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March 24, 2005

Robert Perdue Assistant Executive Officer Attention: Mr. Jose Cortez California Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260

Subject: Waste Discharge Requirements, Order No. R7-2004-0103, Condition D.19 Waste Management Plan Interim Measure No. 3 Pacific Gas and Electric Company, Topock Compressor Station Needles, California

Dear Mr. Perdue:

The Pacific Gas and Electric Company (PG&E) submits the attached Waste Management Plan (plan) for the Topock Compressor Station, Interim Measure No. 3. The plan addresses Condition D.19 of Waste Discharge Requirements, Order No. R7-2004-103.

Please contact Richard McCurdy, PG&E Senior Environmental Consulting Specialist, at 925/974-4079 if you have any questions regarding this information.

Sincerely,

Terri Herron for yronne Meeks

Attachment

cc: R. McCurdy, PG&E T. Herson, CH2M HILL M. Johns, CH2M HILL J. Geels, CH2M HILL M. Blume, CH2M HILL

# Waste Management Plan Topock Compressor Station Needles, California

Prepared for

## Colorado River Basin Regional Water Quality Control Board

On behalf of

**Pacific Gas and Electric Company** 

March 2005

**CH2MHILL** 

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# Acronyms and Abbreviations

BLM	Bureau of Land Management	
CCR	California Code of Regulations	
CFR	Code of Federal Regulations	
CRBRWQCB	Colorado River Basin Region Regional Water Quality Control Board,	
Cr(VI)	hexavalent chromium	
Cr(III)	trivalent chromium	
DOT	Department of Transportation	
IM	interim measures	
PG&E	Pacific Gas and Electric Company	
RCRA	Resource Conservation and Recovery Act	
TCLP	toxicity characteristic leaching procedure	
TDS	total dissolved solids	
USEPA	United States Environmental Protection Agency	
WDR	Waste Discharge Requirement	
WET	waste extraction test	

This Waste Management Plan (plan) has been prepared for the Pacific Gas and Electric Company's (PG&E's) Topock Compressor Station, Interim Measures (IM) No. 3 groundwater extraction and treatment system. IM No. 3 expands groundwater extraction and treatment capacity to maintain hydraulic control of the chromium plume boundaries near the Colorado River. IM No. 3 consists of construction of a new groundwater treatment facility on San Bernardino County Assessor's Parcel 650-151-06, installation of piping to convey the water from the extraction wells to the treatment facility, and disposal of treated water by injection wells. The treatment facility generates residual solids that are disposed offsite.

The groundwater treatment system is a continuous process that involves:

- Reducing the hexavalent chromium [Cr(VI)] to the less-soluble trivalent form [Cr(III)] by reaction with ferrous chloride in a solution made slightly acidic.
- Precipitating iron and Cr(III) by the addition of sodium hydroxide and air.
- Removing the majority of precipitated solids by gravity separation in a clarifier.
- Passing the clarified water through a microfilter to provide additional solids removal.
- Lowering the naturally-occurring total dissolved solids (TDS) of the groundwater using reverse osmosis.
- Dewatering settled solids.

Wastes that are generated from the groundwater treatment process and that are addressed by this plan include:

- Dewatered settled solids.
- Reverse osmosis concentrate.
- Off-specification groundwater.

Additional waste streams that will be generated during operation of the treatment system and that are addressed by this plan include:

- Used lubricating and hydraulic oil.
- Contaminated rags, wipes, laboratory supplies, and personal protective equipment.
- Batteries.
- Fluorescent light tubes.
- Sanitary sewage.
- Conventional trash.
- Empty chemical containers.

Although the extracted groundwater is, itself, a hazardous waste, the extraction, treatment, and management of the treated groundwater is not included here because it is addressed in detail in other documents.

This plan presents procedures for management, transportation, and disposal of IM No. 3 waste streams. Additional documents associated with waste management include the Conditional Authorization Notification and the Business Emergency/Contingency Plan, required by the local Certified Unified Program Agency, which for this project, is the San Bernardino County Fire Department. This plan will be revised if new waste streams are identified or management procedures change significantly.

Wastes from IM No. 3 will be managed and disposed of in a manner consistent with applicable state and federal laws and regulations. PG&E will obtain approvals required by the Bureau of Land Management (BLM) prior to transporting waste on BLM land and will obtain written approval from the Colorado River Basin Regional Water Quality Control Board (CRBRWQCB) regarding the location and method of disposal of wastes before disposing of waste streams not included in this Plan.

This plan addresses the following regulatory requirements:

- Waste Discharge Requirements (WDRs), Order No. R7-2004-0103, Condition D.19. requirement to prepare a Waste Management Plan.
- California Code of Regulations, Title 22, Division 4.5 (22 CCR), Section 66262.34. hazardous waste generator accumulation requirements.
- 22 CCR Section 66260.200(c) waste characterization.
- 22 CCR, Div. 4.5, Chapter 18 land disposal restrictions.
- 22 CCR, Div. 4.5, Chapter 29 standards for the management of used oil.
- 22 CCR, Div. 4.5, Chapter 23 standards for universal waste management.
- Code of Federal Regulations, Title 49 (49 CFR), Parts 171 through 180 Federal Department of Transportation (DOT) hazardous materials regulations.

The waste streams that will be generated at the IM 3 groundwater extraction and treatment facility and addressed in this plan are summarized in Table 1. The two largest-volume waste streams are treatment system solids and the reverse osmosis concentrate. Waste stream characterization for these streams is discussed in more detail below.

#### TABLE 1

Summary of IM 3 Waste Streams

Waste Management Plan, Topock Compressor Station, Needles, California

Waste Stream	Source	Estimated Annual Quantity	Management Approach
Hazardous Wastes		l	l
Treatment system solids	Treatment system clarifier	372,000 pounds	Pumped to transportable phase separators, which are transported off site to a permitted disposal facility.
Off-specification or untreated groundwater	Potentially generated during emergency shut down or maintenance conditions	4,000 gallons	Pumped from treatment system tanks into tanker trucks and transported to a permitted disposal facility.
Used oil	Treatment system mechanical equipment preventive maintenance	< 55 gallons per year	Accumulate in 55-gallon drum in accordance with used-oil regulations (22 CCR Division 4.5, Chapter 29) and transport off site to a permitted facility.
Fluorescent light tubes	Office	<10 tubes	Manage in accordance with Universal Hazardous Waste Rules (22 CCR Division 4.5, Chapter 23) and transport off site to a permitted management facility.
Used batteries	Portable equipment.	<20 batteries	Manage in accordance with Universal Hazardous Waste Rules (22 CCR Division 4.5, Chapter 23) and transport off site to a permitted management facility.
Miscellaneous hazardous waste, including cleanup debris, wipes, and filters.	Equipment maintenance, cleanup of small spills, laboratory wastes.	<12 drums (approximately 500 pounds maximum)	Manage in accordance with hazardous waste regulations (22 CCR Division 4.5, Chapters 11 & 12) and transport off site to a permitted disposal facility.
Non-hazardous Was	ites		
Treatment system reverse osmosis	Treatment system reverse osmosis	2,100,000 gallons	Pumped to the MW-20 bench tanks and transported to a permitted

system

concentrate

disposal facility.

#### TABLE 1

Summary of IM 3 Waste Streams Waste Management Plan, Topock Compressor Station, Needles, California

Waste Stream	Source	Estimated Annual Quantity	Management Approach
Empty chemical containers	Treatment system	<50 containers	Managed per the empty chemical container regulations (22 CCR 66261.7).
Domestic sewage	Domestic sewage accumulation tank.	14,600 gallons	Pumped out to tanker truck for off site disposal at a permitted facility.
Miscellaneous non- hazardous waste	Miscellaneous debris.	<1.000 pounds	Placed in labeled trash cans and transported off site to a permitted disposal facility.

#### 2.1 Treatment System Solids

The main constituents of the treatment system solids are insoluble iron oxyhydroxide and trivalent chromium hydroxide. Per the WDR monitoring and reporting program, treatment system solids will be tested on a monthly or quarterly basis for the parameters listed in Table 2.

TABLE 2

WDR R7-2004-0103 Monitoring Program, Treatment System Solids Analyses Waste Management Plan, Topock Compressor Station, Needles, California

Parameter	Sample Type	Testing Frequency
Fluoride	Composite	Monthly
Total chromium	Composite	Monthly
Hexavalent Chromium	Composite	Monthly
Antimony	Composite	Monthly
Arsenic	Composite	Monthly
Barium	Composite	Monthly
Beryllium	Composite	Monthly
Cadmium	Composite	Monthly
Cobalt	Composite	Monthly
Copper	Composite	Monthly
Lead	Composite	Monthly
Mercury	Composite	Monthly
Molybdenum	Composite	Monthly

#### TABLE 2

WDR R7-2004-0103 Monitoring Program, Treatment System Solids Analyses Waste Management Plan, Topock Compressor Station, Needles, California

Parameter	Sample Type	Testing Frequency
Nickel	Composite	Monthly
Selenium	Composite	Monthly
Silver	Composite	Monthly
Thallium	Composite	Monthly
Vanadium	Composite	Monthly
Zinc	Composite	Monthly
Bioassay	Composite	Quarterly

The treatment solids will be analyzed by the following procedures to determine if they are a Resource Conservation and Recovery Act (RCRA) hazardous waste or state hazardous waste:

- Toxic characteristic leaching procedure (TCLP) per United States Environmental Protection Agency (USEPA) SW-846 Method 1311. The results of this test will be used to determine if the solids exceed the RCRA toxicity characteristics thresholds of 22 CCR 66261.24(a)(1).
- Waste extraction test (WET) per Appendix II of 22 CCR Division 4.5, Chapter 11. The results of this test will be used to determine if the solids exceed the State of California soluble threshold limit concentrations of 22 CCR 66261.24(a)(2).
- Results of the monthly solids monitoring required by the WDRs will be used to determine if the solids exceed the State of California total threshold limit concentrations of 22 CCR 66261.24(a)(2).
- Results of the quarterly bioassay monitoring of the solids required by the WDR will be used to determine if the solids are a toxic hazardous waste per 22 CCR 66261.24(a)(6).
- If the waste is not otherwise determined to be a toxic hazardous waste based on the tests listed above, the oral and dermal LD50 values will be calculated to determine if the solids are a toxic hazardous waste per 22 CCR 66261.24(c).
- pH per USEPA SW-846 Method 9040B or Method 9045C. The results of this test will be used to determine if the solids are a corrosive hazardous waste.

The treatment solids are not a RCRA listed waste (22 CCR, Division 4.5, Chapter 11, Article 4). Based on generator knowledge, the treatment solids do not exhibit the characteristics of ignitability or reactivity. The treatment solids consist almost entirely of inorganic solids and water. In addition, the treatment solids do not emit sufficient gas or vapor that they would have an acute inhalation LC50 less than 10,000 parts per million by volume and thus be a

toxic hazardous waste per 22 CCR 66261.24(a)(5). Finally, analyses of the groundwater have not shown the compounds in the amounts listed in 22 CCR 66261.24(a)(7).

Documentation of the results of the waste characterization of the treatment plant solids will be maintained with this Waste Management Plan.

Treatment plant solids determined to be a hazardous waste will be managed in accordance with federal and state requirements. Hazardous waste will be accumulated for not more than 90 days and will be properly manifested and shipped off site by a registered hazardous waste hauler and disposed at a facility permitted to receive the waste.

#### 2.2 Reverse Osmosis Concentrate

The reverse osmosis concentrate consists of naturally-occurring groundwater containing dissolved solids that are concentrated to between two and four times their original concentration. Per the WDR monitoring program, the reverse osmosis concentrate will be tested on a weekly or monthly basis for the parameters listed in Table 3.

TABLE 3

WDR R7-2004-0103 Monitoring Program, Reverse Osmosis Concentrate Analyses Draft Waste Management Plan, Topock Compressor Station, Needles, California

Parameter	Sample Type	Testing Frequency
TDS	Grab	Weekly
Specific Conductance	Grab	Weekly
рН	Grab	Weekly
Total Chromium	Grab	Weekly
Hexavalent Chromium	Grab	Weekly
Antimony	Grab	Monthly
Arsenic	Grab	Monthly
Barium	Grab	Monthly
Beryllium	Grab	Monthly
Cadmium	Grab	Monthly
Cobalt	Grab	Monthly
Copper	Grab	Monthly
Fluoride	Grab	Monthly
Lead	Grab	Monthly
Mercury	Grab	Monthly
Molybdenum	Grab	Monthly
Nickel	Grab	Monthly
Selenium	Grab	Monthly
Silver	Grab	Monthly
Thallium	Grab	Monthly
Vanadium	Grab	Monthly
Zinc	Grab	Monthly

The reverse osmosis concentrate will be analyzed by the following procedures to confirm that it is a non-hazardous waste:

- TCLP per EPA SW-846 Method 1311. Because the reverse osmosis concentrate does not contain filterable solids, no extraction is required, and the results of the analyses in Table 3 will be used to confirm that the reverse osmosis concentrate does not exceed the RCRA toxicity characteristics thresholds of 22 CCR 66261.24(a)(1).
- WET per Appendix II of 22 CCR Division 4.5, Chapter 11. Because reverse osmosis concentrate does not contain filterable solids, no extraction is required, and the results of the analyses in Table 3 will be used to confirm that the reverse osmosis concentrate does not exceed the State of California soluble threshold limit concentrations of 22 CCR 66261.24(a)(2).
- Results of the reverse osmosis concentrate monitoring required by the WDRs will be used to confirm that the reverse osmosis concentrate does not exceed the State of California total threshold limit concentrations of 22 CCR 66261.24(a)(2).
- A bioassay will be performed on a sample of the reverse osmosis concentrate. Results of the bioassay will be used to confirm that the reverse osmosis concentrate are not a toxic hazardous waste per 22 CCR 66261.24(a)(6).
- If the waste is not otherwise determined to be a toxic hazardous waste based on the tests listed above, the oral and dermal LD50 values will be calculated to confirm that the reverse osmosis concentrate is not a toxic hazardous waste per 22 CCR 66261.24(c).
- pH per USEPA SW-846 Method 9040B or equivalent acceptable method. The results of this test will be used to confirm that the reverse osmosis concentrate is not a corrosive hazardous waste.

The reverse osmosis concentrate is not a RCRA listed waste (22 CCR, Division 4.5, Chapter 11, Article 4). Based on generator knowledge, the reverse osmosis concentrate does not exhibit the characteristics of ignitability or reactivity. In addition, the reverse osmosis concentrate does not emit sufficient gas or vapor to qualify as a toxic hazardous waste due to acute inhalation LC50 per 22 CCR 66261.24(a)(5). Also, based on generator knowledge, the reverse osmosis concentrate does not contain the compounds in the amounts listed in 22 CCR 66261.24(a)(7).

Documentation of the results of the waste characterization of the reverse osmosis concentrate will be maintained with this plan.

Hazardous waste generators must have a USEPA ID Number. The USEPA ID Number for the groundwater extraction and treatment system is **CAR000151118**. This number will be entered on all hazardous waste manifests and used, as necessary, for other hazardous waste-related reporting and recordkeeping.

# 4.0 Hazardous Material Pre-transportation and Transportation Requirements

Hazardous materials, including hazardous wastes, will be managed on site in accordance with the Hazardous Materials Business Plan. Treatment plant staff will comply with applicable pre-transportation requirements for hazardous materials of 49 CFR Part 171 through 180 as they apply to shipments of solid and hazardous waste. Requirements include:

- 1. Determining the hazard class of a hazardous material.
- 2. Properly packaging hazardous materials.
- 3. Marking a package to indicate that it contains a hazardous material.
- 4. Labeling a package to indicate that it contains a hazardous material.
- 5. Providing and maintaining emergency response information.
- 6. Preparing or reviewing a shipping paper to verify compliance with the hazardous material regulations of 49 CFR Parts 171 through 180.
- 7. Certifying that a hazardous material is in proper condition for transportation in conformance with the requirements of the hazardous material regulations.
- 8. Loading, blocking, and bracing a hazardous materials package in a freight container or transport vehicle if treatment plant operators are performing the loading function.
- 9. Segregating a hazardous materials package in a freight container or transport vehicle from incompatible cargo if treatment plant operators are performing the loading function.
- 10. Selecting, providing, or affixing placards (as required) for a freight container or transport vehicle to indicate that it contains a hazardous material if treatment plant operators are performing the loading function.

Hazardous wastes will be managed in accordance with the requirements of 22 CCR, Division 4.5, Chapter 12, Article 3, Pre-Transport Requirements.

### 5.1 Selection of Containers

Containers will be selected to be compatible with the wastes stored and will comply with applicable federal DOT requirements.

### 5.2 Closed Containers

Lids, bungs, or other closures shall be kept closed except when adding waste to a container. At least 2 inches of air-space shall be left in containers to allow for material expansion.

### 5.3 Segregation of Incompatible Waste

Incompatible wastes will not be placed in the same container (for example concentrated acids and bases or sodium hypochlorite and used oil).

### 5.4 Accumulation Time

Hazardous waste containers (including the phase separator, if it is determined that the treatment solids are a hazardous waste) will be placed in secondary containment before they receive hazardous waste. Hazardous waste containers will be transported off site to a permitted disposal facility within 90 days of the date waste accumulation begins.

In accordance with 22CCR66262.34(e), waste oil may be accumulated in one 55-gallon drum or smaller container for up to 1 year from the date waste oil is placed in the empty container, provided that the container is located near the point of generation, and the container is transported off site to a licensed disposal facility within 90 days of the container becoming full.

### 5.5 Marking/Labeling

Containers will be labeled with the following information in black, permanent ink at the time waste is first placed in the container:

- Contents/composition of the waste
- Physical state of the waste (liquid, solid)
- Hazardous properties (e.g. corrosive, toxic)

- Date the empty container begins receiving hazardous waste
- USEPA waste code and California waste code
- DOT shipping name and UN or NA number
- Generator information

#### 5.6 Inspections

Areas used for container storage or transfer will be inspected at least weekly for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

Tanks storing or treating hazardous wastes will be inspected daily including:

- Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that all equipment is in good working order.
- The aboveground portions of the tank system, if any, to detect corrosion or releases of waste.
- Data gathered from monitoring equipment and leak-detection equipment (e.g., pressure and temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design.
- The construction materials and the area immediately surrounding the externally accessible portion of the tank system including secondary containment structures (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).
- For uncovered tanks, the level of waste in the tank, to ensure compliance with 22 CCR 66265.194(b)(3).

The results of these inspections will be documented in the facility operating log. A more comprehensive description of inspection requirements, including inspection requirements related to operation of the treatment system under the grant of Conditional Authorization from the County of San Bernardino Fire Department (Certified Unified Program Agency) is provided in the Environmental Compliance Plan.

# 6.0 Management of Empty Treatment Chemical Containers

Empty containers with a capacity of 5 gallons or less may be disposed of at an appropriate solid waste facility provided they are packaged and transported properly. Containers of 5 gallons or less meeting the definition of "empty" (22CCR66261.7(b)) do not need to be marked or labeled.

Containers greater than 5 gallons meeting the definition of "empty" do not need to be managed as hazardous waste provided that the containers are managed by one of the following methods:

- Sent to a facility where the container is reclaimed for scrap value provided the container is packaged and transported properly.
- Sent for reconditioning or remanufacturing provided the container is packaged and transported properly.
- Sent to a supplier or other intermediate location prior to managing the container by one of the two methods listed above.

Empty containers larger than 5 gallons must be marked with the date that the containers are emptied and must be managed within 1 year of the date that they are emptied.

A log shall be kept for each container larger than 5 gallons listing the name, street address, mailing address, and telephone number of the facility where the containers were shipped.

Used oil is a listed hazardous waste under California State Law. On occasion, used oil may be generated when conducting maintenance on equipment. Containers used to store used oil shall be marked or clearly labeled with the words "used oil" and the appropriate hazardous waste labeling information. Used oil will be transported off site to a permitted oil recycler or permitted hazardous waste facility. Records of shipments of used oil will be kept at the facility, including the name and address of the facility to which the used oil was shipped, the quantity shipped, and the date of shipment.

# 8.0 Management of Fluorescent Light Bulbs and Used Batteries

Fluorescent light tubes are a Universal Hazardous Waste subject to the requirements of 22 CCR, Division 4.5, Chapter 23. Occasionally, spent fluorescent light tubes may be generated at the site. Spent light tubes will be accumulated in a container labeled "used lamps" with the date the first used lamp is placed in the container. Used lamps will be stored in such a way to avoid breakage. Used lamps will be sent off site for recycling within 1 year. Records of shipments of used lamps will be kept at the facility, including the name and address of the facility to which the lamps were shipped, the quantity of lamps shipped, and the date of shipment.

Used batteries (not including automotive-type lead-acid batteries) are a Universal Hazardous Waste subject to the requirements of 22 CCR, Division 4.5, Chapter 23. If used batteries are generated, the batteries will be accumulated in a container labeled "used batteries" with the date the first used battery is placed in the container. Used batteries will be sent to a facility that is permitted to accept them within one year. Records of shipments of used batteries will be kept at the facility, including the name and address of the facility to which the batteries were shipped, the quantity of batteries shipped, and the date of shipment.

### 9.1 Manifesting

Hazardous wastes being transported off site will be accompanied by a hazardous waste manifest and transported by a registered hauler. The manifest will be completed per the requirements of 49 CFR 172.205 and 22 CCR, Division 4.5, Chapter 12.

An appropriately trained and designated individual will sign the manifest, witness the tranporter's signature of the manifest, and retain two copies. Signatory authority for the individual signing the manifest, as the generator, will be documented and retained on file at the site. One of the two copies of the manifest will be retained in the files, and the other copy will be submitted to the Department of Toxic Substances Control within 30 days of the date of the shipment. The transporter retains the remaining copies of the manifest until arrival at the disposal facility. The disposal facility is required to return a signed copy to the generator.

#### 9.2 Pre-shipment Labeling

Containers of 110 gallons or less will be clearly marked with the following words and information:

- Hazardous Waste State and Federal Law Prohibit Improper Disposal. If found, contact the nearest police or public safety authority, the USEPA, or the California Department of Toxic Substances Control.
- Generator's Name and Address \_\_\_\_\_\_
- Manifest Document Number\_\_\_\_\_\_

#### 9.3 Placarding

Before hazardous wastes are transported off site, treatment system staff will confirm that the hazardous waste transporter is correctly placarded in accordance with 49CFR 172, Subpart F.

### 9.4 Land Disposal Restrictions

The treatment solids are expected to be toxicity characteristic metal wastes that are restricted from disposal in a landfill unless it is demonstrated that these solids meet the treatability standards of 22 CCR Division 4.5, Chapter 18, Article 4. PG&E will test the treatment solids to determine if they meet these treatment standards and will maintain the results with this plan. Based on the results of this testing, PG&E will send an initial notification and notifications with each waste shipment meeting the requirements of 22 CCR 66268.7 to the

permitted hazardous waste disposal facility. Copies of notices will be retained on site for at least 3 years.

# 10.0 Contingency Plan

The Business Emergency/Contingency Plan contains information and procedures related to potential releases, spills, etc. The plan will be implemented in the event of an emergency related to hazardous materials, including hazardous wastes.

# 11.0 Training

Personnel will be trained in the elements of this plan, commensurate with their job responsibilities. Personnel will attend refresher training on an annual basis, unless otherwise specified below. More frequent training will be provided as necessary (e.g., if elements of this plan change significantly, job responsibilities change). Training will be directed by a person trained in the elements of this plan and the associated rules regulations.

Training topics may include (based on responsibilities):

- Hazard Communication and Emergency Response Procedures
- Waste Management
- Sampling
- Hazardous Materials Transportation

#### Hazard Communication Training and Emergency Response Procedures (8CCR 5194)

Personnel will be trained in the Hazard Communication Standard. Safety training will be provided in the areas of emergency response, measures to protect the employee from the hazards associated with hazardous materials to which they may be exposed in the work place, specific measures implemented to protect employees from exposure, methods and procedures for avoiding accidents (e.g., proper procedures for handling packages containing hazardous materials), etc.

Training records will be maintained for at least five years after an employee has terminated employment or until site closure. Additional training will be provided if workplace hazards change, emergency response measures change, etc.

Waste Management Training (22CCR 66265.16)

Personnel will be trained commensurate with their responsibilities and within six months after starting to work at the facility and will not work unsupervised until trained.

Training topics may include:

- Waste characterization
- Inspections
- Emergency/Spill Response Procedures

Training documentation will include:

- The job titles of each position involving hazardous waste management and the name of the employee filling the job
- Written job description
- Written description of the type and amount of training to each position
- Records of training provided

Training records will be maintained for at least three years after an employee has terminated employment or until site closure. Refresher training will be provided on an annual basis and more often if needed.

Sampling (22CCR 66265.16)

Personnel will be trained commensurate with their responsibilities and within six months after starting to work at the facility and will not work unsupervised until trained.

Training topics may include, for example:

- Locations and frequency of sampling
- Sample collection methods/techniques
- Sample container selection, preservation, and holding times
- Chain of Custody procedures

Training records will be maintained for at least three years after an employee has terminated employment or until site closure. Refresher training will be provided on an annual basis and more often if needed.

Hazardous Materials Transportation Training (49 CFR Part 172, Subpart H)

Training of operators in regulatory requirements related to shipping of hazardous materials will include:

- Training to familiarize treatment operators with DOT hazardous materials pre-transport requirements and to enable the employees to recognize and identify hazardous materials.
- Function-specific training concerning requirements in DOT hazardous materials pre-transport requirements.
- Security awareness training that provides an awareness of security risks associated with hazardous materials transportation and methods designed to enhance transportation security, including how to recognize and respond to possible security threats.

New employees will be trained upon hiring or within 90 days provided that the employee performs those functions under the direct supervision of a properly-trained and knowledgeable hazmat employee. Refresher training will be provided every three years.

# 12.0 Waste Transporters and Disposal Facilities

Transporters and disposal facilities currently identified for each waste stream are summarized in Table 4. Proposed changes to disposal facilities will be submitted to the Executive Director of the CRBRWQCB for approval. Copies of written communications from the CRBRWQCB approving disposal facility changes will be maintained with this plan.

TABLE 4

Summary of IM 3 Waste Streams, Waste Transporters and Disposal Facilities
Waste Management Plan, Topock Compressor Station, Needles, California

Waste Stream	Transporter	Disposal Facility
Treatment system solids	DenBeste Transportation, Inc. 820 DenBeste Court Windsor, CA 95492 800-838-1477 EPA ID CAD982513632	Chemical Waste Management Inc. 35251 Old Skyline Rd., Kettleman City, CA 93239 559-386-6151 EPA ID CAT000646117
Treatment system reverse osmosis concentrate	DenBeste Transportation, Inc. 820 DenBeste Court Windsor, CA 95492 800-838-1477 EPA ID CAD982513632	U.S. Filter Recovery Services, California 5375 South Boyle Avenue, Vernon, California 90058 323-277-1500 EPA ID CAD 097030993 PG&E Topock Compressor Station Evaporation Ponds
Off-specification or untreated groundwater	DenBeste Transportation, Inc. 820 DenBeste Court Windsor, CA 95492 800-838-1477 EPA ID CAD982513632	U.S. Filter Recovery Services, California 5375 South Boyle Avenue, Vernon, California 90058 323-277-1500 EPA ID CAD 097030993
Empty chemical containers	Chemical Vendor	Containers of 5 gallons or less emptied per regulation and discarded as non-hazardous waste. Containers greater than 5 gallons emptied per regulation and returned to vendors for reconditioning.
Used oil	DenBeste Transportation, Inc. 820 DenBeste Court Windsor, CA 95492 800-838-1477 EPA ID CAD982513632	Permitted oil recycling facility to be determined.
Miscellaneous hazardous waste (e.g. including cleanup debris, wipes, and filters).	DenBeste Transportation, Inc. 820 DenBeste Court Windsor, CA 95492 800-838-1477 EPA ID CAD982513632	Chemical Waste Management Inc. 35251 Old Skyline Rd., Kettleman City, CA 93239 559-386-6151 EPA ID CAT000646117
Light tubes	DenBeste Transportation, Inc. 820 DenBeste Court Windsor, CA 95492 800-838-1477 EPA ID CAD982513632	Recycled.

Waste Stream	Transporter	Disposal Facility Chemical Waste Management Inc. 35251 Old Skyline Rd., Kettleman City, CA 93239 559-386-6151 EPA ID CAT000646117	
Dry Cell Batteries	DenBeste Transportation, Inc. 820 DenBeste Court Windsor, CA 95492 800-838-1477 EPA ID CAD982513632		
Miscellaneous non- hazardous waste	DenBeste Transportation, Inc. 820 DenBeste Court Windsor, CA 95492 800-838-1477 EPA ID CAD982513632	Allied Waste, LaPaz County Landfill 26999 Highway 95 Parker, AZ 85344 520-855-9441	

#### TABLE 4

Summary of IM 3 Waste Streams, Waste Transporters and Disposal Facilities Waste Management Plan, Topock Compressor Station, Needles, California