

## **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

## 2019 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.

- Completed design and initiated construction of the second of three planned projects to improve storm water quality at the Miramar Landfill.
- Completed construction of the final phases of the CNG fueling station at the ESD Collections Yard for the new CNG-powered refuse and recycling trucks on target with the Climate Action Plan.

## 2020 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 2020:

- Complete design, permitting and construction of a consolidated modular office building and associated site improvements at the Miramar Landfill.
- 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. This project will also include the relocation and replacement of existing booth/scale facilities. This project is also included as part of the Climate Action 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 additions, to improve landfill gas collection in support of the City's Climate Action Plan.



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# Environmental Services

## Environmental Services: Capital Improvement Projects

Project	Prior Fiscal Years	FY 2020 Proposed	Future Fiscal Years	Project Total
CNG Fueling Station for Refuse & Recycling / S15000	\$ 5,300,000	\$ 250,000	\$ -	\$ 5,550,000
Covered Aerated Static Pile System / S16053	5,000,000	-	-	5,000,000
Minor Improvements to Landfills / AFA00001	3,834,975	200,000	(3,000,000)	1,034,975
Miramar Landfill Facility Improvements / L17000	21,200,000	3,100,000	-	24,300,000
Miramar Landfill Gas Recovery Improvemen / S16052	9,650,000	-	-	9,650,000
Miramar Landfill Storm Water Improvements / L18002	20,300,000	-	3,000,000	23,300,000
South Chollas Landfill Improvements / S00684	15,828,624	-	-	15,828,624
<b>Total</b>	<b>\$ 81,113,599</b>	<b>\$ 3,550,000</b>	<b>\$ -</b>	<b>\$ 84,663,599</b>



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**Environmental Services**

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

**Landfills - Supporting Fac / Struct**

<b>Council District:</b>	1	<b>Priority Score:</b>	55
<b>Community Planning:</b>	University	<b>Priority Category:</b>	Low
<b>Project Status:</b>	Continuing	<b>Contact Information:</b>	Fergusson, Craig
<b>Duration:</b>	2015 - 2021		858-627-3311
<b>Improvement Type:</b>	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 was completed in Fiscal Year 2019. Phase III of construction is anticipated to begin and be completed in Fiscal Year 2020. Warranty administration and project closeout will occur in Fiscal Year 2021.

**Summary of Project Changes:** During Phase II of construction, unanticipated changed conditions resulted in the expenditure of available contingency funds. In 2020, the total project cost will increase by \$250,000 to replenish contingency for the final phase of construction, and cover preventative maintenance, permitting, survey services, electrical inspections, and labor costs. The project schedule has been updated for Fiscal Year 2020.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2020	FY 2020 Anticipated	FY 2021	FY 2022	FY 2023	FY 2024	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	15,030	14,970	150,000	-	-	-	-	-	-	-	180,000
Recycling Fund CIP Fund	700049	1,926,798	93,202	100,000	-	-	-	-	-	-	-	2,120,000
<b>Total</b>		<b>\$ 5,190,118</b>	<b>\$ 109,881</b>	<b>\$ 250,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,550,000</b>

**Environmental Services**

**Covered Aerated Static Pile System / S16053**

**Landfills**

<b>Council District:</b>	6	<b>Priority Score:</b>	93
<b>Community Planning:</b>		<b>Priority Category:</b>	High
<b>Project Status:</b>	Continuing	<b>Contact Information:</b>	Campos, Luis
<b>Duration:</b>	2017 - 2021		858-492-5035
<b>Improvement Type:</b>	New		lcampos@sandiego.gov

**Description:** This project provides for design and construction of the 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 also 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 first phase of the project is anticipated to be completed in Fiscal Year 2020. Warranty administration and project closeout are anticipated in Fiscal Year 2021.

**Summary of Project Changes:** In Fiscal Year 2019, grant funding was secured for \$2.3 million in equipment expenditures. The project schedule has been updated for Fiscal Year 2020.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2020	FY 2020 Anticipated	FY 2021	FY 2022	FY 2023	FY 2024	Future FY	Unidentified Funding	Project Total
Grant Fund - State	600001	\$ 2,295,447	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,295,447
Refuse Disposal CIP Fund	700040	2,183,868	520,685	-	-	-	-	-	-	-	-	2,704,553
<b>Total</b>		<b>\$ 4,479,314</b>	<b>\$ 520,685</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,000,000</b>



**Environmental Services**

**Minor Improvements to Landfills / AFA00001**

**Landfills**

<b>Council District:</b>	Citywide	<b>Priority Score:</b>	Annual
<b>Community Planning:</b>	Citywide	<b>Priority Category:</b>	Annual
<b>Project Status:</b>	Continuing	<b>Contact Information:</b>	Fergusson, Craig
<b>Duration:</b>	2010 - 2024		858-627-3311
<b>Improvement Type:</b>	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 2020, it is anticipated that \$3.8 million will be transferred to L17000 (Miramar Landfill Facility Improvements) via a Council action.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2020	FY 2020 Anticipated	FY 2021	FY 2022	FY 2023	FY 2024	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 43,562	\$ 3,791,413	\$ 200,000	\$ (3,800,000)	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ 1,034,975
<b>Total</b>		<b>\$ 43,562</b>	<b>\$ 3,791,413</b>	<b>\$ 200,000</b>	<b>\$ (3,800,000)</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,034,975</b>

**Environmental Services**

**Miramar Landfill Facility Improvements / L17000**

**Landfills**

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

**Description:** This project provides for the construction of infrastructure improvements at the West Miramar Landfill. Phase I will provide for the development of a Resource Recovery Facility (RRF) to increase waste diversion from self-haul customers. Phase II will provide for the relocation of the Miramar Greenery as required to comply with conditions of a State-mandated Waste Discharge Requirement for Composting Operations. Phase III will provide for surface improvements to haul roads. Phase IV will provide for the acquisition of landfill gas collection and processing infrastructure currently in place as part of a transfer of gas rights. Phase V will provide for a backup power system for landfill gas collection and processing infrastructure. Phase VI will provide for the replacement of modular office, restroom, and locker trailers that have exceeded their service life. Phase VII will provide for the development of a Materials Recovery Facility (MRF) to provide diversion and transfer services for City refuse collection trucks.

**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 and helps to implement the City's Climate Action Plan.

**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:** Phase I design will begin in Fiscal Year 2020, with construction anticipated to begin in Fiscal Year 2022 and completed by Fiscal Year 2023. Phase II design will begin in Fiscal Year 2021, with construction anticipated to begin in Fiscal Year 2023 and completed in Fiscal Year 2024. Phase III design was completed in Fiscal Year 2018, construction began in Fiscal Year 2019, and is anticipated to be complete in Fiscal Year 2020. Phase IV acquisition was completed in Fiscal Year 2019. Phase V design will begin in Fiscal Year 2020, with construction anticipated to begin in Fiscal Year 2020 and completed in Fiscal Year 2021. Phase VI design will begin in Fiscal Year 2020, with construction anticipated to begin in Fiscal Year 2020 and completed by Fiscal Year 2022. Phase VII design will begin in Fiscal Year 2022, with construction anticipated to begin in Fiscal Year 2024 and completed by Fiscal Year 2025.

**Summary of Project Changes:** The project schedule was updated for Fiscal Year 2020.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2020	FY 2020 Anticipated	FY 2021	FY 2022	FY 2023	FY 2024	Future FY	Unidentified Funding	Project Total
Recycling Fund CIP Fund	700049	\$ -	\$ 15,000,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,000,000
Refuse Disposal CIP Fund	700040	2,805,697	3,394,303	2,100,000	-	-	-	-	-	-	-	8,300,000
<b>Total</b>		<b>\$ 2,805,696</b>	<b>\$ 18,394,303</b>	<b>\$ 3,100,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 24,300,000</b>

**Environmental Services**

**Miramar Landfill Gas Recovery Improvemen / S16052**

**Landfills**

<b>Council District:</b>	6	<b>Priority Score:</b>	88
<b>Community Planning:</b>	University; Kearny Mesa; Clairemont Mesa	<b>Priority Category:</b>	Medium
<b>Project Status:</b>	Warranty	<b>Contact Information:</b>	Campos, Luis
<b>Duration:</b>	2017 - 2020		858-492-5035
<b>Improvement Type:</b>	New		lcampos@sandiego.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 and helps to implement the City's Action Plan.

**Schedule:** Construction began in Fiscal Year 2018 and is anticipated to be completed in Fiscal Year 2020.

**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 2020	FY 2020 Anticipated	FY 2021	FY 2022	FY 2023	FY 2024	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 8,943,689	\$ 706,310	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,650,000
	<b>Total</b>	<b>\$ 8,943,689</b>	<b>\$ 706,310</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 Improvements / L18002**

**Landfills**

<b>Council District:</b>	6	<b>Priority Score:</b>	88
<b>Community Planning:</b>	University	<b>Priority Category:</b>	Medium
<b>Project Status:</b>	Continuing	<b>Contact Information:</b>	Fergusson, Craig
<b>Duration:</b>	2018 - 2025		858-627-3311
<b>Improvement Type:</b>	New		cfergusson@sandiego.gov

**Description:** The project provides for the construction of storm water infrastructure improvements at the West Miramar Landfill to maintain regulatory compliance with the Storm Water Industrial General Permit. The project will be implemented in three phases: Phase I includes paving of haul roads, drainage improvements in the Greenery, stabilization of roadway shoulders and drainage channels, and hydroseeding of inactive fill areas; Phase II includes stabilization and/or hydroseeding of secondary roads, sediment traps, storm drain improvements, and basin expansion; Phase III includes development of new basins and treatment works, as needed.

**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 I was completed in Fiscal Year 2019. Construction of Phase II is expected to be completed in Fiscal Year 2020. Design of Phase III is expected to be initiated in Fiscal Year 2020.

**Summary of Project Changes:** The project schedule has been updated for Fiscal Year 2020.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2020	FY 2020 Anticipated	FY 2021	FY 2022	FY 2023	FY 2024	Future FY	Unidentified Funding	Project Total
Refuse Disposal CIP Fund	700040	\$ 4,547,055	\$ 15,752,944	\$ -	\$ -	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ 23,300,000
<b>Total</b>		<b>\$ 4,547,055</b>	<b>\$ 15,752,944</b>	<b>\$ -</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**

<b>Council District:</b>	4	<b>Priority Score:</b>	85
<b>Community Planning:</b>	Mid-City: Eastern Area	<b>Priority Category:</b>	Medium
<b>Project Status:</b>	Warranty	<b>Contact Information:</b>	Oliver, Kevin
<b>Duration:</b>	2000 - 2021		619-533-5139
<b>Improvement Type:</b>	Replacement		koliver@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 2021.

**Summary of Project Changes:** The project schedule has been updated for Fiscal Year 2020.

**Expenditure by Funding Source**

Fund Name	Fund No	Exp/Enc	Con Appn	FY 2020	FY 2020 Anticipated	FY 2021	FY 2022	FY 2023	FY 2024	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	1,401,122	252,906	-	-	-	-	-	-	-	-	1,654,028
Refuse Disposal CIP Fund	700040	5,726,717	584,985	-	-	-	-	-	-	-	-	6,311,702
Water Utility - CIP Funding Source	700010	2,358,950	369,944	-	-	-	-	-	-	-	-	2,728,894
<b>Total</b>		<b>\$ 14,536,069</b>	<b>\$ 1,292,554</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 15,828,624</b>



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