

# WASTE MANAGEMENT & RECYCLING - EXECUTIVE SUMMARY

## Executive Summary

The Department of Waste Management and Recycling (DWMR) Five-Year Capital Improvement Plan (CIP) is dominated by capital projects at the Kiefer Landfill (KLF) including new liner construction, entrance improvement, partial final cover construction, additional landfill gas collection system components, additional remediation of contaminated groundwater, wetland mitigation, bufferland planning, and site improvements. Most of the KLF projects are required for ongoing landfill operations and are prescribed by various state regulations and permit conditions. The CIP also includes improvements and repairs to the North Area Recovery Station (NARS), minor repairs to the South Container and Transfer Site (SCATS), replacement of fully depreciated equipment for solid waste and recycling operations, and a very small amount of new equipment for improved operation efficiencies resulting in net cost savings. All DWMR capital projects are funded through the Solid Waste Enterprise Fund without any contributions from the County General Fund. Projects proposed to be completed in the 2007-08 Fiscal Year Capital Budget include an “Operating Budget Impact” statement.

Following is a representative sample of the projects in the CIP.

- **Kiefer Landfill – Entrance Improvement Project** -- This project includes the design and construction of a new scale house and improvement of the roadways entering the landfill. Drainage facilities and fencing would be improved; existing gates would be replaced and landscaping updates. The modernization of the scale house would include the addition of a fourth scale making three inbound scales and one outbound scale available for use. Additional construction would include a rest area and interpretive center that would inform visitors of the adjacent wetlands preserve and landfill gas fueled electrical generation facility. **Estimated Total Cost: \$2,885,741**
- **Kiefer Landfill – Landfill 1, Phase II Partial Closure** -- This project includes the planning, design and construction of 25 acres of partial final closure at the Kiefer Landfill. Project components include final cover, drainage improvements, and landfill gas system modifications for Unit 1 and Unit 2 of the unlined portion of Kiefer Landfill known as Landfill 1. This project is required by various permits and state regulations. **Estimated Total Cost: \$4,692,910**
- **Kiefer Landfill – Module 3 (M3) Phase I Liner and Ancillary Features** -- This project includes the planning, design, construction, construction management, inspections, reporting and oversight associated with construction of approximately 40 acres of landfill liner and leachate collection system for Module 3, Phase I and II at Kiefer Landfill. **Estimated Total Cost: \$14,492,250**

- **Kiefer Landfill – Water Supply Improvements** -- This project includes design and construction of water supply and distribution system improvements at Kiefer Landfill. Project elements include decommissioning of the existing back-up water supply well “A”, which may be a source of cross-contamination between water-bearing zones, providing water supply alternatives in the event of a failure to the primary water supply well “E”, and expansion of the water distribution system to deliver water from the new supply alternative(s) and to provide water service to additional areas of the facility. **Estimated Total Cost: \$741,679**
- **Kiefer Landfill – Wetland Mitigation** -- This project provides for wetland mitigation as required in the Kiefer Landfill Expansion permits and Environmental Impact Report (EIR). The design, construction, and ongoing management of wetlands will provide mitigation for approximately six acres of vernal pools that are impacted by the ongoing development of the Kiefer Landfill. **Estimated Total Cost: \$3,640,000**

# WASTE MANAGEMENT & RECYCLING

## SUMMARY

PROJ. #	PROJECT	PRIOR YEARS	FISCAL YEAR 2007-08	FISCAL YEAR 2008-09	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	TOTAL
1	Collections - Automated Refuse Collection Truck, 35 Cubic Yards	\$0	\$5,000,000	\$0	\$0	\$0	\$0	\$5,000,000
2	Collections - Claw Loader	0	208,080	0	0	0	0	208,080
3	Collections - Knuckle Boom Truck	0	418,200	0	0	0	0	418,200
4	Collections - Rear Loaders	0	526,320	0	0	0	0	526,320
5	Elk Grove Landfill Development Project	400,000	200,000	0	0	0	0	600,000
6	Equipment Replacements	0	0	7,072,900	4,556,100	2,178,100	9,579,100	23,386,200
7	Kiefer Landfill - Antifreeze, Batteries, Oil and Paint (ABOP) Facility Construction Project	0	232,100	0	0	0	0	232,100
8	Kiefer Landfill - Articulated Haul Truck	0	714,000	0	0	0	0	714,000
9	Kiefer Landfill - Bufferland Development	70,000	270,000	0	0	0	0	340,000
10	Kiefer Landfill - Bufferland Property Purchases	100,000	2,900,000	2,000,000	0	0	0	5,000,000
11	Kiefer Landfill - Crawler Dozer, Heavy	0	856,800	0	0	0	0	856,800
12	Kiefer Landfill - Crawler Dozer, Light	0	142,800	0	0	0	0	142,800
13	Kiefer Landfill - Crawler Dozer with Ripper	0	918,000	0	0	0	0	918,000
14	Kiefer Landfill - Diesel Tank	0	70,000	0	0	0	0	70,000
15	Kiefer Landfill - Engineering Building Design and Construction	0	0	0	0	198,500	1,214,000	1,412,500
16	Kiefer Landfill - Entrance Improvement Project	427,825	2,185,941	271,975	0	0	0	2,885,741
17	Kiefer Landfill - Flare Improvement and Landfill Gas (LFG) Delivery Project	0	877,800	0	0	594,000	0	1,471,800
18	Kiefer Landfill - Gas Beneficial Use Projects	117,176	27,500	209,000	0	0	0	353,676
19	Kiefer Landfill - Gas Collection System Expansion	0	325,490	1,048,828	512,436	438,020	376,310	2,701,084

SUMMARY

PROJ. #	PROJECT	PRIOR YEARS	FISCAL YEAR 2007-08	FISCAL YEAR 2008-09	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	TOTAL
20	Kiefer Landfill - Gas Remediation Project	\$0	\$192,830	\$170,830	\$0	\$159,830	\$0	\$523,490
21	Kiefer Landfill - Graves Property Deer Creek Levee Repair	50,000	150,000	0	0	0	0	200,000
22	Kiefer Landfill - Landfill-1, Phase II Partial Closure	378,000	125,000	4,189,910	0	0	0	4,692,910
23	Kiefer Landfill - Landfill-1, Phase III Partial Closure	0	0	0	309,000	5,992,960	0	6,301,960
24	Kiefer Landfill - Module 3, Phases I and II Liner and Ancillary Features	78,000	14,414,250	0	0	0	0	14,492,250
25	Kiefer Landfill - Module 3, Phase III Liner and Ancillary Features	0	0	0	245,000	4,906,700	0	5,151,700
26	Kiefer Landfill - Secondary Groundwater Remediation System Improvement	249,000	150,000	0	0	0	0	399,000
27	Kiefer Landfill - Skip Loader	0	120,000	0	0	0	0	120,000
28	Kiefer Landfill - Storm Water Protection Site Improvements	118,000	972,023	0	0	0	0	1,090,023
29	Kiefer Landfill - Water Supply Improvements	36,079	705,600	0	0	0	0	741,679
30	Kiefer Landfill - Wetland Mitigation	2,050,000	1,150,000	110,000	110,000	110,000	110,000	3,640,000
31	North Area Recovery Station - Can Yard Grading and Sealing	0	339,675	0	0	0	0	339,675
32	North Area Recovery Station - Employee Parking Lot Paving	0	45,000	0	0	0	0	45,000
33	North Area Recovery Station - Heavy Duty Inerts Trailer	0	150,000	0	0	0	0	150,000
34	North Area Recovery Station - Site Operations Area Improvements and Repairs	150,000	150,000	570,000	2,600,000	2,600,000	50,000	6,120,000
35	South Container and Transfer Station - Site Improvements (including Can Yard)	155,000	345,000	0	0	0	0	500,000
36	Universal Waste Processing Equipment	0	120,000	0	0	0	0	120,000
	<b>TOTAL</b>	<b>\$4,379,080</b>	<b>\$35,002,409</b>	<b>\$15,643,443</b>	<b>\$8,332,536</b>	<b>\$17,178,110</b>	<b>\$11,329,410</b>	<b>\$91,864,988</b>

PRIOR YEAR COMPLETED/CANCELED PROJECTS SUMMARY

PROJ. #	PROJECT	PRIOR YEARS	FISCAL YEAR 2006-07	FISCAL YEAR 2007-08	FISCAL YEAR 2008-09	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	TOTAL	REASON DROPPED
1	Collections - Automated Side Loading Refuse Truck - 26-30 Cubic Yards	\$0	\$2,000,000	\$0	\$0	\$0	\$0	\$2,000,000	Project Canceled
2	Collections - Automated Side Loading Refuse Truck - 35 Cubic Yards	0	250,000	0	0	0	0	250,000	Project Completed
5	Kiefer Landfill - All-Wheel Drive Fuel Truck	0	150,000	0	0	0	0	150,000	Project Completed
8	Kiefer Landfill - Dozer	0	900,000	0	0	0	0	900,000	Project Completed
13	Kiefer Landfill - Groundwater Monitoring Well 37 and Gas Extraction	0	250,000	0	0	0	0	250,000	Project Completed
16	Kiefer Landfill - Landfill Gas (LFG) Projects Utility All Terrain Vehicle	0	10,000	0	0	0	0	10,000	Project Completed
17	Kiefer Landfill - Lowboy Trailer	0	50,000	0	0	0	0	50,000	Project Canceled
18	Kiefer Landfill - Module 3 (M3) Phase I Liner and Ancillary Features	100,000	155,000	6,313,000	0	0	0	6,568,000	Project Combined
19	Kiefer Landfill - M3 Phase II Liner and Ancillary Features	0	0	100,000	5,706,000	137,000	0	5,943,000	Project Combined (Phase 1 and 2)
21	Kiefer Landfill - Perimeter Landfill Gas Probes	151,386	145,530	0	0	0	0	296,916	Project Completed
23	Kiefer Landfill - Tarping Machines	0	200,000	0	0	0	0	200,000	Project Completed
26	Kiefer Landfill - Wheel Wash and Road Widening	118,000	972,023	0	0	0	0	1,090,023	Project Renamed to Kiefer Landfill-- Stormwater Protection Site Improvement #28
27	Kiefer Landfill - Wheeled Loader	0	480,000	0	0	0	0	480,000	Project Completed
29	North Area Recovery Station (NARS) - Electrical Room Enclosure	0	50,000	0	0	0	0	50,000	Project Completed
31	NARS - Excavator	0	250,000	0	0	0	0	250,000	Project Completed
32	NARS - Pressure Washer and Compressor	0	30,000	0	0	0	0	30,000	Project Completed
34	NARS - Special Waste Forklift	0	30,000	0	0	0	0	30,000	Project Completed
35	NARS - Transfer Trailers	0	260,000	0	0	0	0	260,000	Project Completed
36	NARS - Transfer Truck Tractors	0	240,000	0	0	0	0	240,000	Project Completed
37	NARS - Wheeled Loader	0	230,000	0	0	0	0	230,000	Project Completed
38	NARS - Wheeled Loader with Claw	0	260,000	0	0	0	0	260,000	Project Completed
39	South Container and Transfer Site - Can Yard Grading and Sealing	155,000	345,000	0	0	0	0	500,000	Project Renamed to South Container and Transfer Station - Site Improvements (including Can Yard) #35
	<b>TOTAL</b>	<b>\$524,386</b>	<b>\$7,257,553</b>	<b>\$6,413,000</b>	<b>\$5,706,000</b>	<b>\$137,000</b>	<b>\$0</b>	<b>\$20,037,939</b>	

**Collections – Automated Refuse Collection Truck, 35 Cubic Yards**

9611 Conservation Road, Sacramento, CA 95827

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$5,000,000

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

This is the purchase of a fully automated side loading refuse collection truck with 35 cubic yard capacity. It is to be a three axle truck with tag axle, powered by liquid natural gas fuel and right hand drive.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

Collections - Automated Refuse Collection Truck, 35 Cubic Yards

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost 20 units @\$250,000	0	5,000,000	0	0	0	0	5,000,000

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	5,000,000	0	0	0	0	5,000,000

**Collections – Claw Loader**

9611 Conservation Road, Sacramento, CA 95827

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$208,080

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

Collections - Claw Loader – the wheeled claw loader is utilized for moving and loading residential material discarded by residents in the Neighborhood Cleanup program and moving commodities at other facilities.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

Collections - Claw Loader

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost 2 @ \$104,040	0	208,080	0	0	0	0	208,080

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	208,080	0	0	0	0	208,080

**Collections – Knuckle Boom Truck**

9611 Conservation Road, Sacramento, CA 95827

**Department:** Waste Management & Recycling

**Estimated Equipment Cost:** \$418,200

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

The knuckle boom truck is a large capacity refuse collection vehicle with a knuckle boom arm for picking up large appliances and bulky material in the Neighborhood Cleanup program.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

Collections - Knuckle Boom Truck

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost 2 @ \$209,100	0	418,200	0	0	0	0	418,200

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	418,200	0	0	0	0	418,200



**Collections – Rear Loaders**

9611 Conservation Road, Sacramento, CA 95827

**Department:** Waste Management & Recycling

**Estimated Equipment Cost:** \$526,320

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

This is an 18 to 20 cubic yard, rear-loading refuse truck utilized for manual collection of materials. It is primarily used in the Neighborhood Cleanup program.

**Operating Budget Impact:**

The operation cost impact of this project is unknown at this time.

Collections - Rear Loaders

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost 3 @ \$175,440	0	526,320	0	0	0	0	526,320

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	526,320	0	0	0	0	526,320

**Elk Grove Landfill Development Project**

Intersection of Bond Road and Waterman Road

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$600,000  
**Expected Completion Date:** 2008      **Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**

Elk Grove Landfill currently costs the County approximately \$320,000 per year to maintain legal compliance. This request is part of a long term project entitled, "Elk Grove Landfill Development Project", which seeks to improve the financial status of this site by a) reducing costs and b) increasing revenues. It is the intention of the Department of Waste Management to develop the site into an income-producing property.

- a) The County seeks to reduce costs by presenting data to the Central Valley Regional Water Quality Control Board (RWQCB) which lead to the conclusion that the current minimal danger of the Landfill to public health and the environment will allow a reduction in the current monitoring and reporting activities. The County has committed \$40,000 for this pending environmental analysis and presentation to the RWQCB.
- b) The County seeks to increase revenues by applying engineering mitigation to the existing refuse in the closed Landfill such that the site will accommodate low density commercial structures that are operated in a manner consistent with the surrounding neighborhoods (i.e. professional office suites restricted to daytime business hours). The County is concurrently negotiating with the Elk Grove Cemetery District to obtain a plan whereby the Cemetery District will expand the adjacent existing cemetery onto the Landfill property (above the existing refuse) for parking and grave sites.

The County previously expended funds for rights to apply licensed technology at the site and a site feasibility study with field investigation (Spring 2006). The present budget request is for \$200,000 in funds in Fiscal Year 2007-08 to:

- 1) Conduct follow-up activities related to obtaining agency relaxation of environmental monitoring to appropriate levels, and/or conduct planning to implement the licensed "Aerobic Landfill (AL) Technology". (Note: implementation of AL technology is not included in this request.)
- 2) Conduct site (architectural and financial) planning related to the proposed ultimate land use, which will result in a project scheme with sufficient detail to present to the public and seek input.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

Elk Grove Landfill Development Project

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Consultant Services	400,000	200,000		0	0	0	600,000

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Solid Waste Capital Outlay Fund	400,000	200,000		0	0	0	600,000

**Equipment Replacements**

Kiefer Landfill, 12701 Kiefer Boulevard, Sloughhouse, CA 95683  
 South Container & Transfer Site, 8550 Fruitridge Road, Sacramento, CA 95826  
 North Area Recovery Station, 4450 Roseville Road, North Highlands, CA 95660  
 South Collections, 9611 Conservation Road, Sacramento, CA 95827

**Department:** Waste Management & Recycling **Estimated Project Cost:** \$23,386,200  
**Expected Completion Date:** 2012 **Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**  
 Purchase of equipment to replace older, fully-depreciated heavy equipment for various Collection, Landfill, Transfer, Engineering and Hazmat programs.

**Equipment Replacements**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Purchase Costs	0	0	7,072,900	4,556,100	2,178,100	9,579,100	23,386,200

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	0	7,072,900	4,556,100	2,178,100	9,579,100	23,386,200

**Kiefer Landfill – Antifreeze, Batteries, Oil and Paint (ABOP) Facility Construction Project**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling **Estimated Project Cost:** \$232,100  
**Expected Completion Date:** 2008 **Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

Construct an ABOP facility at Kiefer Landfill to collect antifreeze, batteries, oil, paint and universal waste from citizens in the eastern part of Sacramento County. The facility will consist of a preengineered building, outside storage lockers, waste oil tanks, and other miscellaneous equipment.

**Operating Budget Impact:**

Completion of this project will add \$130,740 to fund associated maintenance costs.

**Kiefer Landfill - Antifreeze, Batteries, Oil and Paint (APOB) Facility Construction Project**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	214,500	0	0	0	0	214,500
Construction Inspection	0	17,600	0	0	0	0	17,600
<b>TOTAL</b>	<b>0</b>	<b>232,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>232,100</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	232,100	0	0	0	0	232,100

**Kiefer Landfill – Articulated Haul Truck**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Equipment Cost:** \$714,000

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Equipment Description:**

The articulated haul truck is a large volume haul truck with articulated axles for hauling dirt and construction materials at the Kiefer Landfill site.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

Kiefer Landfill - Articulated Haul Truck

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost 2 @ \$350,000	0	714,000	0	0	0	0	714,000

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	714,000	0	0	0	0	714,000

**Kiefer Landfill – Bufferland Development**

12701 Kiefer Boulevard, Sloughhouse, CA 95683

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$340,000  
**Expected Completion Date:** 2008      **Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**

Several parties have proposed projects to the Department which would be compatible with, and located upon, the Kiefer Landfill bufferlands. The Department has generally responded that such proposals should not be considered until a planning analysis for the lands has been prepared and studied with the Board of Supervisors, neighbors, and other parties. This project provides funds for such an analysis and miscellaneous related expenses. The Project continues from Fiscal Year 2005-06.

Expense components include: property boundary surveys (on ground and aerial photogrammetry), land use planning consultants, and public relations consultants.

**Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

**Kiefer Landfill - Bufferland Development**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Consultant Services	70,000	270,000	0	0	0	0	340,000

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Solid Waste Capital Outlay Fund	70,000	270,000	0	0	0	0	340,000

**Kiefer Landfill – Bufferland Property Purchases**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$5,000,000

**Expected Completion Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

Kiefer Landfill Bufferland must increase in order to protect the landfill from urban encroachment. This project cost is for the acreage desired to acquire and assumptions on the value per acre. There has been an appraisal obtained that has confirmed the estimates of this project.

**Kiefer Landfill - Bufferland Property Purchases**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Purchase Costs	100,000	2,900,000	2,000,000	0	0	0	5,000,000

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	100,000	2,900,000	2,000,000	0	0	0	5,000,000

**Kiefer Landfill – Crawler Dozer, Heavy**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$856,800

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

The Kiefer Landfill - Crawler Dozer-Heavy is a large-volume, track-type tractor for pushing of compacting material at the Kiefer Landfill.

**Operating Budget Impact:**

The operation cost impact of this project is unknown at this time.

Kiefer Landfill - Crawler Dozer, Heavy

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost	0	856,800	0	0	0	0	856,800

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	856,800	0	0	0	0	856,800



**Kiefer Landfill – Crawler Dozer, Light**

12701 Kiefer Boulevard, Sloughhouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Equipment Cost:** \$142,800

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

The Kiefer Landfill - Crawler Dozer, Light is a lighter-weight track-type dozer for specialty work including construction of foundation liner material and finishing grade work.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

Kiefer Landfill - Crawler Dozer, Light

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost	0	142,800	0	0	0	0	142,800

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	142,800	0	0	0	0	142,800

**Kiefer Landfill – Crawler Dozer with Ripper**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$918,000

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

The crawler dozer with ripper is a track-type tractor for preparing sites and pushing and spreading material. The ripper attachment breaks up compacted soil for ease of excavation and moving material.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

Kiefer Landfill - Crawler Dozer with Ripper

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost	0	918,000	0	0	0	0	918,000

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	918,000	0	0	0	0	918,000

**Kiefer Landfill – Diesel Tank**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$70,000

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

Kiefer Landfill - Diesel Tank is used for the onsite storage of fuels at the Kiefer Landfill.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

Kiefer Landfill - Diesel Tank

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost	0	70,000	0	0	0	0	70,000

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	70,000	0	0	0	0	70,000

**Kiefer Landfill – Engineering Building Design and Construction**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$1,412,500  
**Expected Completion Date:** 2012      **Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

The project will include design and construction of a new building for engineering and technician staff at Kiefer Landfill. The estimated structure size is 3,500 square feet. Additionally, the project includes renovation of the existing building to accommodate “special waste” management staff and departmental document storage needs. The project will incorporate “sustainable/green” building elements and seek industry certification.

**Kiefer Landfill - Engineering Building Design and Construction**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	0	0	0	0	990,000	990,000
Project Management/Design	0	0	0	0	50,000	50,000	100,000
Consultant Services Construction	0	0	0	0	148,500	0	148,500
Inspection	0	0	0	0	0	99,000	99,000
Misc. Project Costs	0	0	0	0	0	75,000	75,000
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>198,500</b>	<b>1,214,000</b>	<b>1,412,500</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	0	0	0	198,500	1,214,000	1,412,500

**Kiefer Landfill – Entrance Improvement Project**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$2,885,741  
**Expected Completion Date:** 2008      **Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

Make improvements to the entrance area at Kiefer Landfill. The entrance would be regraded to accommodate traffic from the landfill gas utilization projects. Drainage facilities and fencing would be improved, existing gates would be replaced, and landscaping updated. The scalehouse would be replaced with a modernized facility consisting of three inbound and one outbound scale. A customer rest area and interpretive center would be constructed to inform customers and visitors about the adjacent wetlands preserve and landfill gas fueled electrical generation facility.

**Kiefer Landfill - Entrance Improvement Project**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Cost	0	2,081,849	236,500	0	0	0	2,318,349
Project Management/Design	427,825	0	23,650	0	0	0	451,475
Construction Inspection	0	104,092	11,825	0	0	0	115,917
<b>TOTAL</b>	<b>427,825</b>	<b>2,185,941</b>	<b>271,975</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,885,741</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	427,825	2,185,941	271,975	0	0	0	2,885,741

**Kiefer Landfill – Flare Improvement and Landfill Gas (LFG) Delivery Project**

12701 Kiefer Boulevard, Sloughhouse, CA 95683

**Department:** Waste Management & Recycling **Estimated Project Cost:** \$1,471,800  
**Expected Completion Date:** 2010 **Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

This project will improve the LFG collection system’s delivery and flare capacities. The project includes the installation of the following:

- Automation upgrades to the existing flare in Fiscal Year 2007-08.
- Installation of a lower flow, low British Thermal Unit (BTU) flare in Fiscal Year 2007-08.
- Installation of a gas sales delivery manifold in Fiscal Year 2007-08.
- Installation of large diameter pipe from 30-inch pipe to delivery manifold location in Fiscal Year 2007-08.
- Upgrade of the condensate storage and treatment system in Fiscal Year 2007-08.
- Large Flare overhaul/new intake blowers in Fiscal Year 2010-11.

**Kiefer Landfill - Flare Improvement and Landfill Gas (LFG) Delivery Project**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	836,000	0	0	495,000	0	1,331,000
Consultant Services	0	0	0	0	74,250	0	74,250
Construction Inspection	0	41,800	0	0	24,750	0	66,550
<b>TOTAL</b>	<b>0</b>	<b>877,800</b>	<b>0</b>	<b>0</b>	<b>594,000</b>	<b>0</b>	<b>1,471,800</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	877,800	0	0	594,000	0	1,471,800

**Kiefer Landfill – Gas Beneficial Use Projects**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$353,676

**Expected Completion Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

Construction of a facility to recover energy from collected landfill gas. The facility will likely consist of a plant that will convert landfill gas to liquid natural gas fuel to be used in Waste Management and Recycling Department’s refuse collection fleet. The majority of the project costs would be borne by the project developer. The department will pay for site grading and improvements.

**Kiefer Landfill - Gas Beneficial Use Projects**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Cost	0	0	165,000	0	0	0	165,000
Consultant Services	0	27,500	27,500	0	0	0	55,000
Construction Inspection	117,176	0	16,500	0	0	0	133,676
<b>TOTAL</b>	<b>117,176</b>	<b>27,500</b>	<b>209,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>353,676</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	117,176	27,500	209,000	0	0	0	353,676

**Kiefer Landfill – Gas Collection System Expansion**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$2,701,084  
**Expected Completion Date:** Ongoing      **Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

This project expands the Kiefer Landfill’s (KLF) gas collection system into Modules M2 (a section of KLF) and beyond. Additional gas wells will be needed as the KLF expands. The project is anticipated to be developed in phases. Major efforts include:

- Installation of replacement wells (10-year life) on an annual basis.
- New wells will be installed in M2 in Fiscal Year 2008-09.
- Header piping will be relocated in Fiscal Year 2007-08.
- The large diameter pipe from Sump No.1 to the flare manifold is included in the Flare Improvements and Landfill Gas Delivery Project.
- Permanent perimeter header costs are included in the liner construction projects.

**Kiefer Landfill - Gas Collection System Expansion**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Cost	0	295,900	953,480	465,850	398,200	342,100	2,455,530
Project Management/ Design	0	14,795	47,674	23,293	19,910	17,105	122,777
Construction Inspection	0	14,795	47,674	23,293	19,910	17,105	122,777
<b>TOTAL</b>	<b>0</b>	<b>325,490</b>	<b>1,048,828</b>	<b>512,436</b>	<b>438,020</b>	<b>376,310</b>	<b>2,701,084</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	325,490	1,048,828	512,436	438,020	376,310	2,701,084



**Kiefer Landfill – Gas Remediation Project**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$523,490  
**Expected Completion Date:** 2011      **Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

Kiefer Landfill has recently detected additional offsite landfill gas (LFG). Regulations require landfill owners to control landfill gas at the facility boundary. The Department of Waste Management and Recycling is obligated to address the LFG migration. The extent of migration and magnitude of the remediation are unknown at this time. For the purposes of this estimate it is assumed that four extraction wells will be installed in the impacted areas in Fiscal Years 2007-08, 2008-09 and 2010-11. These wells would be connected to the existing LFG collection and destruction system using aboveground piping and sumps.

**Kiefer Landfill - Gas Remediation Project**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	135,300	135,300	0	135,300	0	405,900
Project Management/Design	0	13,530	13,530	0	13,530	0	40,590
Consultant Services	0	44,000	22,000	0	11,000	0	77,000
<b>TOTAL</b>	<b>0</b>	<b>192,830</b>	<b>170,830</b>	<b>0</b>	<b>159,830</b>	<b>0</b>	<b>523,490</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	192,830	170,830	0	159,830	0	523,490

**Kiefer Landfill – Graves Property Deer Creek Levee Repair**  
 13045 Jackson Road, Sloughouse, CA, 95683

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$200,000  
**Expected Completion Date:** 2007      **Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**

On January 1, 2006 an intense storm raised Deer Creek water level to flood stage. The flow escaped the channel and flood plain by rupturing one segment of levee on countyowned land known as the Graves Property. This project includes removing and replacing approximately 1,000 feet of existing, but poorly built, levee (the length of project is equal to the full width of the property). Existing berm soil, trees, and other vegetation will be left in windrows on site. Soil for the replacement levee will be borrowed from on site. This project includes the planning, design, construction, construction management, and inspections. The estimates are based on information provided by the consulting engineer. This project includes nominal funding for permitting, but not for environmental mitigation.

A 150-foot length portion of the levee was repaired in the Fall 2006. Unspent monies from Fiscal Year 2006-07 are to be rebudgeted to Fiscal Year 2007-08 to fund continued repairs.

**Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

Kiefer Landfill - Graves Property Deer Creek Levee Repair							
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Consultant Services	5,000	10,000	0	0	0	0	15,000
Misc. Project Costs	45,000	140,000	0	0	0	0	185,000
<b>TOTAL</b>	<b>50,000</b>	<b>150,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>200,000</b>

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Solid Waste Capital Outlay Fund	50,000	150,000	0	0	0	0	200,000

**Kiefer Landfill – Landfill-1, Phase II Partial Closure**

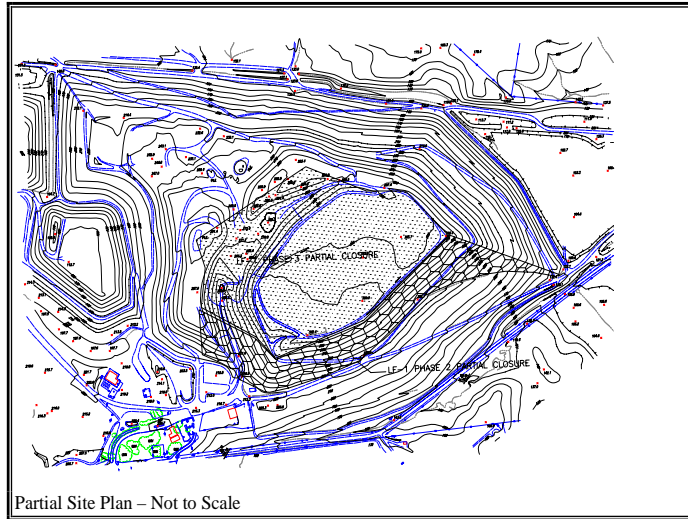
12701 Kiefer Boulevard, Sloughouse, CA, 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$4,692,910

**Expected Completion Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

This project includes the planning, design, construction, construction management, inspections, and reporting associated with construction of partial final closure components such as final cover, drainage improvements, and landfill gas modifications on 25 acres of Kiefer Landfill Unit 1. The estimates are based on information contained in the Partial Final Closure Plan and also include costs to design and permit a proposed alternative “evapotranspiration” final cover. All costs are in 2007 dollars. The estimates are based on a composite geosynthetic clay liner/geomembrane final cover over all areas to receive final cover, consistent with current site permit documents. Costs will likely be lower if an alternative final cover is constructed, pending approval by the Regional Water Quality Control Board.

**Kiefer Landfill - Landfill-1, Phase II Partial Closure**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	0	3,217,000	0	0	0	3,217,000
Project Management/Design	25,000	25,000	25,000	0	0	0	75,000
Consultant Services	353,000	100,000	208,000	0	0	0	661,000
Construction							
Inspection	0	0	96,510	0	0	0	96,510
Misc. Project Costs	0	0	643,400	0	0	0	643,400
<b>TOTAL</b>	<b>378,000</b>	<b>125,000</b>	<b>4,189,910</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,692,910</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	378,000	125,000	4,189,910	0	0	0	4,692,910

**Kiefer Landfill – Landfill-1, Phase III Partial Closure**

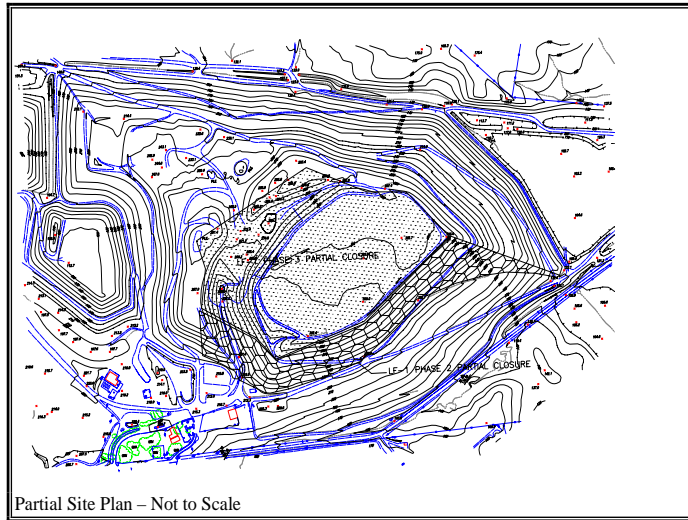
12701 Kiefer Boulevard, Sloughouse, CA, 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$6,301,960

**Expected Completion Date:** 2011

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

This project includes the planning, design, construction, construction management, inspections, and reporting associated with construction of partial final closure components such as final cover, drainage improvements, and landfill gas modifications on 46 acres of Kiefer Landfill Unit 1. The estimates are based on information contained in the Partial Final Closure Plan. All costs are in 2007 dollars. The estimates are based on a composite geosynthetic clay liner/geomembrane final cover over all areas to receive final cover, consistent with current site permit documents. Costs will likely be lower if an alternative “evapotranspiration” final cover is constructed, pending approval by the Regional Water Quality Control Board.

**Kiefer Landfill - Landfill-1, Phase III Partial Closure**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	0	0	0	\$4,852,000	0	4,852,000
Project Management/Design	0	0	0	25,000	\$25,000	0	50,000
Consultant Services	0	0	0	284,000		0	284,000
Construction							
Inspection	0	0	0	0	\$145,560	0	145,560
Misc. Project Costs	0	0	0	0	\$970,400	0	970,400
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>309,000</b>	<b>5,992,960</b>	<b>0</b>	<b>6,301,960</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	0	0	309,000	5,992,960	0	6,301,960

**Kiefer Landfill – Module 3, Phases I and II Liner and Ancillary Features**

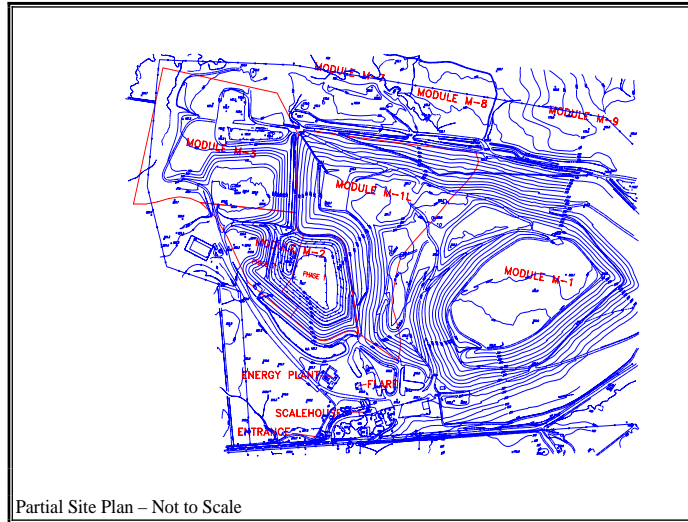
12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$14,492,250

**Expected Completion Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



Partial Site Plan – Not to Scale

**Project Description:**

This project includes the planning, design, construction, construction management, inspections, reporting and oversight associated with construction of approximately 40 acres of landfill liner and leachate collection systems for Module 3, Phases I and II at Kiefer Landfill. The budget is based on experience with Module 2 and draft design and cost estimating documents. The estimates do not include costs for permitting activities, groundwater monitoring wells, or costs for any aspects of the required mitigation for species and habitat.

**Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

Kiefer Landfill - Module 3, Phases I and II Liner and Ancillary Features

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	13,950,000	0	0	0	0	13,950,000
Project Management/Design	0	45,000	0	0	0	0	45,000
Consultant Services	78,000	200,000	0	0	0	0	278,000
Construction Inspection	0	209,250	0	0	0	0	209,250
Misc. Project Costs	0	10,000	0	0	0	0	10,000
<b>TOTAL</b>	<b>78,000</b>	<b>14,414,250</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,492,250</b>

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	78,000	14,414,250	0	0	0	0	14,492,250

**Kiefer Landfill – Module 3, Phase III Liner and Ancillary Features**

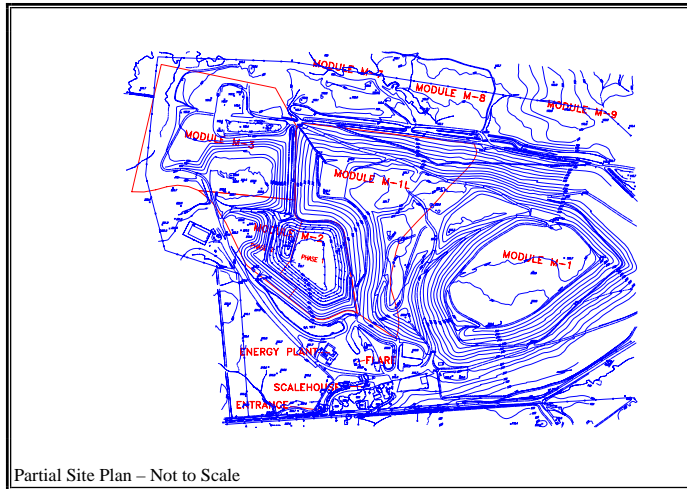
12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$5,151,700

**Expected Completion Date:** 2011

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

This project includes the planning, design, construction, construction management, inspections, reporting, and oversight associated with construction of approximately 16 acres of landfill liner and leachate collection systems for Module 3, Phase III at Kiefer Landfill. The budget is based on experience with Module 2 and conceptual design and cost estimating documents. The estimates do not include costs for permitting activities, groundwater monitoring wells, or costs for any aspects of the required mitigation for species and habitat.

**Kiefer Landfill - Module 3, Phase III Liner and Ancillary Features**

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	0	0	0	4,780,000	0	4,780,000
Project Management/							
Design	0	0	0	45,000	45,000	0	90,000
Consultant Services	0	0	0	200,000	0	0	200,000
Construction							
Inspection	0	0	0	0	71,700	0	71,700
Misc. Project Costs	0	0	0	0	10,000	0	10,000
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>245,000</b>	<b>4,906,700</b>	<b>0</b>	<b>5,151,700</b>

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	0	0	245,000	4,906,700	0	5,151,700

**Kiefer Landfill – Secondary Groundwater Remediation System Improvement**  
 12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$399,000  
**Expected Completion Date:** 2008                      **Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**  
 The existing Kiefer Landfill groundwater remediation program has two ongoing costly elements: the pump and treat system, and extensive sampling and monitoring. Two methods have been identified which may reduce the costs of these two programs. Focused water extraction from the more contaminated wells will reduce total flow. Use of indicator parameters will reduce the range of monitoring even while increasing the frequency of monitoring.

This project will implement these two methods and others which later investigation may produce.

**Operating Budget Impact:**  
 The completion of this project has no measurable impact on the operating budget.

Kiefer Landfill - Secondary Groundwater Remediation System Improvement							
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Consultant Services	249,000	150,000	0	0	0	0	399,000

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Solid Waste Outlay Capital Fund	249,000	150,000	0	0	0	0	399,000

**Kiefer Landfill – Skip Loader**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$120,000

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

Kiefer Landfill - Skip Loader – This is a wheeled loader utilized for special projects and comes with special attachments for side hill mowing, small construction projects and other miscellaneous projects.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

Kiefer Landfill - Skip Loader

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost	0	120,000	0	0	0	0	120,000

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	120,000	0	0	0	0	120,000



**Kiefer Landfill – Stormwater Protection Site Improvements**

12701 Kiefer Boulevard. Sloughouse, CA 95683

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$1,090,023  
**Expected Completion Date:** 2008      **Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

Install a wheel washing system, make necessary road widening improvements, construct stormwater management improvements, and construct asphalt improvements at recycling and equipment and vehicle staging areas. The wheel washing system includes the structures necessary for collection of sediments and utility connections (water, electrical, and sewer). The road in the proposed wheel wash location needs to be widened to accommodate the wash and a bypass lane. New asphalt will be installed in the current truck parking area and the recycling area would receive asphalt improvements.

**Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

**Kiefer Landfill - Stormwater Protection Site Improvements**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	883,657	0	0	0	0	883,657
Consultant Services	118,000	0	0	0	0	0	118,000
Construction							
Inspection	0	88,366	0	0	0	0	88,366
<b>TOTAL</b>	<b>118,000</b>	<b>972,023</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,090,023</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	118,000	972,023	0	0	0	0	1,090,023

**Kiefer Landfill – Water Supply Improvements**

12701 Kiefer Boulevard, Sloughhouse, CA 95683

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$741,679  
**Expected Completion Date:** 2009      **Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

The project will include design and construction of water supply and distribution system improvements at Kiefer Landfill. Project elements will include review of the existing water supply infrastructure, possible decommissioning of the existing back-up water supply well “A,” providing water supply alternatives in the event of a failure to the primary water supply well “E,” and expanding the water distribution system to deliver water from the new supply alternative(s) and to provide water service to additional areas of the facility.

**Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

**Kiefer Landfill - Water Supply Improvements**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	572,000	0	0	0	0	572,000
Project Management /Design	0	10,000	0	0	0	0	10,000
Consultant Services	36,079	95,000	0	0	0	0	131,079
Construction Inspection	0	28,600	0	0	0	0	28,600
<b>TOTAL</b>	<b>36,079</b>	<b>705,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>741,679</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Refuse Capital Outlay Fund	36,079	705,600	0	0	0	0	741,679

**Kiefer Landfill – Wetland Mitigation**

12701 Kiefer Boulevard, Sloughouse, CA 95683

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$3,640,000

**Expected Completion Date:** 2016

**Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**

The project is required as part of the Landfill Expansion permit. The county’s consultant prepared a report entitled Kiefer Landfill Wetland Mitigation Plan which describes the required mitigation. This project will design, construct and manage in perpetuity the Wetland Mitigation.

**Kiefer Landfill - Wetland Mitigation**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Consultant Services	2,050,000	1,150,000	110,000	110,000	110,000	110,000	3,640,000

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Solid Waste Capital Outlay Fund	2,050,000	1,150,000	110,000	110,000	110,000	110,000	3,640,000

**North Area Recovery Station – Can Yard Grading and Sealing**

4450 Roseville Road, North Highlands, CA 95660

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$339,675  
**Expected Delivery Date:** 2008      **Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**  
 Background: This project was rebudgeted from Fiscal Year 2005-06 for grading and chip sealing of a 109,000-square foot area to house containers returned from the City of Citrus Heights and for north area can delivery.

The project includes grading to sheet drain to the west of the compound. Also included in the project is perimeter chainlink fencing, two gates (one on the northeast end and one on the southeast end), and a small shed for hardware and forklift storage, and for employees to work in during inclement weather.

The project is to be rebudgeted to Fiscal Year 2007-08 pending consideration of future comprehensive site improvements for the entire North Area Recovery Station property.

**Operating Budget Impact:**  
 The completion of this project has no measurable impact on the operating budget.

**North Area Recovery Station - Can Yard Grading and Sealing**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	226,450	0	0	0	0	226,450
Project Management/ Design	0	45,290	0	0	0	0	45,290
Consultant Services Construction	0	22,645	0	0	0	0	22,645
Inspection	0	22,645	0	0	0	0	22,645
Misc. Project Costs	0	22,645	0	0	0	0	22,645
<b>TOTAL</b>	<b>0</b>	<b>339,675</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>339,675</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Solid Waste Capital Outlay Fund	0	339,675	0	0	0	0	339,675

**North Area Recovery Station – Employee Parking Lot Paving**

4450 Roseville Road, North Highlands, CA 95660

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$45,000  
**Expected Completion Date:** 2008      **Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**

This project involves paving the gravel/dirt area where transfer operations staff park their personal vehicles.

Project is to be rebudgeted to Fiscal Year 2007-08 pending consideration of future comprehensive site improvements for the entire North Area Recovery Station property.

**Operating Budget Impact:**

Operating costs should decrease; however, the amount of the reduction cannot be determined until the project is completed.

**North Area Recovery Station - Employee Parking Lot Paving**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	30,000	0	0	0	0	30,000
Project Management/Design	0	10,000	0	0	0	0	10,000
Construction Inspection	0	5,000	0	0	0	0	5,000
<b>TOTAL</b>	<b>0</b>	<b>45,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>45,000</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Solid Waste Capital Outlay Fund	0	45,000	0	0	0	0	45,000

**North Area Recovery Station – Heavy Duty Inerts Trailer**

4450 Roseville Road, North Highlands, CA 95660

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$150,000

**Expected Delivery Date:** 2008

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

North Area Recovery Station (NARS) – Heavy Duty Inerts Trailer – utilized for hauling concrete, soil, rocks and other abrasive material from the NARS Transfer station to the Kiefer Landfill and other sites to assist in the County Diversion Program.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

North Area Recovery Station - Heavy Duty Inerts Trailer

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Purchase Cost	0	150,000	0	0	0	0	150,000

Funding Source	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Refuse Capital Outlay Fund	0	150,000	0	0	0	0	150,000

**North Area Recovery Station – Site Operations Area Improvements and Repairs**

4450 Roseville Road, North Highlands, CA 95660

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$6,120,000

**Expected Completion Date:** 2011

**Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**

The project includes substantial improvements to the site to increase capacity, improve storm water drainage, and replace pavement in numerous locations.

**North Area Recovery Station - Site Operations Area Improvements and Repairs**

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	150,000	150,000	400,000	2,500,000	2,500,000	50,000	5,750,000
Project Management/Design	0	0	20,000	20,000	20,000	0	60,000
Consultant Services	0	0	100,000	30,000	30,000	0	160,000
Construction Inspection	0	0	50,000	50,000	50,000	0	150,000
<b>TOTAL</b>	<b>150,000</b>	<b>150,000</b>	<b>570,000</b>	<b>2,600,000</b>	<b>2,600,000</b>	<b>50,000</b>	<b>6,120,000</b>

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Solid Waste Capital Outlay Fund	150,000	150,000	570,000	2,600,000	2,600,000	50,000	6,120,000

**South Container and Transfer Station - Site Improvements (including Can Yard)**

8850 Fruitridge Road, Sacramento, CA 95826

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$500,000  
**Expected Completion Date:** 2008      **Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**

Site improvements, including grading and chip sealing of a 21,000-square foot area to refurbish and wash containers returned from the City of Citrus Heights and Sacramento County. The project includes grading to sheet drain to the southeast or east from the western side of the site. Also included in the project is perimeter chainlink fencing, one gate on the north end at the entrance road.

Work completed in Fiscal Year 2006-07 included a new drain to divert water to the sanitary drain on site, and a canopy for shade and for employees to work in during inclement weather.

**Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

**South Container and Transfer Station - Site Improvements (including Can Yard)**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	30,000	280,000	0	0	0	0	310,000
Consultant Services	0	40,000	0	0	0	0	40,000
Construction							
Inspection	0	25,000	0	0	0	0	25,000
Misc. Project Costs	125,000	0		0	0	0	125,000
<b>TOTAL</b>	<b>155,000</b>	<b>345,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>500,000</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Solid Waste Capital Outlay Fund	155,000	345,000	0	0	0	0	500,000



**Universal Waste Processing Equipment**  
 North Area Recovery Station/Kiefer Landfill  
 4450 Roseville Road, North Highlands, CA 95660  
 12701 Kiefer Boulevard, Sloughhouse, CA 95683

**Department:** Waste Management & Recycling      **Estimated Project Cost:** \$120,000  
**Expected Delivery Date:** 2007      **Funding Sources:** Solid Waste Capital Outlay  
 Fund

**Project Description:**

This project includes the acquisition of universal waste processing equipment which is comprised of a compressor, hand tools, conveyor system, and a drainage system.

The budget also includes \$40,000 to provide new underground conduit from the North Area Recovery Station Household Hazardous Waste Administration Building’s electrical panel to the Household Hazard Waste canopy.

**Operating Budget Impact:**

The operating cost impact of this project is unknown at this time.

**Universal Waste Processing Equipment**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Construction Costs	0	40,000	0	0	0	0	40,000
Misc. Project Costs	0	80,000	0	0	0	0	80,000
<b>TOTAL</b>	<b>0</b>	<b>120,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120,000</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2007-08</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Total</b>
Solid Waste Capital Outlay Fund	0	120,000	0	0	0	0	120,000