**STATE OF CALIFORNIA**
**REGIONAL WATER QUALITY CONTROL BOARD**
**CENTRAL COAST REGION**
**895 Aerovista Place, Suite 101**
**San Luis Obispo, CA 93401-7906**

# WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2007-0023

Waste Discharger Identification No. 3400307001

**FOR**

**CLOSED LOS OSOS CLASS III LANDFILL**
**SAN LUIS OBISPO COUNTY**

The California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board) finds that:

## LANDFILL OWNER AND LOCATION

1. Mrs. Jeena W. Piccuta (hereafter "Owner"), owns the property on which the Los Osos Closed Class III Landfill (hereafter "Landfill") is located. The County of San Luis Obispo (hereafter "County") is responsible for closure and post-closure maintenance of the Landfill. These Waste Discharge Requirements apply to both County and Owner (hereafter "Discharger").

2. Previous owners of the property on which the Landfill is located include Mr. George Sousa and Mr. and Mrs. George and Ann Martines. The County entered into a lease agreement with Mr. Sousa on October 16, 1978, which assigned responsibility to the County for maintaining the landfill premises to meet all State and County health laws, rules and regulations once waste disposal operations ceased. The lease with Mr. Sousa ended on November 30, 1988 and the County elected to cease waste disposal operation at the Landfill at that time. On June 6, 1989, the County entered into a new agreement with the subsequent property owners (Mr. and Mrs. Martines), which established that the County was responsible for closure and post-closure maintenance of the Landfill.

3. The Landfill is a closed facility which last received waste on November 26, 1988. The 25-acre unlined Landfill is located at 2285 Turri Road approximately 1.5 miles northeast of the community of Los Osos as shown on Attachment A included as part of this Order. The location is described as, Section 16, Township 30 south, Range 11 east, Mount Diablo Base Line and Meridian. The Assessor Parcel Number for the Landfill property is 067-011-047.

## PURPOSE OF ORDER

4. The Discharger submitted an Amended Report of Waste Discharge (ROWD) on June 30, 2003 and an amendment to the Amended ROWD on December 31, 2003 to update the Landfill's Waste Discharge Requirements (WDR) Order No. 94-64 (hereafter "Order 94-64") and Monitoring and Reporting Program (MRP) Order No. 94-64. On December 15, 2004, Central Coast Water Board staff required a technical report to supplement the Amended ROWD due to the addition of groundwater monitoring wells and upgrades to the landfill gas extraction system. The County submitted the technical report on December 1, 2005. The technical report was deemed incomplete by Central Coast Water Board staff and the following additional information was required 1) an updated closure and post-closure maintenance plan, 2) an engineering feasibility study for corrective action of groundwater, and 3) an updated groundwater monitoring program.

On June 29, 2006, the County submitted an updated groundwater monitoring program and an updated post-closure maintenance plan. The County submitted an engineering feasibility study for corrective action of groundwater on November 1, 2006. All of these reports combined, provide the required information to update the Landfill's WDR and MRP Order Nos. 94-64.

5. The Landfill is regulated by Order No. 94-64, as adopted by the Central Coast Water Board on July 8, 1994. The primary purpose of proposed Order No. R3-2007-0023 (hereafter "Order") is to reflect the change in ownership, to revise and update requirements for post-closure maintenance and long-term monitoring, pursuant to California Code of Regulations Title 27, Solid Waste (hereafter "Title 27") effective July 18, 1997, and pursuant to Code of Federal Regulations Title 40, Part 257 and 258 Solid Waste Facility Disposal Criteria, Final Rule, as promulgated on October 9, 1991 (hereafter "40CFR258").

6. This Order replaces Order No. 94-64, provides updates to the groundwater monitoring program, updates the post-closure maintenance plan, and specifically prohibits discharge of waste at the Landfill.

7. The Landfill is currently subject to the Central Coast Water Board's Order No. 93-84 "Waste Discharge Requirements Amendment for all MSW Landfills in the Central Coast Region" (Order 93-84). Order 93-84 was an "umbrella" order intended to collectively cover all Central Coast Water Board landfills and make them subject to 40CFR258. This Order preempts the need to continue covering the Landfill under Order 93-84.

## CLASSIFICATION AND WASTE TYPE

8. The Central Coast Water Board classifies the Landfill as a closed Class III non-hazardous solid waste landfill under Title 27 of the California Code of Regulations.

## LANDFILL DESCRIPTION AND HISTORY

9. The Landfill operators placed waste as area fill on native silty clay, sandy clay, and sandy soils, without a liner or leachate collection and removal system. The site covers approximately 40 acres with a Landfill footprint of approximately 25 acres.
10. Disposal operations began in December 1958, when the County leased the property from its owner, and subleased it to an operator for providing disposal services to local residents. The Landfill accepted waste until November 26, 1988 and closed with approximately 838,000 tons of waste in place. The County constructed a final cover for the Landfill in 1990, which the Central Coast Water Board approved in January 1991. The County installed additional surface drainage improvements at the site in 1991.

    In 1998, the County installed a landfill gas extraction system. The landfill gas system consists of 20 extraction wells, approximately 5,000 linear feet of gas piping, and a gas flare station located near the southwest corner of the property. The County also implemented a landfill final cover enhancement program in 1998 to minimize the potential for leachate formation and to minimize landfill gas production.

    In 2003, the County made additional upgrades to the landfill gas extraction system to enhance gas extraction. During this time, the County also completed additional enhancements to the final cover to promote better drainage and fill in areas where settlement had occurred.

11. The final cover consists of three distinct layers: a foundation layer, a barrier layer, and a vegetative layer. The foundation layer consists of two feet of soil over all areas of waste fill. A compacted one-foot thick clay material with a minimum permeability of $9 \times 10^{-8}$ centimeters per second (cm/sec) covers

the foundation layer. The County placed a one-foot layer of onsite soils over the barrier layer and hydroseeded to establish the final vegetative layer.

## GEOLOGY/HYDROGEOLOGY

12. **Setting** – The landfill is located in Los Osos valley. Los Osos valley is an elongate triangular feature that widens and discharges at Morro Bay. Bedrock hills border the Los Osos valley to the north and south. The previous Landfill operators initiated Landfill development within a relatively shallow, southwest-facing canyon that abuts Warden Creek on its southern border. The Los Osos Creek floodplain sits adjacent to and immediately south and west of the Landfill property.

13. **Topography** – The Landfill site slopes to the southwest with ground surface elevations ranging from 35 to 160 feet mean sea level. The Landfill slopes extend approximately 120 feet vertically to the northeast at a maximum gradient of approximately 3:1 (vertical:horizontal). North of the approximately 3.5-acre landfill deck area, the landfill slopes down to the north at a shallow gradient of about 13:1.

14. **Stratigraphy and Structure** – From bottom to top, the Landfill and adjacent properties overly 1) meta-volcanic rocks of the Cretaceous Franciscan Formation, 2) loosely consolidated, generally fine-grained sediments of the Pleistocene Paso Robles Formation, and 3) fine-grained alluvial deposits of Recent age.

    The Franciscan Formation crops out east and west of the Landfill and underlies the entire site. Geophysical surveys and exploratory borings indicate that the Franciscan Formation forms a shallow southwesterly dipping trough beneath the Landfill. The unconformable contact between the Franciscan Formation and the overlying Paso Robles Formation is approximately 100 feet below the ground surface at the northern end of the property and 50 feet or less at the southerly toe of the Landfill. Alluvial deposits overlie the Paso Robles Formation to depths of approximately 20 to 35 feet southwest of the Landfill

15. **Faulting** – No known Holocene faults underlie the Landfill.

16. **Hydrogeology** – The Landfill overlies the northeast margin of the Los Osos Valley Groundwater Basin. Groundwater within the Basin generally flows from east to west. Infiltration of rainwater, groundwater inflow along the basin margins, and seepage from Los Osos Creek are the largest sources of natural recharge to the Los Osos Valley Groundwater Basin.
17. **Rainfall** – The average rainfall at the Landfill ranges from approximately 15 to 21 inches per year.

18. **Floodplain** - The Landfill is not within the 100-year flood plain or any designated wetlands.

## GROUNDWATER, STORM WATER, AND SURFACE WATER

19. **Groundwater** – The Landfill is located within the Los Osos Hydrologic Unit. Groundwater occurs beneath the Landfill in clayey sandstone bedrock of the Paso Robles Formation and recent alluvial deposits overlying the Paso Robles Formation. The Franciscan Complex, which underlies the Paso Robles Formation, is non-water bearing. On the south side of Warden Creek, groundwater occurs in both the recent alluvial deposits and in the underlying Paso Robles Formation. The recent alluvial deposits thicken to the south toward the valley center and away from Warden Creek, while to the north they pinch out against the Paso Robles Formation beneath Warden Creek. The contact between the alluvial deposits and Paso Robles Formation is gradational and is not a barrier to groundwater flow. Groundwater beneath the Landfill generally flows south (toward Warden Creek). Shallow groundwater near Warden Creek periodically switches flow direction.

    Consultants divided the water-bearing sediments of the recent alluvium and Paso Robles Formation into a shallow zone and deep zone for water quality monitoring purposes. Consultants based the

division of the shallow zone and deep zone on the differences in hydraulic conductivity between the two zones. Consultants for the County have divided the shallow and deep zones based on the differences in hydraulic conductivity between the two zones. Groundwater in the alluvial deposits and the upper portion of the Paso Robles Formation represent the shallow zone and the gravelly sandstone at the base of the Paso Robles Formation is representative of the deep zone. The hydraulic conductivity of the alluvial deposits ranges from approximately $3 \times 10^{-5}$ to $1 \times 10^{-4}$ cm/sec and the hydraulic conductivity of the upper or shallow zone of the Paso Robles Formation is approximately $5 \times 10^{-4}$ cm/sec. The hydraulic conductivity of the deep zone of the Paso Robles Formation ranges from approximately $5 \times 10^{-4}$ to $3 \times 10^{-1}$ cm/sec.

Based on site-specific data, the County's consultants calculated a groundwater velocity of approximately 130 feet per year (ft/yr) in the deep zone of the Paso Robles Formation beneath the Landfill. The groundwater velocity in the alluvium is approximately 1.7 ft/yr (south of the Landfill) and approximately 10 ft/yr in the shallow Paso Robles Formation south of the Landfill.

20. **Groundwater Quality** – The County identified impacts to groundwater by volatile organic compounds (VOCs) at the Landfill in 1986. Groundwater monitoring results from 1986 to 1994 at the Landfill demonstrate that a VOC plume in groundwater exists. The groundwater VOC plume extends approximately 200 to 250 feet beyond the Landfill property to the southwest as shown in Attachment B.

    Chlorinated ethene compounds such as tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride (VC) are the most commonly detected VOCs in groundwater. A small fraction of the total VOC mass detected in groundwater also includes freon's and aromatic hydrocarbons. Groundwater samples collected from several wells near the toe of the Landfill have evidence of inorganic impacts. Groundwater samples collected from wells along the toe of the landfill that also have VOC impacts, contain elevated levels of nitrate and chloride. Elevated nitrate and chloride concentrations in wells at the toe of the Landfill indicate groundwater VOC impacts from landfill leachate. Similar chlorinated aliphatic VOCs are detected in landfill gas and groundwater, which suggests that landfill gas is the source of the VOC impacts in groundwater downgradient of the Landfill.
    Groundwater quality upgradient from the Landfill supports domestic and agricultural beneficial uses. The general water quality parameters reported for background well BW-1 in the First Semi-Annual 2006 Groundwater Monitoring Report are as follows:

| Parameter | Concentration | Unit |
|---|---|---|
| EC[1] | 510 | µmhos/cm[2] |
| pH | 6.3 | |
| TDS[3] | 310 | mg/L[4] |
| Chloride | 77 | mg/L[4] |
| Sulfate | 39 | mg/L |

[1] EC = electrical conductivity
[2] µmhos/cm = micromhos per centimeter
[3] TDS = total dissolved solids
[4] mg/L = milligrams per liter

21. **Storm Water** - Graded swales, corrugated-pipe downdrains, and a perimeter detention basin system collectively control storm water runon and runoff at the Landfill. The perimeter detention basin system includes three separate, interconnected unlined detention basins on the west side of the Landfill and one detention basin at the southeast corner of the Landfill. Storm water discharges to Warden Creek at the toe of the Landfill through detention basins that are equipped with over-spill flumes or pipes. Warden Creek discharges to Los Osos Creek that in turn discharges to Morro Bay (approximately two miles from the Landfill).

22. **Surface Water** - The Landfill is located adjacent to, and upslope from Warden Creek, a seasonally flowing creek, which joins Los Osos Creek half a mile downgradient of the Landfill. Several decades ago, farmers constructed Warden Creek to enhance local irrigation by re-routing Los Osos Creek to the south side of the Landfill property. Warden Creek drains alluvial groundwater along the northern portion of the floodplain (southern edge of the Landfill property) and can have a significant effect on local groundwater flow conditions. For example, during the rainy season, Warden Creek appears to recharge the alluvial deposits and groundwater flows to the south and west. However, in the summer months, Warden Creek acts as a drain and groundwater flow within the alluvial deposits is to the north and east.

23. **Surface Water Quality** - Trace to low levels of VOCs occur sporadically in surface water samples collected within Warden Creek. The County has not detected VOCs in surface water samples collected since 2003.

## MONITORING PROGRAMS

24. **Groundwater** - The Landfill's groundwater monitoring network contains 16 wells. Attachment C shows the locations of the monitoring wells. Two of these wells are hydraulically upgradient from the Landfill (BW-1) or upgradient from impacted groundwater (BW-2). The remaining 14 wells are in detection or corrective action monitoring. The County installed well MW-1 in the upper portion of the Franciscan Formation. Groundwater in MW-1 is typically dry and groundwater samples collected from this well have not had detections of VOCs. The County installed wells MW-2 through MW-9 to monitor the shallow water-bearing zone and the County installed wells MW-10 through MW-14 to monitor the deep water-bearing zone.

    Analytical data presented in the First Semi-Annual 2006 Groundwater Monitoring Report indicate that MW-2, MW-3, MW-5, MW-6, MW-10, and MW-12 contain VOCs. The County reported the following maximum VOC concentrations above their respective maximum contaminant level (MCL) in the following wells:

| Well | VOC | Max Conc.[1] | MCL[2] |
|---|---|---|---|
| MW-2 | Benzene | 2.1 | 1 |
| MW-10 | cis-1,2-DCE | 43 | 6 |
| MW-2 | PCE | 44 | 5 |
| MW-3 | TCE | 19 | 5 |
| MW-10 | VC | 3.9 | 0.5 |

[1] Maximum Concentrations in micrograms per liter
[2] Maximum Contaminant Level in micrograms per liter

25. **Surface Water** - Surface water monitoring stations are located at upstream station S-1, midstream station S-2, and downstream station S-3. Attachment C shows the location of the surface water sampling stations. The surface water samples collected during the First Semi-Annual 2006 sampling event contained no VOCs.

26. **Soil Gas** – Four soil gas monitoring probes (GP-1, GP-2A, GP-2B, and GP-3) and six gas extraction system monitoring ports (MP1 through MP6) are monitored at the Landfill. Attachment C shows the gas probe and gas extraction system monitoring ports locations. The County also monitors the landfill gas condensate.

## BASIN PLAN

1. The Central Coast Water Board adopted the Water Quality Control Plan, Central Coast Basin (Basin Plan), on September 8, 1994. The State Water Resources Control Board approved the Basin Plan on

November 17, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State Waters. This Order implements the water quality objectives stated in that Plan.

2. The Basin Plan identifies the following present and anticipated beneficial uses for surface water adjacent and downgradient of the Landfill:

   a. Municipal and domestic supply
   b. Wildlife habitat;
   c. Water contact recreation;
   d. Agricultural supply;
   e. Non-contact water recreation; and
   f. Groundwater recharge

3. Currently, groundwater use near the Landfill is agricultural and domestic water supply. Other than the groundwater monitoring wells at the Landfill, groundwater wells are more than 2000 feet from the Landfill property. The Basin Plan identifies the following present and anticipated beneficial uses of groundwater in the vicinity of the Landfill:

   a. Agricultural water supply
   b. Municipal and domestic water supply
   c. Industrial supply

## CALIFORNIA ENVIRONMENTAL QUALITY ACT

1. This Order contains prohibitions, discharge specifications, water quality protection standards, and provisions intended to protect the environment by mitigating or avoiding impacts from the Landfill on water quality. This Order is for an existing facility and therefore is exempt from provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, and et seq.) in accordance with Title 14, Chapter 3, Section 15301.

## GENERAL FINDINGS

1. Operation of the landfill became inactive prior to the promulgation of Title 27. As such, the Landfill final closure criteria referenced in Title 27 regulations, does not apply directly to this Landfill. This Order implements the applicable prescriptive standards and performance goals of Title 27.

2. The goal of post-closure maintenance is to assure that the Landfill continues to comply with Title 27 and 40CFR258 closure requirements until such time that the waste in the Landfill no longer constitutes a potential threat to water quality.

3. The California Integrated Waste Management regulates the Landfill with Solid Waste Facilities Permit No. 40-AA-0007.

4. The State Water Resources Control Board Water Quality Order No. 97-03-DWQ "National Pollutant Discharge Elimination System General Permit No. CAS000001 Waste Discharge Requirements for Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities" (General Permit) regulates storm water related issues at the Landfill.

5. In May 2004, the Discharger demonstrated availability of financial resources to conduct closure and post-closure maintenance activities.

6. On **February 9, 2007**, the Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to issue Waste Discharge Requirements for the Landfill. Water Board staff

provided the opportunity to review a copy of the proposed Order and submit written views and comments.

7. After considering all comments pertaining to this discharge during a public hearing on **May 11, 2007**, the Central Coast Water Board found this Order consistent with the above findings.

**IT IS HEREBY ORDERED** pursuant to authority in Section 13263 of the California Water Code, the Discharger, its agents, successors, and assigns in maintaining the closed Los Osos Class III Landfill, shall comply with the following:

## A. COMPLIANCE WITH OTHER REGULATIONS AND ORDERS

1. Discharge of waste is a privilege, not a right, and authorization to discharge waste is conditioned upon the discharge complying with provisions of Division 7 of the California Water Code and with any more stringent limitations necessary to implement the Basin Plan, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should ensure conditions are met and mitigate any potential changes in water quality due to the Landfill waste.

2. Cleanup or Abatement (CAO) Order No. 89-90 issued March 27, 1989, addressed groundwater and surface water contamination originating from the Landfill. CAO Order No. 89-90 required the Discharger to characterize the nature and extent of groundwater and surface water impacts, and develop and implement an appropriate remedial response. In response to CAO No. 89-90, the County installed a series of groundwater monitoring wells between 1989 and 1994 to define the nature and extent of the landfill release.

   The Central Coast Water Board replaced and updated CAO Order No. 89-90 in 1995 with CAO Order No. 95-66. CAO Order No. 95-66 requires the Discharger to clean up contaminated groundwater downgradient of the Landfill. In response, the County installed a landfill gas extraction system in 1998 to minimize landfill gas and VOC impacts to groundwater. The County also made enhancements to the Landfill cap to minimize the potential for leachate formation and to minimize landfill gas production.

   On December 29, 2005, Central Coast Water Board staff informed the County of their successful delineation of VOCs in groundwater downgradient of the Landfill. However, based on the available information, Central Coast Water Board staff determined that additional corrective action measures are required to cleanup VOC contamination downgradient of the Landfill.

   The County submitted an engineering feasibility study in November 2006 that proposes enhancement of the ongoing corrective action program and to cleanup VOC impacts to groundwater using enhanced bioremediation technologies.

3. Discharge of waste, closure, post-closure maintenance and long-term monitoring shall comply with all applicable requirements contained in the California Code of Regulations Title 27, Division 2 Solid Waste (Title 27) and 40 CFR Parts 257 and 258 Solid Waste Facility Disposal Criteria (40CFR258). If any applicable regulatory requirements overlap or conflict in any manner, the most water quality protective requirement shall govern in all cases, unless specifically stated otherwise in this Order, or as directed by the Executive Officer.

4. This Landfill is no longer subject to this Central Coast Water Board's Order No. 93-84 "Waste Discharge Requirements Amendment for All MSW Landfills in the Central Coast Region" (Order No. 93-84).

5. The Discharger shall monitor potential releases from the Landfill to surface water runoff by complying with all requirements contained in the "State Water Resources Control Board Water Quality Order No. 97-03-DWQ National Pollutant Discharge Elimination System General Permit No. CAS000001 Waste

Discharge Requirements for Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities" (General Permit).

## B. DISCHARGE PROHIBITIONS

1. This Order prohibits the discharge of wastes at the Landfill, except as provided in an Executive Officer approved Closure and Post-Closure Maintenance Plan for the Landfill.

2. Discharge of waste or leachate to ponded water or waters of the State, including groundwater, is prohibited.

## C. SPECIFICATIONS

1. The Discharger shall ensure the Landfill remains closed and maintain the Landfill in conformance with the Central Coast Water Board Executive Officer-approved closure plan, except where the plan conflicts with this Order. In the event of conflict, this Order shall govern in cases where it is more protective of water quality. The Executive Officer must approve any changes to the closure plan that may affect compliance with this Order.

2. All Landfill containment structures and drainage facilities shall be designed, constructed, and maintained to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, overtopping, and damage due to natural disasters (e.g., 100 years 24-hour precipitation, the maximum probable earthquake, and severe wind storms).

3. The Discharger must line drainage ditches crossing over the Landfill with material that provides an effective field permeability of $1 \times 10^{-6}$ cm/sec or less.

4. Throughout the post-closure maintenance period, the Discharger shall:

   a. Maintain the structural integrity and effectiveness of all containment structures, and maintain the final cover as necessary to correct the effects of settlement or other adverse factors.
   b. Maintain monitoring systems as specified in this Order.
   c. Prevent erosion and related damage of the final cover due to drainage.
   d. Protect and maintain surveyed monuments.

5. Rills in the final cover exceeding six inches in depth must be backfilled and compacted throughout the year.
6. The Discharger may use water collected in any storm water catchment basin in minimum amounts necessary for dust control, compaction, or irrigation of cover vegetation provided none of the water infiltrates past the root zones of vegetation or past a depth where effective evaporation can occur.

7. The Discharger must empty storage facilities associated with precipitation and drainage control systems immediately following each storm or otherwise manage to maintain the design capacity of the system.

8. Discharge of waste shall not cause the release of pollutants, contaminants, or waste constituents in a manner, which could cause a condition of pollution or contamination to occur.

9. Discharge of waste shall not create nuisance, as defined by California Water Code Section 13050(m).

10. The Discharger shall prevent formation of a habitat for carriers of pathogenic microorganisms.

11. The Discharger shall remove and relocate all wastes discharged in violation of this Order.

12. The Compliance Period, pursuant to Title 27 Section 20380(d)(1) and Section 20410, is a minimum of thirty years or until waste discharged at the Landfill no longer poses a threat to water quality.

## D. WATER QUALITY PROTECTION STANDARDS

1. The discharge of waste shall not cause a statistically significant difference in water quality over background concentrations for proposed Concentration Limits for each Constituent of Concern or Monitoring Parameter (per MRP Order No. R3-2007-0023) at the Point of Compliance. The Point of Compliance is the edge of the waste and extends vertically down through the uppermost water-bearing zone. The Discharger must maintain the Concentration Limits for as long as the waste poses a threat to water quality. Discharge of waste shall not adversely impact the quality of State waters.
2. Discharge of waste shall not cause concentrations of chemicals and radionuclides in groundwater downgradient of the Landfill to exceed the State Department of Health Services latest recommended Drinking Water Action Levels or MCL of the California Code of Regulations Title 22, Division 4, Chapter 15, Article 5.5.

3. Discharge of waste shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Central Coast Water Board or the State Water Resources Control Board.

4. Discharge of waste shall neither cause nor contribute to any surface water impacts, including, but not limited to:
   a. Floating, suspended, or macroscopic particulate matter or foam.
   b. Increases in bottom deposits or aquatic growth.
   c. An adverse change in temperature, turbidity, or apparent color beyond natural background levels.
   d. The creation or contribution of visible, floating, suspended, or oil or other products of petroleum origin.
   e. The introduction or increase in concentration of toxic or other pollutants/contaminants resulting in unreasonable impairment of State waters' beneficial uses.

5. Constituents of Concern and monitoring parameters for groundwater and landfill gas are listed in MRP Order No. R3-2007-0023. Monitoring points and background monitoring points shall be those specified in MRP Order No. R3-2007-0023.

## E. PROVISIONS

1. Order No. 94-64 adopted by this Water Board on July 8, 1994 is hereby rescinded.

2. The Discharger is responsible for waste containment, monitoring, and correcting any problems resulting from the discharge of waste for as long as the waste poses a threat to water quality.

3. The Discharger shall comply with MRP Order No. R3-2007-0023, as specified by the Executive Officer.

4. By **October 1 of each year**, the Discharger shall implement all necessary runoff diversion and erosion prevention measures. The Discharger shall also complete all necessary construction, maintenance, or repairs of precipitation and drainage control facilities by October 1 of each year.

5. By **October 1, of each year**, the Discharger shall plant vegetation (as necessary) and maintained over all slopes within the entire Landfill area to prevent erosion. The Discharger shall select vegetation that requires minimum irrigation and maintenance and shall have a rooting depth not in excess of the vegetative soil layer thickness. Upon Executive Officer approval, the Discharger may utilize non-hazardous sludge as a soil amendment to promote vegetation. Soil amendments and fertilizers (including wastewater sludge) used to establish vegetation shall not exceed the vegetation's agronomic rates (i.e., annual nutrient needs), unless approved by the Executive Officer.

6. Should additional data become available through monitoring or investigation that indicates compliance with this Order is not adequately protective of water quality, the Central Coast Water Board will review and revise this Order as appropriate.

7. If the Discharger or the Central Coast Water Board determines, pursuant to Title 27, Section 20420, that there is evidence of a release from any portion of the Landfill, the Discharger shall immediately implement the procedures outlined in Title 27 Sections 20380, 20385, 20430 and MRP Order No. R3-2007-0023.

8. The Central Coast Water Board shall be allowed, at any time and without prior notification:
   a. Entry upon the Landfill area or where records are kept under the conditions of this Order and MRP Order No. R3-2007-0023.
   b. Access to copy any records that must be kept under the conditions of this Order and MRP Order No. R3-2007-0023.
   c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order and MRP Order No. R3-2007-0023.
   d. To photograph, sample, and monitor for showing compliance with this Order.

9. The Discharger shall take all reasonable steps to minimize or correct adverse impacts on the environment resulting from noncompliance with this Order.

10. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
    a. Violation of any term or condition contained in this Order.
    b. Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts.
    c. A change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge.

11. By **May 12, 2008**, the Owner shall record a notation on the deed to the Landfill property, or some other instrument that a potential purchaser normally examines during title search. A copy of the notation will be included in the Landfill record and the Owner will submit a copy of the recorded notation to the Central Coast Water Board Executive Officer. The notation must in perpetuity notify and potential purchaser of the property that:
    a. The land has been used as a landfill,
    b. The land use is restricted by the approved post-closure maintenance plan, pursuant to Title 27, Section 21170. The deed notation must include all information required by Section 21170,
    c. Pursuant to Title 27, Section 21090, should the Discharger default in post-closure care, liability shifts to the new owner/operator.

## F. REPORTING

1. Any person signing a report makes the following certification, whether its expressed or implied: "I certify under penalty of perjury that I have personally examined and am familiar with the information submitted in this document and all attachments and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

2. Except for data determined to be confidential under Section 13267 (b)(2) of the California Water Code, all reports prepared in accordance with this Order shall be available for public inspection at the Central Coast Water Board office.

3. The Discharger shall submit reports in advance of any planned changes in the permitted Landfill or any activity that could potentially result in noncompliance. Advance submittal should reflect relative need for Central Coast Water Board review and concurrence.

4. By **November 1 of each year**, the Discharger shall submit a Wet Weather Preparedness Report (WWPR). The WWPR shall describe compliance with Provisions E.4 and E.5, above. The report shall also detail preparedness actions taken to ensure discharges to surface or groundwater do not occur during the impending rainy season, and ensure compliance with all other relevant Title 27 and 40CFR258 criteria.

5. The Discharger shall notify the Central Coast Water Board with a written request of any proposed change in ownership or responsibility for maintaining the Landfill in accordance with Title 27, Section 21710 (c)(1). The written request shall be given at least 90-days prior to the effective date of change in ownership or responsibility and shall:

   a. Be accompanied by an amended Report of Waste Discharge and any technical documents to demonstrate continued compliance with these Waste Discharge Requirements.
   b. Contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Central Coast Water Board.
   c. Contain a statement indicating that the new owner or operator assumes full responsibility for compliance with this Order.

6. The Executive Officer may approve or disapprove the request for change in ownership or responsibility in writing. In the event of a change in ownership of this Landfill, the Discharger shall notify the succeeding owner or operator, in writing, of the existence of this Order. The Discharger shall send a copy of that notification to the Executive Officer.

7. The Discharger shall furnish, within a reasonable time, any information the Executive Officer may request to determine compliance with this Order or to determine whether cause exists for modifying or terminating this Order.

8. The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the State Department of Water Resources and with concurrence of the Executive Officer regarding the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this Order or with MRP Order No. R3-2007-0023, as required by Sections 13750.5 through 13755 and Section 13267 of the California Water Code.

9. Should the Discharger discover that it failed to submit any relevant facts or that it submitted incorrect information, it shall promptly submit the missing or corrected information.

10. All reports shall be signed as follows:
    a. By either a division manager responsible for Landfill compliance or ranking elected official.
    b. Their "duly authorized representative."
    c. A California Registered Civil Engineer or Certified Engineering Geologist must sign engineering reports.

11. The Discharger shall notify the Executive Officer, within 24 hours by telephone or electronic mail and within 14 days in writing, of:
    a. Any noncompliance potentially or actually endangering health or the environment.
    b. Any flooding, equipment failure, slope failure, or other change in Landfill conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
    c. Leachate seep(s) occurring on or in proximity to the Landfill

d. Violation of a Discharge Prohibition.

12. Reports of compliance or noncompliance with, or any progress reports on, the Discharger shall submit final requirements contained in any compliance schedule within 14-days following each scheduled date. If reporting noncompliance, the report shall include a description of:
    a. The reason for noncompliance.
    b. A description of the noncompliance.
    c. Schedule of tasks necessary to achieve compliance.
    d. An estimated date for achieving full compliance.

13. The Discharger shall promptly correct any noncompliance, which threatens the Landfill's containment integrity. Correction schedules are subject to the approval of the Executive Officer, except when delays will threaten the environment and/or the Landfill's integrity (i.e., emergency corrective measures). The Discharger shall report corrections initiated prior to Executive Officer approval in the above-described report.

14. By **January 31 of every year**, the Discharger shall submit a Compliance Report addressing compliance with all terms of this Order. The report can be included in the Landfill's Annual Report to the Executive Officer.

15. The Discharger shall maintain a financial assurance instrument to cover the estimated costs for initiating and completing corrective action of all known or reasonably foreseeable releases from the Landfill until the end of the post-closure maintenance period. The Discharger shall submit a report every five years that either validates the financial assurance instrument's ongoing viability or proposes and substantiates any needed changes. The report is due **January 15, 2009** and every five years from this date thereafter.

16. By **May 11, 2012**, the Discharger must submit a Report of Waste Discharge (hereafter "ROWD") pursuant to CCR Title 27 Section 21710, to the Executive Officer. The ROWD is to be submitted in the form of a Joint Technical Document (hereafter "JTD"), in accordance with Title 27 Section 21585 et al, and meet the following criteria:

    a. Contain information on waste characteristics, geologic and climatologic characteristics of the Unit and the surrounding region, installed features, precipitation and drainage controls, and closure and post-closure maintenance plans, in accordance with CCR Title 27 Section 21740, Section 21750, Section 21760, and Section 21769.
    b. Include a completed State Water Board JTD Index, in accordance with CCR Title 27 Section 21585(b),
    c. Discuss whether, in the Discharger's opinion, there is any portion of this Order that is incorrect, obsolete, or otherwise in need of revision.
    d. Include any other technical documents needed to demonstrate continued compliance with this Order and all pertinent State and Federal requirements.
    e. Include detailed information regarding regulatory considerations, operating provisions, environmental monitoring, and closure and post-closure maintenance plans.

## G. ENFORCEMENT

1. The Discharger must comply with all conditions of this Order. Noncompliance violates state law and is grounds for enforcement action or modification of the Order.

2. Any person failing or refusing to furnish technical or monitoring program reports as required in this Order under subdivision (b) of Section 13267 of the California Water Code, or falsifying any information provided therein, is guilty of a misdemeanor.

3. The Discharger and any person who violates Waste Discharge Requirements and/or who intentionally or negligently discharges waste or causes or permits waste to be discharged into surface waters or groundwater of the state may be liable for civil and/or criminal remedies, as appropriate, pursuant to Sections 13350, 13385, and 13387 of the California Water Code.

4. Provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.

5. This Order does not authorize commission of any act causing injury to the property of another, does not convey any property rights of any sort, does not remove liability under federal, state, or local laws, and does not guarantee a capacity right.

6. All technical and monitoring reports submitted pursuant to this Order are requested pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order, attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer may subject the Discharger to enforcement action pursuant to Section 13268 of the California Water Code.

7. The Discharger must comply with all conditions of these Waste Discharge Requirements. Violations may result in enforcement actions, including Water Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Central Coast Water Board. [California Water Code Sections 13261, 13267, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350].

The Discharger shall comply with the following submittal and implementation schedule for all tasks and/or reports required by this Order

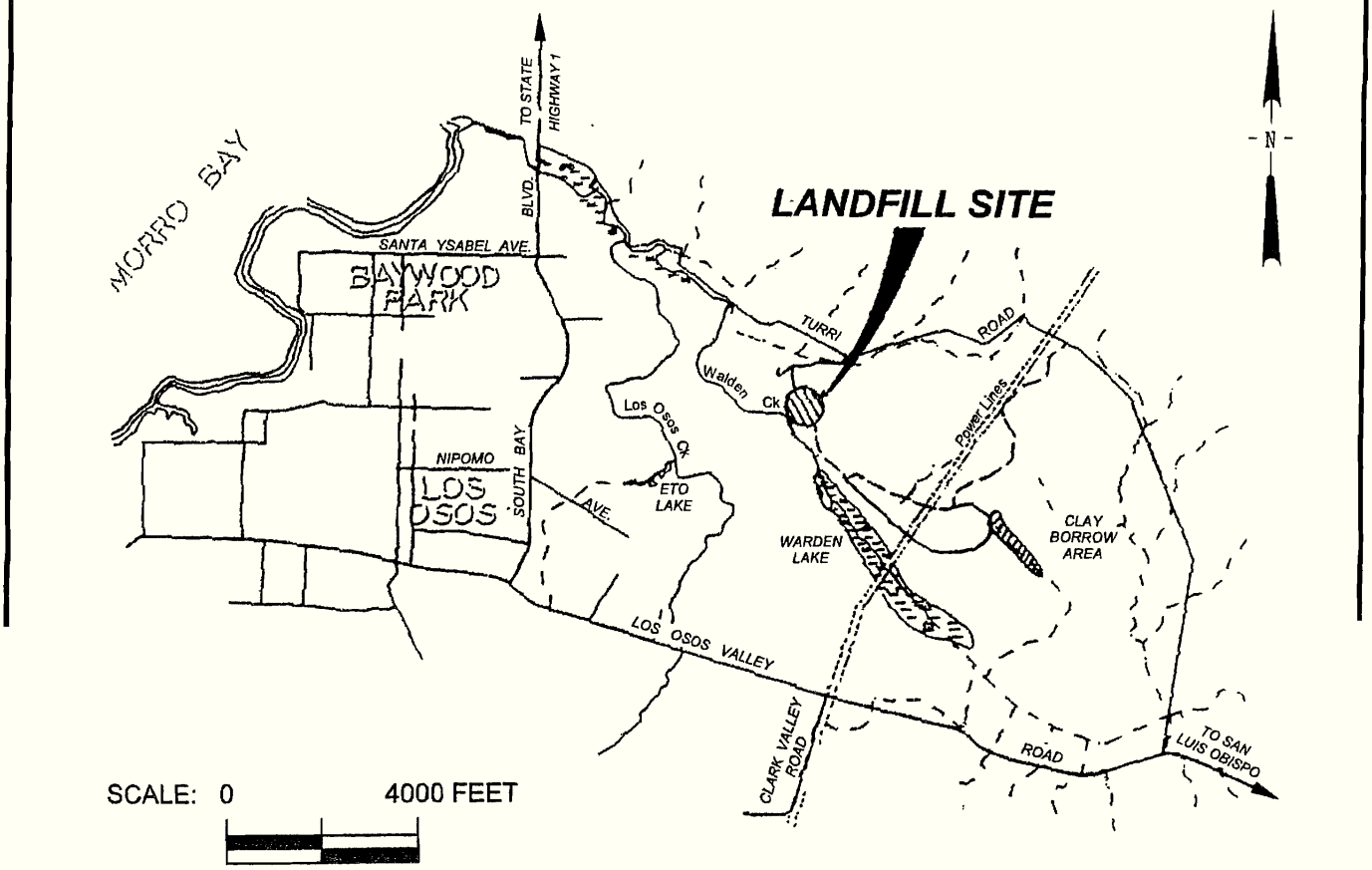
**REPORT AND IMPLEMENTATION DATE SUMMARY**

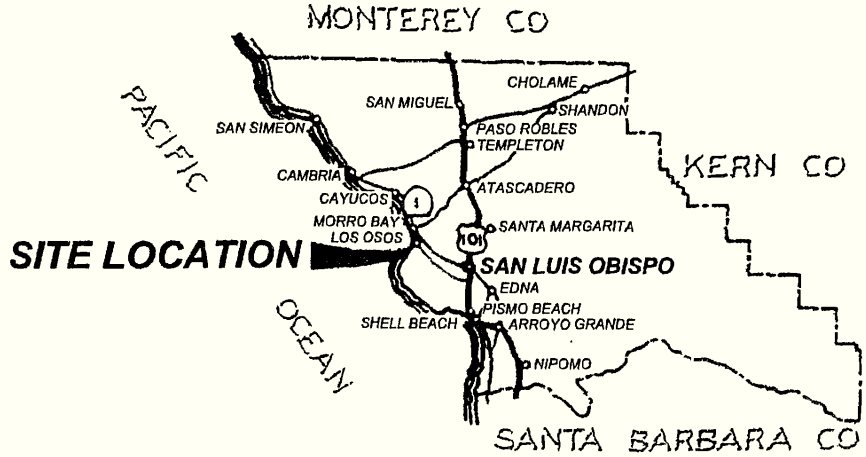
| TASK | IMPLEMENTATION DATE |
|---|---|
| Runoff diversion and erosion prevention [Provision No. E.4] | October 1, of each year |
| Vegetation placement over entire Landfill area [Provision No. E.5] | October 1, of each year |
| **REPORT** | **DUE DATE** |
| Deed Notation [Provision E.11] | May 12, 2008 |
| Wet Weather Preparedness Report [Reporting No. F.4] | November 1, of each year |
| Compliance Report [Reporting No. F.14] | January 31, of each year |
| Financial Assurance [Reporting No. F.15] | January 15, 2009, and every five years thereafter |
| ROWD/JTD [Reporting No. F.16] | May 11, 2012 |

**I, Roger W. Briggs, Executive Officer**, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on May 11, 2007.

**Executive Officer**

S:\Land Disposal\Land Disposal Facilities\PERMITTED SITES\Los Osos\ORDERS\2007 WDR & MRP\WDR R3-2007-0023 Final.doc



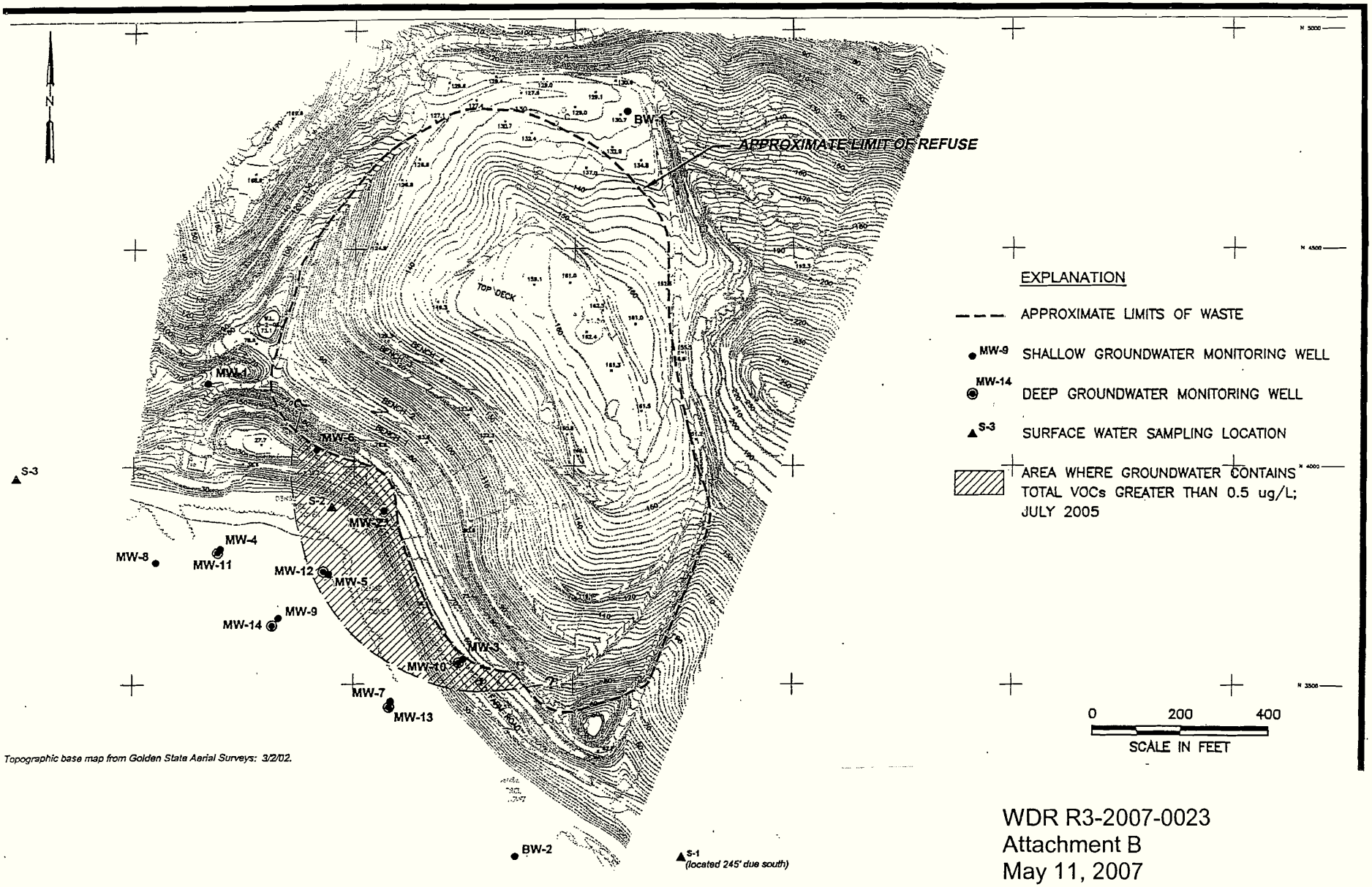




Golder Associates

WDR R3-2007-0023
Attachment A
May 11, 2007



G:\ 053-7865\FIGURES\SITE LOCATION.DSF 7/25/05

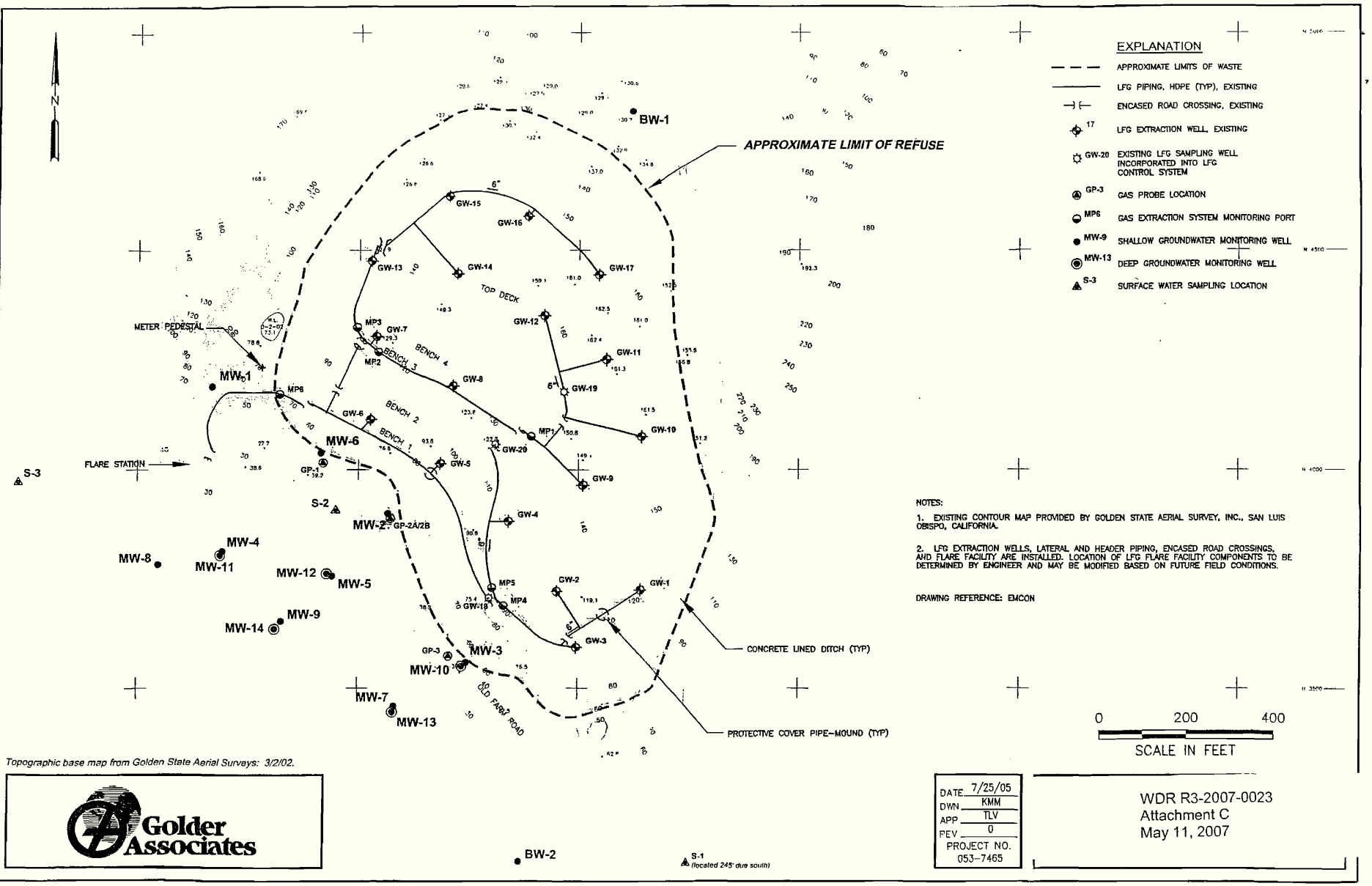



*Topographic base map from Golden State Aerial Surveys: 3/2/02.*

WDR R3-2007-0023
Attachment B
May 11, 2007

SOURCE: GOLDER ASSOCIATES, 2005

| GeoLogic Associates<br>Geologists, Hydrogeologists, and Engineers | | |
|---|---|---|
| DRAWN BY: VL | DATE: AUGUST 2006 | JOB NO. 2006-108 |


EXPLANATION
APPROXIMATE LIMITS OF WASTE
LFG PIPING, HDPE (TYP), EXISTING
ENCASED ROAD CROSSING, EXISTING
17 LFG EXTRACTION WELL, EXISTING
GW-20 EXISTING LFG SAMPLING WELL INCORPORATED INTO LFG CONTROL SYSTEM
GP-3 GAS PROBE LOCATION
MP6 GAS EXTRACTION SYSTEM MONITORING PORT
MW-9 SHALLOW GROUNDWATER MONITORING WELL
MW-13 DEEP GROUNDWATER MONITORING WELL
S-3 SURFACE WATER SAMPLING LOCATION
APPROXIMATE LIMIT OF REFUSE
CONCRETE LINED DITCH (TYP)
PROTECTIVE COVER PIPE-MOUND (TYP)
TOP DECK
BENCH 4
BENCH 3
BENCH 2
BENCH 1
OLD FARM ROAD
METER PEDESTAL
FLARE STATION
BW-1
BW-2
S-1 (located 245' due south)
NOTES:
1. EXISTING CONTOUR MAP PROVIDED BY GOLDEN STATE AERIAL SURVEY, INC., SAN LUIS OBISPO, CALIFORNIA.
2. LFG EXTRACTION WELLS, LATERAL AND HEADER PIPING, ENCASED ROAD CROSSINGS, AND FLARE FACILITY ARE INSTALLED. LOCATION OF LFG FLARE FACILITY COMPONENTS TO BE DETERMINED BY ENGINEER AND MAY BE MODIFIED BASED ON FUTURE FIELD CONDITIONS.
DRAWING REFERENCE: EMCON
0 200 400
SCALE IN FEET
Topographic base map from Golden State Aerial Surveys: 3/2/02.
Golder Associates
DATE 7/25/05
DWN KMM
APP TLV
REV 0
PROJECT NO. 053-7465
WDR R3-2007-0023
Attachment C
May 11, 2007
Dimscale: 1 Utscale: 1 Paltscale: 1=1
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