STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. R4-2010-xxxx
CORRECTIVE ACTION PROGRAM AND POSTCLOSURE MAINTENANCE
WASTE DISCHARGE REQUIREMENTS
FOR
WASTE MANAGEMENT INCORPORATED
(Bradley Landfill and Recycling Center)
(File No. 78-027)

TENTATIVE

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

BACKGROUND

1. Waste Management Inc. (Discharger) owns and operates the Bradley Landfill and Recycling Center (Landfill), a Class III municipal solid wastes (MSW) disposal facility at 9081 Tujunga Avenue, Sun Valley, California. The Landfill is approximately 3.5 miles southeast of the intersection of the Golden State (I-5) and Ronald Reagan (118) freeways (Figure 1).

2. The Landfill was operations from 1959 to April 14, 2007. Final closure activities at the Landfill are scheduled to be completed in the Fall of 2010. During its active life, approximately 34.8 million tons of municipal solid waste (MSW) was disposed of at the Landfill.

3. The Landfill is part of a 209-acre site (Site) of which 171 acres are permitted for landfilling. The Landfill consists of three contiguous disposal areas within a large, pre-existing, gravel pit that are commonly referred to as the Bradley East (45 acres), Bradley West, and Bradley West Extension (collectively 126 acres) (Figure 2):

   a. Bradley East was operated as a MSW (Class III) landfill from 1959 to 1980, and has no natural or synthetic liners. Since 1980, only inert materials which consist of natural clean soils, rubble and rocks were deposited in Bradley East. Clean soils were used as daily and/or final cover on Bradley East.

   b. Bradley West began MSW disposal operations as a class III landfill in 1980. This area is equipped with a one-foot thick compacted clay base overlain by a six-inch compacted clay liner, and a leachate collection and removal system (LCRS).

   c. Bradley West Extension was developed in stages as a series of cells referred to as "sumps" (Sump C, Sump D, Sump E, and Sump F).

      i. Sumps C and D were constructed in 1986, and MSW disposal began in March 1987. Sumps C and D are equipped with a single 12-inch compacted clay liner with a permeability of 1 X 10^{-6} centimeters per second (cm/s) or less, and LCRS.

      ii. Sumps E and F are equipped with a composite liner and LCRS, Sump E was constructed in 1990 with a composite base liner that consists of a 3.5-foot thick compacted clay liner base with a hydraulic conductivity of 1 x 10^{-6} cm/s, a 2-foot thick compacted clay

liner with a hydraulic conductivity of 1 x 10^{-7} cm/s, and an 80 mil high density polyethylene (HDPE) geomembrane. The Sump E sidewall liner consists of a minimum 5.5-foot thick compacted clay liner having a hydraulic conductivity of 1 x 10^{-7} cm/s, an 80 mil HDPE geomembrane, a layer of cushioning geotextile material, and a 2-foot thick protective soil layer. The Sump E area is equipped with a pan lysimeter to detect leakage through the composite lined LCRS sump. Sump F was constructed in 1993 is equipped with a composite base liner that consists of a 2.5-foot thick compacted clay liner base having a hydraulic conductivity of 1 x 10^{-6} cm/s, a 3-foot thick compacted clay liner having a hydraulic conductivity of 1 x 10^{-7} cm/s, and an 80 mil HDPE geomembrane.

4. In accordance with the California Water Code (CWC), this Regional Board adopted Resolution No. 58-89 on April 23, 1959, prescribing waste discharge requirements (WDRs) for a portion of Bradley East. On August 13, 1959, the Regional Board adopted Order No. 59-82 amending the previous WDRs to add additional acreage. On September 25, 1978, this Regional Board adopted Order No. 78-108 for the operation of Bradley West. These WDRs were revised on January 9, 1986, to include a Monitoring and Reporting Program (M&RP) (Order No. 86-011, No. CI-6434). The WDRs were revised on November 25, 1987 with Order No. 87-153, which was subsequently amended on January 28, 1991 (Order No. 91-017) and November 6, 1993 (Order No. 93-080). On May 13, 1994, this Regional Board adopted Order No. 94-059 that includes the current WDRs that the Landfill is operating under.

5. Ancillary structures located on the Site include a scale house, a permanent office and maintenance shop facility, a truck wash facility, a materials recovery facility, a wood waste recycling facility, and a landfill gas recovery facility and flare station.

6. The final cover of the Bradley Landfill consists of an evapotranspiration (ET) cover at least five-feet thick underlain by a minimum of a one-foot thick foundation layer or interim cover soil. This final cover system is an engineered alternative to the prescriptive final cover system required under title 27 of California Code of Regulations (27 CCR), section 21090.

7. To demonstrate that the ET cover affords equivalent protection against water quality impairment as that provided by a 27 CCR prescriptive final cover system, the Discharger installed three pan lysimeters at Bradley West, and one moisture meter in at Bradley East, that will be used to monitor the effectiveness of the ET final soil cover during the postclosure maintenance period (Figure 3).

8. Post closure land use of the Landfill is un-irrigated open space. In addition, the Facility will also be used for green waste processing, electricity production using landfill gas, a municipal solid waste transfer station, and offices, which are all located off of the landfill footprint.

9. In accordance with 27 CCR, section 21090, the Discharger submitted a *Final Postclosure Maintenance Plan* (FPCMP) to the Regional Board in April 2005. Subsequently, the Discharger submitted amendments to the FPCMP to the Regional Board on February 1, 2007, November 2, 2007, December 21, 2007, and January 15, 2008. The FPCMP includes existing environmental control and monitoring systems, final closure design, final closure construction methods, construction quality assurance, post-closure maintenance, and closure and post-closure maintenance cost estimates.

10. CWC section 13263 (e) provides that all WDRs shall be reviewed periodically and, upon such review, may be revised by the Regional Board to comply with changing state or federal laws, regulations, policies, or guidelines. This Order revises the WDRs for the Landfill to include requirements for post-closure maintenance and a Corrective Action Program (CAP) for the Landfill.

11. This Order includes the attached Definition of Terms and Acronyms (Attachment A), which the Regional Water Board Executive Officer may revise as need arises.

REGULATORY REQUIREMENTS

12. Although the State Water Resources Control Board (State Board) and Regional Boards are the state agencies designated to protect water quality that may be impacted by solid waste disposal activities, the California Department of Resources Recycling and Recovery (CalRecycle, formerly California Integrated Waste Management Board, or CIWMB) regulates all other aspects of solid waste disposal in the state. California Code of Regulations, title 27 (27 CCR), promulgated on July 18, 1997, clarifies the roles and responsibilities of the State Board/Regional Boards and CalRecycle in regulating MSW disposal sites.

13. The United States Environmental Protection Agency (USEPA) under title 40 of the Code of Federal Regulations (CFR), Parts 257 and 258 (Subtitle D) revised existing regulations for MSW disposal facilities in response to the 1984 Hazardous and Solid Waste Amendments of the Resources Conservation and Recovery Act and added new detailed requirements addressing the issues of location restrictions, facility operation and design criteria, groundwater monitoring and corrective action, closure and postclosure maintenance, and financial assurance. The USEPA delegated the responsibility for implementing these regulations to states with a fully approved landfill regulatory program. As the responsible agencies for an approved state with respect to the water quality protection aspects of the federal MSW regulations, the State Board adopted Resolution No. 93-62 on June 17, 1993, and this Regional Board adopted Order No. 93-062 on September 27, 1993, to implement the federal Subtitle D regulatory requirements. Regional Board Order No. 93-062 revised existing WDRs of all active Class III landfills in this Region, including the Landfill.

14. Pursuant to section 402 (p) of the Clean Water Act and 40 CFR Parts 122, 123, and 124, the State Board adopted a National Pollutant Discharge Elimination System (NPDES) General Permit to regulate stormwater discharges associated with industrial activities in California (State Board Order 97-03-DWQ). Stormwater runoff from the Bradley Landfill is currently regulated under the general NPDES permit (WDID No. 4 19I005561, enrolled since April 7, 1992). The Discharger is implementing a Storm Water Pollution Prevention Plan (SWPPP) at the Landfill as required by the general NPDES permit.

15. On June 13, 1994, this Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan (including its subsequent amendments) designates beneficial uses and water quality objectives for the area of the Landfill. The requirements in this Order, as they are met, are in conformance with the goals of the Basin Plan.

ENVIRONMENTAL SETTING

16. The Bradley Landfill is located within the Hansen subarea of the San Fernando Valley Basin near the northeastern tip of the Verdugo Mountains. The local topography around the Landfill is generally flat with an approximate slope from north to south of one percent. The geology in the Hanson subarea, from youngest to oldest, consists of Holocene Alluvium, Pleistocene Alluvium, Miocene sedimentary formations, and Pre-Cretaceous crystalline and metamorphic rocks. The surficial geology in the area around the landfill are alluvial sediments from the Verdugo Mountains, to the east, and the San Gabriel Mountains, to the north, and are comprised of uncemented sand, gravel, and boulders.

17. The Hansen subarea is bounded by the Hansen dam to the north, the Verdugo Mountains to the east and southeast, and by the Verdugo Fault to the west and south west. Groundwater occurs within Pleistocene alluvium with a hydraulic conductivity up to 900 gallons per day per square foot (gpd/ft^2), or 4.2 X 10^{-2} cm/s from aquifer tests. The historical groundwater flow direction is northwest to southeast. Groundwater levels in this area are strongly influenced by the Hansen Dam Spreading Grounds about 3,000 feet to the northwest, but are also influenced by precipitation, underflow from Hanson Dam, pumping from local industrial wells, and outflow from the Main San Fernando Basin. Groundwater beneath the Site has a typical annual variation of 10 to 70 feet.

18. There are three known prominent faults located in the vicinity of the Landfill:

    a. The Tujunga segment of the San Fernando Fault, located 2.5 miles north of the Site, is of Holocene age, and is an active fault. The latest major activity on this fault was the Sylmar earthquake that occurred on February 9, 1971 and registered a moment magnitude of 6.6. No observable damage associated with the earthquake occurred at Bradley Landfill.

    b. The Verdugo Fault is parallel to San Fernando Road, located about 100 feet inside the southwest boundary of the Site, and is of probable Pleistocene age. This fault is potentially active and has been assigned a maximum moment magnitude of 6.7 by the California Division of Mines and Geology. The Verdugo Fault acts as a barrier to the southwesterly movement of groundwater. The elevation of groundwater west of the fault is typically about 100 feet lower than it is east of the fault.

    c. The inactive La Tuna Canyon Fault is located about one mile to the east of the Site.

19. In accordance with the Basin Plan, the beneficial uses of groundwater in the Hansen subarea are: municipal and domestic supply, agricultural supply, industrial service, and process supply. No drinking water intakes exist within one mile of the Landfill. However, there are potable water supply wells and irrigation water wells in the area that must be protected.

20. The Site is not within a 100-year floodplain. In addition, Hansen Dam, located one-half mile north of the Site, provides 100-year washout protection.

21. A variety of land uses exist within one mile of the Landfill consisting of commercial, industrial, residential, and recreational. Most of the land uses are industrial and include both active and inactive landfills, auto salvage yards, manufacturing, and active gravel mining.

TENTATIVE

ENVIRONMENTAL PROTECTION AND MONITORING SYSTEMS

22. Interim groundwater monitoring at the Landfill started on February 1, 1986. The current groundwater monitoring network at the Landfill includes two off-Site background wells (4914G and 4915B), five on-Site background wells (4915A, 4915C, 4915D, 4915E, and 4915M), seven on-Site downgradient wells (4916D, 4916F, 4916G, 4916H, 4916J, 4916L, and 4926C), and one well, west of the Verdugo Fault, that monitors a separate groundwater system (Figure 3).

23. Since 1992, the Discharger has been monitoring the leachate from the Landfill annually from LCRS sumps for constituents listed in Appendix II of 40 CFR Part 258, and re-testing for newly discovered ones, in order to create a list of constituents of concern (COC) can be released from the Landfill. By monitoring for detectable COCs, and any foreseeable breakdown products, the Discharger will be monitoring for all Appendix II constituents that could be released from the Landfill. This is the manner in which this Order meets the requirements of 40 CFR section 258.55(b).

24. 27 CCR section 20415(d) requires an unsaturated zone groundwater monitoring program at Class III Landfills. The intent of an unsaturated zone monitoring program is to monitor unsaturated soils/bedrock between the waste management unit and groundwater to potentially provide an early indication of groundwater quality degradation. One lysimeter (Lysimeter F) was installed in the Bradley West Extension (Figure 3) as required under Order No. 93-062. However, existing monitoring data indicates that the lysimeter is ineffective in supplementing water quality monitoring because they consistently fail to yield an adequate volume of water to allow analysis. Through adoption of this Order, this Regional Board grants an exemption to further unsaturated zone monitoring, pursuant to 27 CCR 20415(d)(5).

25. Landfill liquids generated at the Landfill, including leachate and gas condensate, are currently pumped to a holding tank prior to discharge to the sanitary sewer system.

26. The Discharger has installed and operates a landfill gas recovery system at the Landfill. Landfill gas is collected under vacuum through a system of vertical extraction wells and horizontal trenches. The recovered landfill gas is used at an On-Site Gas-to-Energy Facility with flares used as backup capacity.

27. The Discharger currently uses potable water for irrigation and dust control purposes at the Landfill. The Discharger intends to use recycled water for these purposes at a later date, which they will obtain from the Los Angeles Department of Water and Power (LADWP). The use of recycled water at the Landfill is in conformance with the goals of the Basin Plan and State statutes and regulations pertaining to the use of recycled water in California that can be found in the CWC, CCR, and the health and safety code (HSC). State policy promotes the use of recycled water to the maximum extent in order to supplement existing surface and groundwater supplies to help meet water needs (CWC sections 13510 to 13512).

KNOWN CONTAMINATION AND CORRECTIVE ACTION PROGRAM

28. The Discharger notified the Regional Board on June 12, 1991, that low levels of volatile organic compounds (VOCs) were detected in two down gradient monitoring wells (4916D and 4916F). In response to the detection of VOCs, the Discharger submitted an Engineering Feasibility Study

(Study) to the Regional Board on December 27, 1991. The Study contained an Evaluation Monitoring Program (EMP) pursuant to 27 CCR section 20425. The EMP was initiated on June 18, 1991.

29. In March, 1994, the Discharger submitted a *Evaluation Monitoring Report* for the Bradley Landfill to the Regional Board. The report concluded that VOCs entered groundwater at the Site as a consequence of the contact of groundwater with landfill gas. The presence of VOCs in groundwater was determined to be from the older sections of the Landfill, which are unlined or partially lined.

30. VOCs detected in groundwater at the impacted monitoring wells include 1,1-Dichloroethane, 1,1,1-Trichloroethane, 1,1-Dichloroethene, 1,2-Dichloroethane, 1,2-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichloropropane, 2-Butanone, Acetone, Benzene, Bromodichloromethane, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, cis-1,2-Dichloroethene, Ethylbenzene, Dichlorofluoromethane, Methylene chloride, Tetrachloroethylene (PCE), Toluene, Trichloroethylene (TCE), trans-1,2-Dichloroethene, and Vinyl chloride. TCE and vinyl chloride are the constituents most frequently detected. The remaining VOCs, when present, were generally at low concentrations, at approximately the method detection limit of each constituent.

31. In an *Amended Report of Waste Discharge for Corrective Action Program* dated June 1, 1994, the Discharger proposed a Corrective Action Program (CAP) pursuant to 27 CCR section 20430. The CAP proposed enhanced gas extraction to prevent the contact between landfill gas and groundwater that had caused the contamination of groundwater by VOCs. Additional gas extraction wells were installed and an additional flair for the removal of extracted gas was added. The proposed CAP has been implemented at the Landfill on an interim basis since 2001.

32. The most recent monitoring results (First quarter of 2010) indicate VOC concentrations in groundwater monitoring wells at the Landfill are all below the method detection limits. The VOC concentrations in downgradient monitoring wells have been significantly reduced from 1991 levels when VOCs were first detected. This Order requires the Discharger to continue the existing corrective action measures at the Landfill, and properly manage the landfill gas collection system to prevent the contact of landfill gas with groundwater.

33. This Order is in conformance with state and federal requirements for a CAP, for known and any future releases, because it implements all applicable 27 CCR CAP requirements and all additional federal requirements under 40 CFR sections 258.56, 258.57 and 258.58, including section 258.58(a)(1)(i-iii), which requires the Discharger to implement an assessment monitoring program pursuant to 40 CFR section 258.55 in conjunction with the CAP.

34. This Order places the entire Landfill into a CAP for implementing corrective measures of the known releases meeting applicable state and federal requirements. This approach eliminates needless complexity associated with applying concurrent programs (i.e., running unaffected portions of the Landfill under a detection monitoring program (DMP) pursuant to 27 CCR section 20420 and the portions affected by the release under either an EMP or a CAP, or both). The Regional Board chooses to implement this approach by documenting and responding to the compliance status of each monitoring parameter (Mpar) individually at each compliance well separately (i.e., the Discharger will track the compliance status of each such "well/MPar pair" separately).

T E N T A T I V E

35. Under this Order, at any given time, each well/MPar pair will be in one of two compliance status conditions. Prior to the MPar's exhibiting a measurably significant exceedance at a given well, that well/MPar pair will be in "detection mode" and monitoring will involve statistical or non-statistical data analysis designed to detect a Landfill-related increase at that well for that MPar. Once a well/MPar pair exhibits a measurably significant increase (i.e., an initial exceedance of its Concentration Limit, verified by retesting), it will change to "tracking mode" and monitoring will involve concentration-versus-time plotting to document changes in the release. Once in tracking mode, a well/MPar pair can return to detection mode only upon inception of a proof period to demonstrate the successful completion of corrective action.

36. This Order minimizes the occurrence of false-positive indications in two ways:

    a. It includes a non-statistical data analysis method, meeting 27 CCR section 20415(e)(8-9) requirements, that collectively analyzes all the Mpars, at a given well, whose background data exceeds its respective method detection limit no more than 10% of the time; and

    b. All statistical and non-statistical data analysis methods used on well/MPars in detection mode data analyses under this Order include a pass-1-of-3 retesting approach (explained in the attached M&RP) imposed pursuant to 27 CCR 20080(a)(1) as a more-effective replacement for the usual discrete retest of 20415(e)(8)(E).

37. To assure compliance with the requirements and considerations under 40 CFR section 258.55 through section 258.58 and 27 CCR section 20425 in the simplest way possible, this Order:

    a. requires statistical or non-statistical data analysis, at any given compliance well, only for those MPars that are in detection mode at that well;

    b. requires concentration-versus-time plotting, at any given compliance well, for all MPars that are in tracking mode at that well; and

    c. uses annual leachate sampling for all non-COC Appendix II constituents, to keep the COC list updated to include all Appendix II constituents that could be released from the Landfill. New constituents so identified automatically become a part of the COC list and an MPar for all compliance wells.

38. Given that detection mode testing can be compromised by the arrival of a COC at any background well either as a result of the release (e.g., through advective flow, in the unsaturated zone, of gas-phase VOCs in landfill gas) or through the arrival of such a constituent from an upgradient source, this Order implements a simple means for identifying such anomalies which require the Discharger to investigate their cause, and initiates appropriate adjustments to the monitoring program.

39. Given that the VOCs in the federal monitoring parameter list, Appendix I to 40 CFR part 258 (Appendix I), are all Appendix II constituents, leachate sampling from the LCRSs for Sumps A through Sumps F, in the Bradley West and Bradley West Extension areas, also serves as a basis for narrowing the scope of VOCs which the Discharger must monitor in these areas to include only those Appendix I constituents that have ever been detected in leachate, at trace level or above, and verified by retest. This is the manner in which this Order implements 40 CFR section 258.54(a)(1).

40. 27 CCR sections 20380(b) and 22222 require WDRs for MSW landfills to contain a provision which requires the discharger to obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the landfill (27 CCR 22220 et seq.). The Discharger has provided the Regional Board with a corrective action plan and corrective action cost estimate for all known or reasonable foreseeable releases from the Landfill, under Corrective Action Bond No. 851021.

41. In accordance with 27 CCR section 20430(h), this Order requires corrective actions measures (CAM) effectiveness reports to be submitted to the Regional Board semi-annually. The CAM effectiveness report must include, at a minimum, a comprehensive discussion of the compliance record and the result of any corrective actions taken, or planned, which may be needed to bring the Discharger into full compliance with the WDRs.

ADMINISTRATIVE

42. In accordance with regulations adopted by the State Board in September 2004 regarding electronic submittal of information (ESI), the Discharger has been electronically submitting monitoring reports required under the WDRs to the State Board GeoTracker system since 2005. The Discharger is subject to any future revision to ESI requirements.

43. Revision of the WDRs for the Landfill constitutes an existing project as defined in section 15301, chapter 3, title 14 of the CCR and is therefore exempt from the provisions of the CEQA (Public Resources Code section 21000 et seq.).

The Regional Board has notified interested agencies and all known interested parties of its intent to issue requirements for postclosure maintenance, and CAP for the Landfill.

The Regional Board in a public meeting heard and considered all comments pertaining to postclosure maintenance, and CAP for the Landfill.

Any person aggrieved by this action of the Regional Board may petition the State Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Board must *receive* the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: *http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml* or will be provided upon request.

IT IS HEREBY ORDERED that the Discharger shall comply with the following at the Landfill:

A. SPECIFICATIONS

1. The Landfill is closed. No MSW or any other wastes may be received at the Landfill for the purpose of disposal.

2. Inert soil, concrete, and asphalt materials that are used for the construction or repair of the final cover, access roads, or other facilities at the Site may be imported to the Landfill,

provided that the source, volume, and usage of such imported materials are reported in the corresponding semi-annual monitoring report .

3. Green waste products generated at the Landfill may be applied at the Landfill for erosion control, vegetative enhancement, or other final cover maintenance activities.

4. The Discharger shall remove any unacceptable wastes that arrive at the Site in violation of the requirements in this Order and discharge such removed waste to a legal point of disposal.

B. PROHIBITIONS

1. Discharge of waste as a result of inadequate postclosure maintenance practices, and that have not been specifically described to the Regional Board and for which valid WDRs are not in force, are prohibited.

2. The waste that the Landfill received throughout its operating life shall not:

   a. cause the occurrence of coliform or pathogenic organisms in waters pumped from a groundwater basin;

   b. cause the occurrence of objectionable tastes or odors in waters pumped from a groundwater basin;

   c. cause waters pumped from a groundwater basin to foam;

   d. cause the presence of toxic materials in waters pumped from a groundwater basin;

   e. cause the pH of waters pumped from a groundwater basin to fall below 6.0, or rise above 9.0;

   f. cause the Regional Board's objectives for the groundwaters or surface waters as established in the Basin Plan to be exceeded; or

   g. cause pollution, contamination, or nuisance, as defined in CWC section 13050, or adversely affect beneficial uses of groundwaters or surface waters as established in the Basin Plan.

3. Odors, vectors, and other nuisances of waste origin that migrate beyond the limits of the Landfill are prohibited.

4. The discharge of waste to surface drainage courses or to usable groundwater is prohibited.

5. The Discharger shall conduct site operations such that there is no release from the Landfill that causes any Basin Plan objective to be exceeded at any location under, or in the vicinity of, the Landfill. Moreover, no COC shall exhibit a measurably significant increase over its respective Concentration Limit (background data set) at any well, as indicated by an approved statistical or nonstatistical data analysis method (including that method's retesting approach).

6. All federal, state, and county sanitary health codes, rules, regulations, and ordinances pertinent to the disposal of wastes on land shall be complied with in the operation and maintenance of the Landfill.

C. REQUIREMENTS FOR POSTCLOSURE MAINTENANCE

1. This Order approves the addendums to the FPCMP that was submitted to the Regional Board by the Discharger on January 15, 2008. Postclosure maintenance of the Landfill shall be conducted in accordance with the revised FPCMP and its amendments as approved by the Executive Officer.

2. The Landfill's post-closure maintenance period shall continue until the Regional Board determines that remaining wastes in all waste management units at the Landfill will not threaten water quality.

3. All containment structures and erosion and drainage control systems at the Landfill shall be designed and constructed under direct supervision of a California-registered civil engineer or certified engineering geologist, and shall be certified by the individual as meeting prescriptive standards and/or performance goals of 27 CCR.

4. The Landfill shall have containment structures that are capable of preventing degradation of the waters of the state. Construction standards for containment structures shall comply with 27 CCR requirements. Design specifications, including any alternative design proposal meeting prescriptive standards and/or performance goals of 27 CCR, are subject to the Executive Officer's review and approval prior to construction of any containment structure.

5. The Discharger shall perform an annual testing per 27 CCR section 20340(d) of any LCRS to demonstrate their operating efficiency during the postclosure maintenance period of the landfill.

6. Surface drainage from the Landfill is subject to State Board Order 97-03-DWQ (general industrial stormwater permit). The Regional Board may adopt a site specific NPDES permit for the discharge of stormwater runoff if the Regional Board determines that such a permit is necessary. No surface water or stormwater shall leave the Landfill except as permitted by a NPDES permit issued in accordance with the federal Clean Water Act (CWA) and the CCR. The Discharger shall maintain and modify, as necessary, the SWPPP developed for the Landfill.

7. Drainage controls, structures, and facilities shall be designed to divert any precipitation or tributary runoff and prevent ponding and percolation of water at the Landfill in compliance with sections 20365 and 21090(b)(1) of 27 CCR. When necessary, temporary structures shall be installed as needed to comply with this requirement.

8. The Landfill shall be graded and maintained to promote runoff of precipitation and to prevent ponding of liquids and surface water. Erosion or washout of refuse or cover materials by surface flow shall be controlled to prevent off-site migration.

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9. The migration of gases from the Landfill shall be controlled as necessary to prevent water pollution, nuisance, or health hazards. The discharge of wastes or waste by-products (i.e., leachate or gas condensate) to off-site surface drainage courses or to groundwater is prohibited.

10. Gas condensate gathered from the gas monitoring and collection system at the Landfill shall not be returned to the Landfill unless approved by the Executive Officer. If approved, the condensate shall be discharged to a composite-lined portion of the Landfill. Any proposed modifications or expansions to this system shall be designed to allow the collection, testing and treatment, or disposal by approved methods, of all gas condensate produced at the Landfill.

11. The Discharger shall intercept and remove any liquid detected in all LCRSs at the Landfill to a legal point of disposal and leachate shall not be returned to the Landfill unless it meets the requirements of this Order for on-site reuse as described in Section F below, which implements the leachate handling requirements contained in 27 CCR sections 20340(g) and 21090(a)(5), and 40 CFR section 258.28. Any leachate determined to be hazardous shall be transported by a licensed hazardous waste hauler to an approved treatment or disposal facility.

12. The Discharger shall maintain permanent survey monuments at the Landfill throughout the postclosure maintenance period. Benchmarks shall be established and maintained in sufficient numbers to enable reference to key elevations and to permit control of critical grading and compaction operations.

13. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, and adequate laboratory and process controls including appropriate quality assurance procedures.

14. The Discharger shall conduct periodic inspections at the Landfill, at least once per month, to ensure the compliance of this Order. The inspections shall cover the final cover system, the water quality monitoring system, drainage system, landscape and irrigations systems, leachate collection and removal systems, landfill gas collection system, and any other systems at the Site that may have an impact to water quality. Such inspections shall be documented and reported to the Regional Board in accordance with the M&RP.

15. The Discharger shall report any noncompliance or any incident at the Landfill that are in violation of this Order. Any such information shall be provided verbally to responsible Regional Board staff within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission to the Executive Officer shall be provided within 14 days of the time that the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance. The Executive Officer, or an

authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

D. REQUIREMENTS FOR GROUNDWATER MONITORING

1. The Discharger shall implement the attached M&RP (Attachment T) which is incorporated herein by reference and revisions thereto in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Landfill or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste at the Landfill and to continue the CAP for areas of the Landfill where releases to groundwater have occurred. The M&RP is designed to satisfy both federal and state regulatory monitoring requirements.

2. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer, proposing modifications to the M&RP. The Discharger shall implement any changes to the revised M&RP approved by the Executive Officer upon receipt of a signed copy of the revised M&RP.

3. The Discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with CWC section 13267. Failure or refusal to furnish these reports or falsifying any information provided therein renders the Discharger guilty of a misdemeanor and subject to the penalties stated in CWC section 13268. Monitoring reports shall be submitted in accordance with the provisions contained in the attached M&RP No. CI-6434, as directed by the Executive Officer.

4. The effectiveness of all groundwater monitoring wells, groundwater monitoring devices, and leachate and gas collection systems shall be maintained throughout the Landfill's postclosure maintenance period in accordance with acceptable industry standards. The Discharger shall maintain a monitoring well preventative maintenance program (MWPMP) approved by the Executive Officer. Elements of the program should include a minimum of periodic visual inspections of well integrity, pump removal and inspection, and appropriate inspection frequencies. If a well or piezometer is found to be inoperative, the Regional Board and other interested agencies shall be so informed in writing within fourteen days after such discovery, and this notification shall contain a time schedule for returning the well or piezometer to operating order. Changes to the existing program shall be submitted for Executive Officer approval at least 30 days prior to implementing the change(s). Within 60 days of the adoption of this Order, the Discharger shall submit an updated MWPMP to the Executive Officer for approval.

5. If a groundwater monitoring well or piezometer is proposed to replace an inoperative well or piezometer identified in the MWPMP, the Discharger shall not delay replacement while waiting for Executive Officer approval. However, a technical report describing the location and construction details shall be submitted to the Executive Officer within 30 days.

6. The Discharger shall provide for proper handling and disposal of water purged from groundwater monitoring wells at the Landfill during sampling. Water purged from a groundwater monitoring well shall not be returned to that well (or any other Landfill well).

TENTATIVE

7. Any abandoned groundwater monitoring wells or bore holes under the control of the Discharger, and situated within the Landfill boundaries, must be located and properly modified or sealed to prevent mixing of any waters between adjacent water-bearing zones. A notice of intent to decommission a well must be filed with the appropriate regulatory agencies prior to decommissioning. Procedures used to decommission these wells, or to modify wells still in use, must conform to the specifications of the local health department or other appropriate agencies.

8. For any monitoring wells installed at the Landfill in the future, the Discharger shall submit technical reports for approval by the Executive Officer prior to installation. These technical reports shall be submitted at least 60 days prior to the anticipated date of installation of the wells. These reports shall be accompanied by:

   a. Maps and cross sections showing the locations of the monitoring points; and

   b. Drawings and data showing construction details of the monitoring points. These data shall include:

      iii. casing and test hole diameter;
      iv. casing materials;
      v. depth of each hole;
      vi. the means by which the size and position of perforations shall be determined, or verified, if in the field;
      vii. method of joining sections of casing;
      viii. nature of filter materials;
      ix. depth and composition of soils; and
      x. method and length of time of well development.

   Within 30 days of the installation of a groundwater monitoring well at the Landfill, the Discharger shall submit an as-built report to the Regional Board and the California Department of Water Resources (DWR), including delineation of the stratigraphy encountered and all water bearing zone(s) encountered.

9. As of the effective date of this Order, the compliance monitoring wells at the Landfill shall consist of those wells listed in Table T-1 of the M&RP. All monitoring wells shall be monitored pursuant to this Order and as directed by the Executive Officer through future revisions of the M&RP.

10. The Discharger shall install any additional groundwater, soil pore liquid, soil pore gas, or leachate monitoring devices necessary to comply with the M&RP, as adopted or as revised by the Executive Officer.

11. As of the effective date of this Order, the Landfill's constituents of concern (COCs) are those listed in Table T-2 in the M&RP. Any non-COC Appendix II constituent exceeding its respective practical quantitation limit in both an initial leachate scan and retest automatically becomes a new COC.

T E N T A T I V E

12. In accordance with 27 CCR section 20390, the water quality protection standard (WQPS) for the Landfill is established as the natural background groundwater quality at the Site.

13. In accordance with 27 CCR section 20390(a), the WQPS shall apply during the closure period, the post closure maintenance period, and during any compliance period for the Landfill.

14. The point of compliance (POC) for groundwater monitoring for the Landfill is a vertical surface located at the hydraulically downgradient limit of the Landfill that extends through the uppermost aquifer underlying the Landfill pursuant to 27 CCR section 20405(a).

E. REQUIREMENTS FOR A CORRECTIVE ACTION PROGRAM (CAP)

1. The Discharger shall continue the Corrective Action Program (CAP) at the Landfill that currently includes the proper managing of the landfill gas collection system to prevent the contact of landfill gas with groundwater.

2. In each semi-annual report submitted under the M&RP, the Discharger shall summarize all corrective action taken at the Landfill during the reporting period and the corrective action that will be taken for following monitoring periods. The Executive Officer may require additional corrective action that is deemed necessary.

3. If the Discharger or Executive Officer determines that the CAP either fails to contain the release or fails to provide effective remediation for the portion of the aquifer already affected by the release, the Discharger shall, pursuant to 27 CCR sections 20430(i) or (j) and 40 CFR section 258.58(b), submit an amended ROWD to make appropriate changes to the CAP within 90 days of the determination.

F. REQUIREMENTS FOR ON-SITE USE OF WATER

1. The Discharger is not currently reusing wastewater at the Landfill. Requirements in this section are to be followed in the event that the Discharger chooses to reuse wastewater at the Landfill. The Discharger shall notify Regional Board staff, in writing, at least 60 days prior to any on-site use of wastewater.

2. No water shall be routinely applied at the Landfill except for irrigation, dust control, or other non-emergency uses approved by the Executive Officer. Any water used at the Landfill, except for potable water, recycled water permitted under Water Reclamation Requirements (WRRs) adopted by the Regional Board, and any other water allowed by the Executive Officer, shall be subject to these WDRs.

3. Wastewater produced at the Landfill shall not be subject to these WDRs, pursuant to paragraph F.2 above, if it meets applicable requirements of the CWC, CCR, and HSC for recycled water. The Discharger shall demonstrate to the Executive Officer compliance with this provision before each Landfill wastewater source is used as an equivalent recycled water as defined above.

4. Requirements for the use of recycled water at the Landfill are also controlled by WRRs for the LADWP facility that will provide the recycled water, which is the source of recycled water provided the Landfill chooses to use it. General blanket Order No. 97-072, contains recycled water requirements and provisions in accordance with California Code of Regulations Title 22 Water Recycling Criteria. The use of Title 22 tertiary treated recycled water at the Landfill includes, but is not limited to landscape irrigation and dust control.

5. Mixing any Landfill wastewater source with recycled or potable water to achieve equivalence to recycled water standards, as described in paragraph F.4 above, is prohibited if deemed unsuitable by the Executive Officer.

6. During periods of precipitation, when the use of irrigation or dust control is not necessary for the purpose specified in this Order, all wastewater generated at the Landfill shall be stored, discharged to the sanitary sewer, or hauled to a legal point of disposal.

7. Washing of paved Landfill roads during rainy periods shall only occur when muddy roads create a safety concern. Washing of equipment or vehicles on the Landfill shall be confined to controlled areas where the wastewater is collected for proper disposal.

8. Overflow, runoff, or ponding caused by the over-application or improper management of on-site use of water are prohibited.

9. All uses of potable water, recycled, or wastewater shall be within the boundaries of the Landfill property. During an emergency, this water may be used for fire fighting on the Landfill or on undeveloped areas off and adjacent to the Landfill.

10. Wastewater used at the Landfill shall not percolate into the disposal areas or native soil, or enter stormwater collection systems, except as specifically permitted by this Order.

G. REQUIREMENTS FOR REPORTING SCHEDULED ACTIVITIES

1. The Discharger shall notify Regional Board staff at least 30 days prior to any maintenance activities, for approval by the Executive Officer, which could alter existing surface drainage patterns or change existing slope configurations. These activities may include, but not be limited to, significant grading activities, the importation of fill material, the design and installation of soil borings, groundwater monitoring wells and other devices for Landfill investigation purposes.

2. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

3. If the Discharger becomes aware that it failed to submit any relevant facts in any report to the Regional Board, it shall submit such facts or information within fourteen days of its discovery of the omission.

4. The Regional Board shall be notified of any incident at the Landfill that are in violation of this Order and that may endanger the environment, by telephone within 24 hours from the time the Discharger becomes aware of the circumstances, and in writing within 14 days of the time that the Discharger becomes aware of the circumstances. The written notification shall fully describe the incident including what occurred, when it occurred, the duration of the incident, when correction occurred (or when correction will occur if it is a continuing incident), and the steps taken or planned to reduce, eliminate, and/or prevent recurrence of the incident. All instances of noncompliance with this Order shall also be reported to the Regional Board in the same manner as stated above, and shall also be included in the next scheduled monitoring report.

5. The Discharger shall notify the Executive Officer, in writing, at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage between the Discharger and a new owner or operator of the Landfill. Any transfer agreement between the Discharger and a new owner or operator shall include an acknowledgement that the Discharger is liable for violations up to the transfer date and that the new owner or operator is liable from the transfer date on. The agreement shall include an acknowledgement that the new owner or operator accepts responsibility for compliance with this Order.

6. The Discharger shall notify the Regional Board in writing within 14 days, if fluid is detected in a previously dry LCRS.

7. The Discharger shall notify the Regional Board of changes in information submitted in the revised FPCMP within 30 days of the change.

8. All applications, reports, or information submitted to the Executive Officer shall be signed and certified as follows:

   a. The applications, reports, or information shall be signed as follows:

      i. For a corporation - by a principal executive officer of at least the level of vice-president.
      ii. For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
      iii. For a municipality, state, federal or other public agency - by either a principal executive officer or ranking elected official.
      iv. For a military installation - by the base commander or the person with overall responsibility for environmental matters in that branch of the military.

   b. All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph [a] of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:

      i. The authorization is made in writing by a person described in paragraph [a] of this provision;
      ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and

iii. The written authorization is submitted to the Executive Officer.

c. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

H. GENERAL PROVISIONS

1. This Order does not authorize violation of any federal, state, or local laws or regulations.

2. The Discharger has a continuing responsibility for correcting any problems which may arise in the future as a result of waste discharged at the Landfill, and from gases and leachate that may be caused by infiltration or precipitation of drainage waters into the waste disposal units, or by infiltration of water applied to this property during subsequent use of the land or other purposes.

3. The Discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

   a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;

   b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Order;

   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

   d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the CWC, any substances or parameters at this location.

4. The Discharger shall maintain a copy of this Order at the Landfill so as to be available at all times to Landfill operating personnel.

5. These requirements do not exempt the Discharger from compliance with any other current or future law that may be applicable. They do not legalize this waste management facility, and they leave unaffected any further restraints on the disposal of wastes at this waste management facility that may be contained in other statutes.

6. This Order includes the attached *"Standard Provisions Applicable to Waste Discharge Requirements"*, adopted November 7, 1990 (Attachment W) which is incorporated herein by reference.

7. The requirements adopted herein neither authorize the commission of any act causing injury to the property of another, nor protect the Discharger from liabilities under federal, state, or local laws.

8. The filing of a request by the Discharger for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any condition, provision, or requirements of this Order.

9. This Order does not convey any property rights of any sort, or any exclusive privilege.

10. The Discharger is the responsible party for these WDRs, including any M&RP or other body of requirements incorporated by reference therein. The Discharger shall comply with all conditions of these WDRs. Violations may result in enforcement actions, including regional board orders, or court orders, requiring corrective action or imposing civil monetary liability, or in modification or revocation of these WDRs by the Regional Board.

11. The Discharger shall within 48 hours of a significant earthquake event, provide an initial verbal assessment to the Regional Board of any earthquake damage at the Landfill. A detailed post-earthquake report describing any physical damages to the containment features, groundwater monitoring and/or leachate control facilities and a corrective action plan to be implemented at the Landfill shall be submitted to the Regional Board within thirty days of the earthquake event. A significant earthquake is herein defined as an earthquake event above Richter Magnitude 5.0 within a 100-kilometer radius of the property boundaries of the Landfill.

12. The Discharger shall immediately notify the Regional Board of any flooding, slope failure or other change in Landfill conditions that could impair the integrity of waste containment facilities or of precipitation and drainage control structures.

13. The Discharger shall submit to the Regional Board and to the CalRecycle evidence of financial assurance for postclosure maintenance, pursuant to 27 CCR, division 2, chapter 6. The postclosure maintenance period shall be at least 30 years. However, postclosure maintenance shall extend as long as wastes pose a threat to water quality.

14. The Discharger shall comply with all conditions of this Order and any additional conditions prescribed by the Regional Board in addenda thereto. Noncompliance with this Order constitutes a violation of the CWC and is grounds for:

    a. enforcement action;

    b. termination, revocation and reissuance, or modification of this Order; or

    c. denial of a ROWD in application for new or revised WDRs.

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15. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

16. This Order is not transferable to any person except after notice to the Executive Officer. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWC. The Discharger shall submit notice of any proposed transfer of this Order's responsibility and coverage as described under Provision No. G.5 of this Order.

17. In accordance with CWC section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to being superseded or modified. All discharges of waste into the waters of the state are privileges, not rights.

18. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

19. This Order becomes effective on the date of adoption by the Regional Board.

20. 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 failure to disclose all relevant facts;

    c. A change in any condition that required either a temporary or permanent reduction or elimination of the authorized waste discharge.

21. This Order in no way limits the authority of the Regional Board, as delineated in the CWC, to require additional investigations and cleanups pertinent to this project. This Order may be revised by the Regional Board as additional information from the project becomes available.

22. Failure to comply with the terms and conditions of this Order may result in imposition of civil liability against the Discharger by the Regional Board, either by the Regional Board or judicially by the Superior Court, in accordance with CWC section 13350 et. seq. and/or referral to the Attorney General of the State of California for such legal action as may be deemed appropriate.

I. RESCISSIONS

1. Except for violation enforcement purposes, Regional Board Order No. 94-059, adopted May 13, 1994, is hereby superseded.

2. Because requirements applying a federal assessment monitoring program and a federal corrective action program are incorporated into this Order, the Landfill is no longer subject to Regional Board Order No. 93-062 requirements.

I, Samuel Unger, Executive Officer, do certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on **November 4, 2010**.

_____
Samuel Unger, P.E.
Executive Officer

TENTATIVE

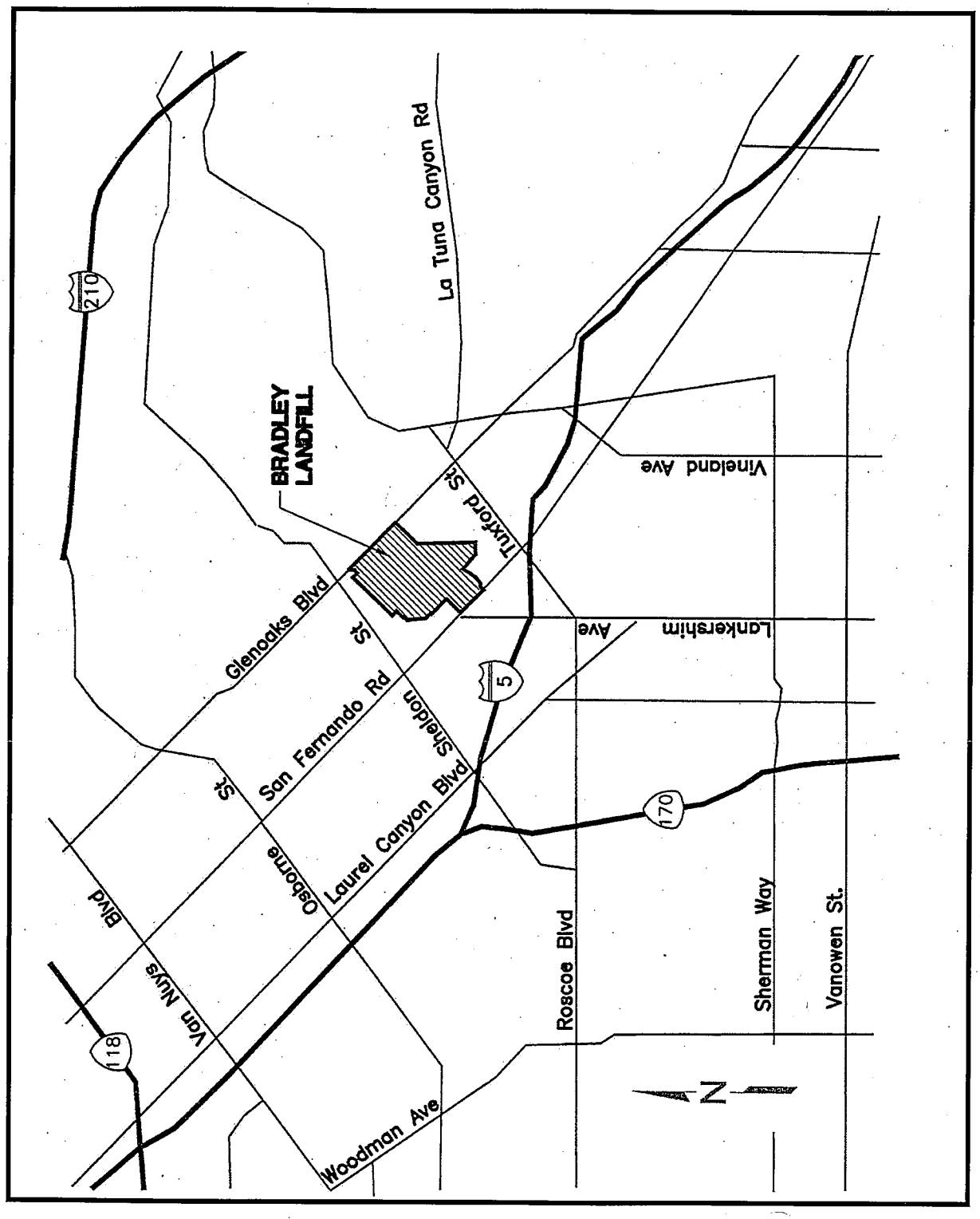

Figure 1. Location Map

TENTATIVE

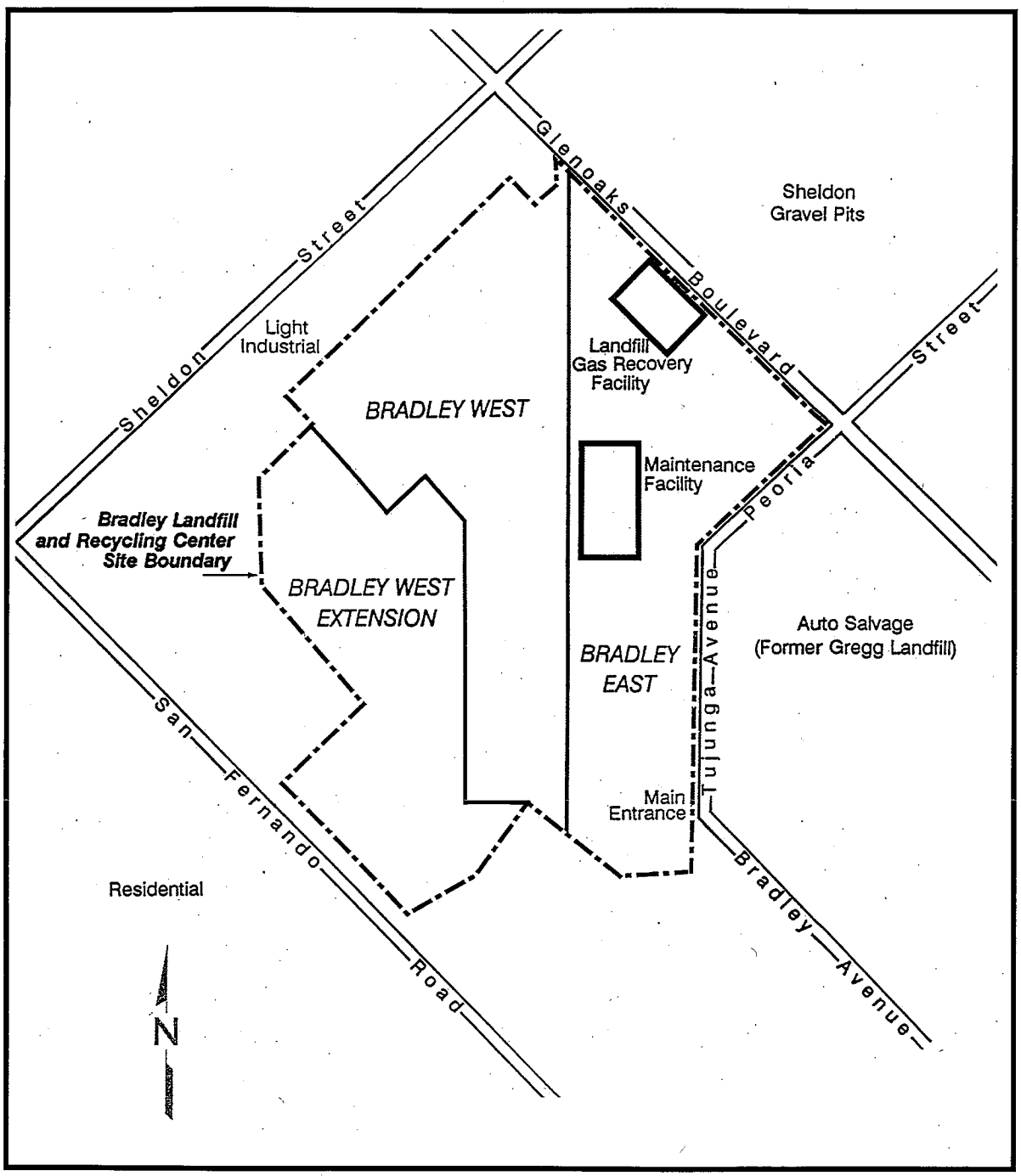

Figure 2. Landfill Cells

TENTATIVE

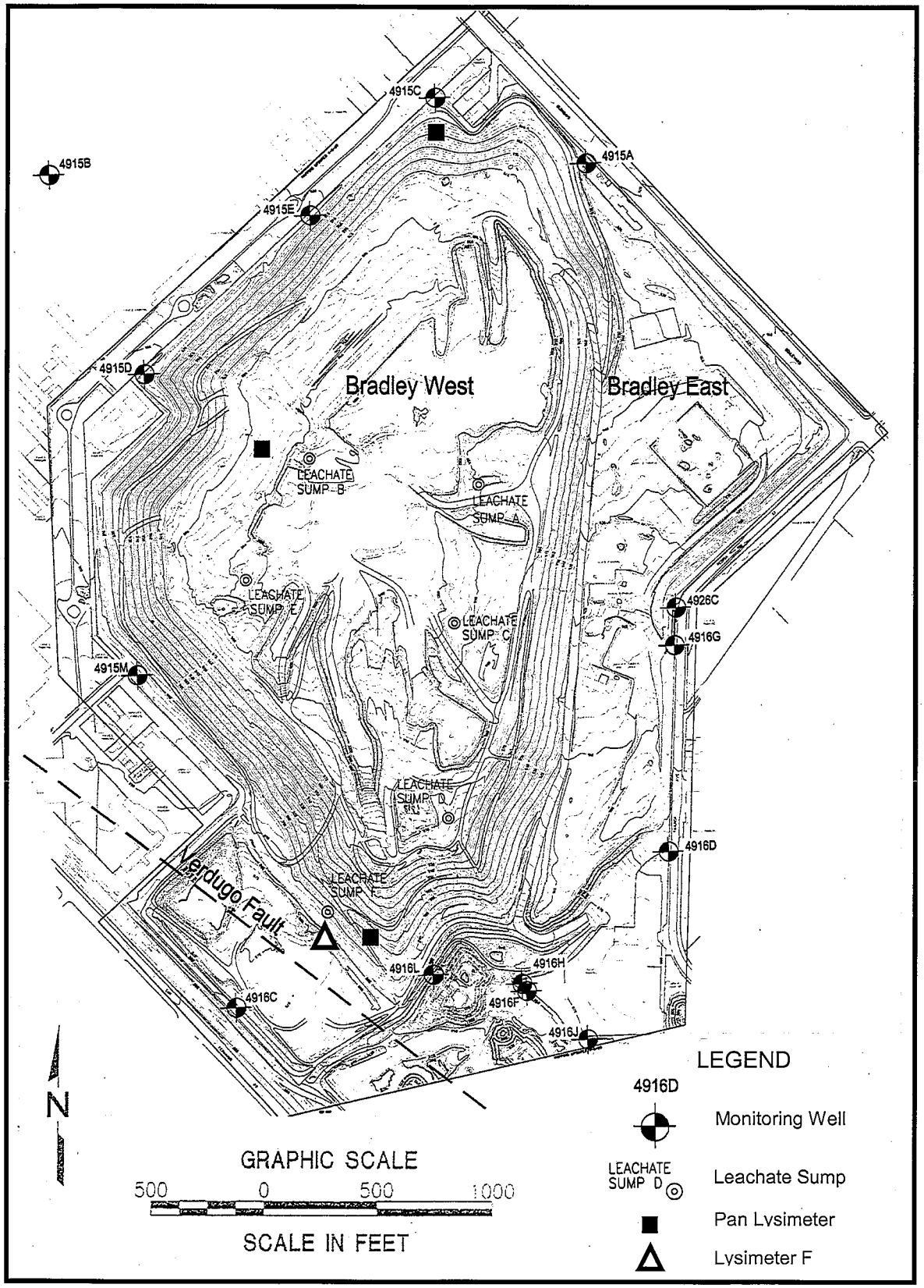

Figure 3. Well Locations, Sumps, and Lysimeters

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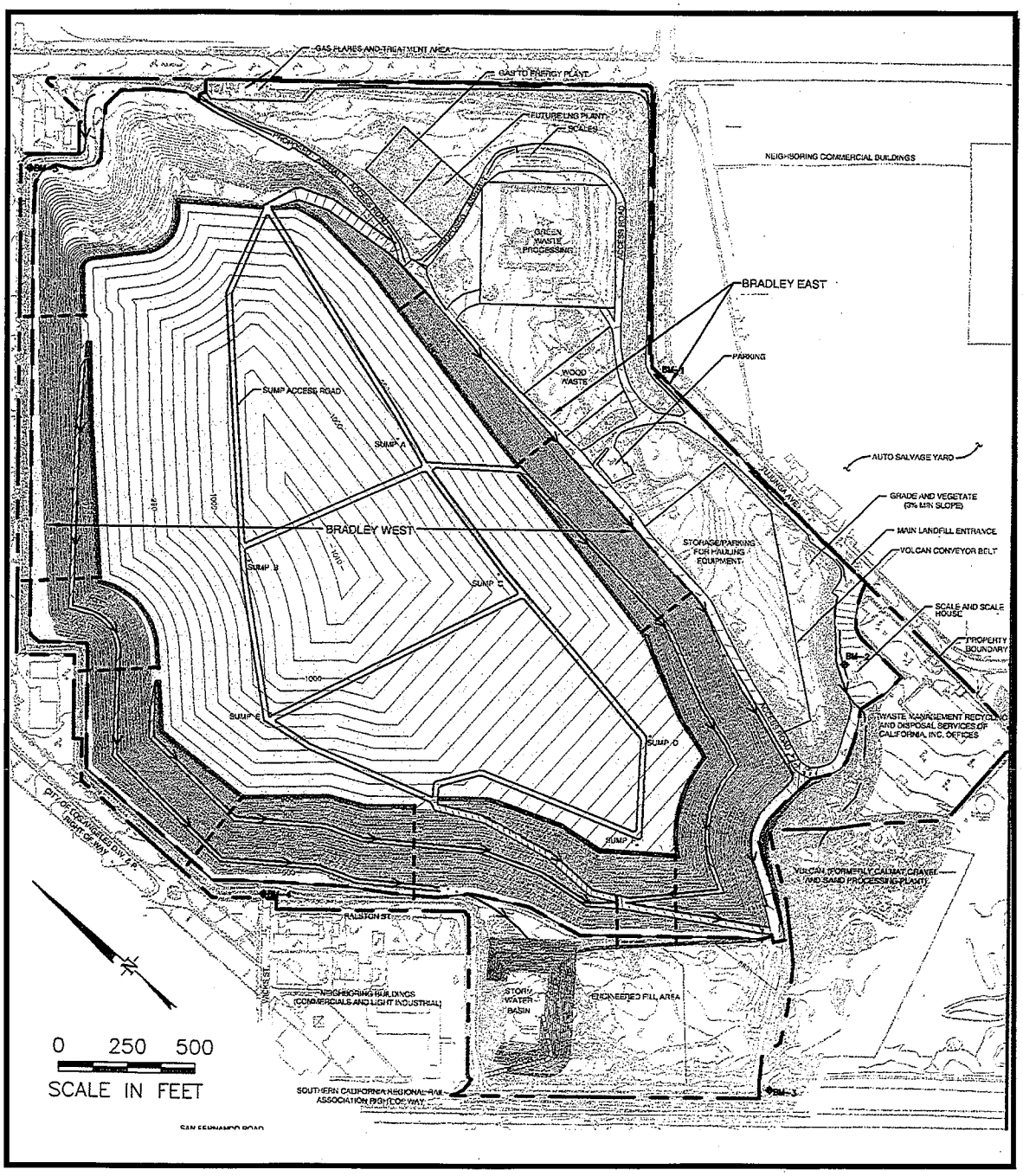

Figure 4. Final Grade

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