
Project Status:	Continuing	Contact Information:	Fergusson, Craig
Duration:	1996 - 2018		858-573-1208
Improvement Type:	Betterment		rpurtee@sandiego.gov

**Description:** This project provides for a landfill gas collection system for the West Miramar Landfill - Phase 2. Bio-degradation of buried waste produces landfill gas. The landfill gas collection system consists of a network of gas extraction wells connected by piping.

**Justification:** This improvement is required to maintain compliance with various State and federal regulatory requirements. It will also prevent code violations and enhance public health and safety.

**Operating Budget Impact:** None.

**Relationship to General and Community Plans:** This project is located on federal property and there is no community planning area. This project is in conformance with the City's General Plan.

**Schedule:** Design and construction began in Fiscal Year 1996 and will continue through the life of the landfill which is anticipated to close in Fiscal Year 2024. The next scheduled major project is the design and construction of a horizontal landfill gas collection system.

Construction began in Fiscal Year 2017 and is scheduled to be completed in Fiscal Year 2018.

**Summary of Project Changes:** This project is complete and will be closed by the end of the Fiscal Year.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2019	FY 2019 Anticipated	FY 2020	FY 2021	FY 2022	FY 2023	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 1,511,693	\$ 148,306	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,660,000
<b>Total</b>		<b>\$ 1,511,693</b>	<b>\$ 148,306</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,660,000</b>