# STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

ORDER NO. R4-2006-0080

# WASTE DISCHARGE REQUIREMENTS for CITY OF WHITTIER (SAVAGE CANYON LANDFILL) (File No. 63-082)

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

- 1. The Savage Canyon Landfill (Landfill) is a municipal solid waste management facility located at 13919 East Penn Street in the City of Whittier, California (Figure 1), that has been in operation since 1935. The Landfill is owned and operated by the City of Whittier (Discharger) under waste discharge requirements (WDRs) adopted by the Regional Board on April 13, 2000 (Order No. 00-047).
- 2. The Discharger completed a Master Land Use Plan for the Landfill in 1969; it was subsequently revised in 1975 and updated in 1997.
- 3. The 1977 "Savage Canyon Landfill Expansion Environmental Impact Report" (EIR) evaluated the potential environmental impacts from the Landfill for a 1977 expansion. In October 1985, the "Final EIR: Savage Canyon Sanitary Landfill Expansion" was updated to evaluate potential environmental impacts from further expansion. Both of these environmental documents were certified by the City of Whittier as the lead agency in accordance with California Environmental Quality Act (CEQA) requirements.
- 4. Landfill operations encompass approximately 132 acres with landfilling permitted in approximately 102 acres. Approximately 60 acres of the Landfill are occupied by an older, unlined portion of the site that has reached final capacity. The Discharger has expanded the disposal area laterally into an adjacent 42 acre parcel located in the back canyon area of Savage Canyon.
- 5. The Landfill was operated as an open burn dump from 1935 until 1949. It is currently operated as a modified "cut and cover" landfill. Soil is excavated from onsite native soils to provide daily, interim, and final covers. Soil, for use as cover, is excavated within the Landfill property, or provided by reclaiming clean dirt loads from the incoming waste stream. Refuse is spread and compacted in cells approximately 18 to 20 feet in height. An approximately 15-foot wide bench is constructed approximately every 40 vertical feet to provide slope stability, drainage and access for maintenance. This design provides for proper grading and drainage of surface water to eliminate ponding of water on the

Landfill. The Landfill accepts up to 350 tons of nonhazardous solid waste each day. The estimated closure date for this waste management facility is 2048.

- 6. The Landfill is located in the western Puente Hills which are bounded on the south by the Los Angeles Central Groundwater Basin. The area can generally be characterized as unconsolidated materials at lower elevations surrounding areas of elevated marine sedimentary bedrock.
- 7. The Landfill is located within the Central Hydrologic Subarea of the Coastal Plain Hydrologic Area of the Los Angeles San Gabriel Hydrologic Unit. The *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) identifies beneficial uses for inland surface waters of Coyote Creek that drains the Central Hydrologic Subarea as Rare, Threatened, or Endangered species, and potential beneficial uses for Municipal and Domestic Supply, Industrial Service Supply, Industrial Process Supply, Water Contact Recreation, and Warm Freshwater Habitat, as well as intermittent beneficial uses for Non-Contact Recreation. The beneficial uses of surface waters in Savage Canyon are not individually identified in the Basin Plan, however, application of the tributary rule requires the beneficial uses of any specifically identified water body apply to its tributary streams. The requirements in this Order, as they are met, are in conformance with beneficial uses identified in the Basin Plan for the canyon/stream at the Landfill that are tributary to Coyote Creek.
- 8. The Landfill is located in the National Flood Insurance Community No. 0601690002B, and is classified as Zone C, designating the absence of a flood hazard.
- 9. Land uses surrounding the waste management facility include residential areas and a community park located to the south; residential properties and Whittier College are located to the west; open spaces are located to the north; and light residential and open space are located to the east.
- 10. Permanent storm drainage facilities on the Landfill are designed to handle flows from a 100-year, 24-hour duration storm in accordance with section 20365 of title 27 of the California Code of Regulations (27 CCR).
- 11. The Discharger continues to implement a waste-load checking program to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable materials. Hazardous materials are temporarily stored in a dedicated hazardous waste storage area and disposed of at an appropriate hazardous waste facility according to hazardous waste laws.
- 12. Engineered containment features for the expanded Landfill include geosynthetic clay liner (GCL) and a synthetic high density polyethylene (HDPE) base liners installed beyond the footprint of the older, unlined portion; as well as GCL and HDPE liner systems installed on sideslopes; a leachate collection and removal system (LCRS), ground water, unsaturated zone and soil gas monitoring systems, and a landfill gas collection system.

These systems will continue to be constructed to the prescriptive standards of 27 CCR or equivalent performance standards. This Order specifies that final design and construction methods for proposed engineered systems be reviewed and approved by this Regional Board's Executive Officer prior to installation and that no disposal occur in a new area until the corresponding construction is complete and certified and approved by Regional Board staff.

- 13. A solid waste assessment test (SWAT) analysis, consistent with the requirements of section 13273 of the California Water Code (CWC) was conducted between July 1991 and July 1993 for the Landfill and was approved by the Executive Officer on November 8, 1993. SWAT investigation monitoring wells, borings, and gas probes completed in the front-face area of the Landfill were dry, indicating a deep groundwater table. To date the existing groundwater monitoring network does not include downgradient monitoring points. This Order specifies that the groundwater monitoring network be revised to include groundwater monitoring downgradient of the Landfill.
- 14. The Landfill groundwater monitoring program incorporates monitoring wells that are upgradient and sidegradient to the Landfill (see Figure 2, attached). In accordance with requirements of this Order, the Discharger will upgrade the monitoring network to include downgradients wells.
- 15. Landfill gas migration monitoring probes are located along the boundary of the Landfill. These probes are currently monitored on a monthly basis pursuant to requirements of the California Integrated Waste Management Board (CIWMB) and the local enforcement agency (LEA), the Los Angeles County Department of Health Services, Solid Waste Program.
- 16. An unsaturated zone monitoring program is required for the Landfill, pursuant to 27 CCR, section 21769. The intent of an unsaturated zone monitoring program is to monitor unsaturated soils/bedrock between the waste management unit and groundwater to provide an early indication of potential groundwater quality degradation. The Discharger installed an unsaturated zone monitoring system at the Landfill as part of the SWAT monitoring program consisting of suction lysimeters. The unsaturated zone monitoring system has proved ineffective in supplementing water quality monitoring because collection of water samples is problematic, the lysimeters consistently fail to yield a sufficient volume of water to allow analysis.
- 17. Soil gas monitoring wells were constructed as part of a revised monitoring program implemented at the Landfill when the Discharger expanded into the back-canyon portion of the site. The intent of the soil gas monitoring program is to monitor unsaturated soils/bedrock for landfill related gases that might be an early indication of potential groundwater quality degradation. This Order specifies installation of downgradient monitoring points in order to detect any Landfill release to groundwater, eliminating the need for soil gas monitoring at the Landfill.

- 18. The Landfill is located within the Whittier Fault Zone. Local faulting is present onsite, but an analysis completed by the Discharger's consultant (Geologic Associates, 1995) concluded that for the purposes of engineering design, fault traces mapped within the Landfill are not considered active. Active faults are defined as Holocene epoch faults that have exhibited movement in the last 11,000 years.
- 19. The Seismic Hazard Zone Map for the Whittier 7.5 minute quadrangle (released March 25, 1999) produced by the California Division of Mines and Geology Seismic Hazards Mapping Program (incorporated herein by reference) indicate that proposed operational areas at the Landfill are located outside identified liquefaction zones. The hazard zone maps also identify areas where the previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions, indicate a potential for permanent ground displacements such that mitigation is required. The Whittier map shows that portions of the Landfill where continued development is proposed are located within an earthquake-induced landslide zone.
- 20. Results of a seismic design investigation performed by County Sanitation Districts of Los Angeles County for the nearby Puente Hills Landfill (GeoSyntec Consultants, 2002) indicate that seismic sources that govern seismicity in the area of the Savage Canyon Landfill are either a moment magnitude 6.8 event on the Whittier Fault for a "near-field" maximum credible earthquake (MCE) design event, or a moment magnitude 7.8 event on the San Andreas Fault for a "far-field" MCE design event. A moment magnitude 6.8 event on the Whittier Fault located in the vicinity of the Landfill could generate a free-field bedrock peak horizontal ground acceleration (PHGA) in excess of 0.60g and have a duration of shaking of 11.7 seconds. For the San Andreas Fault, a moment magnitude 7.8 event located approximately 30 miles from the Landfill could generate a free-field bedrock PHGA of 0.12g but have a duration of shaking of 30.9 seconds. The MCE design events exceed maximum probable earthquake (MPE) design criteria that is the minimum requirement contained in 27 CCR.
- 21. Portions of the Landfill were formerly parts of the North Whittier Heights Oil Field, which was active from the early 1900's to 1970. All known abandoned oil and water wells on the Landfill have been properly decommissioned according to appropriate Division of Oil and Gas (now the Division of Oil, Gas, and Geothermal Resources) guidelines. Some improperly decommissioned wells may remain for which no records exist. This Order specifies that upon discovery of any such wells they will be properly decommissioned according to the appropriate Division of Oil, Gas, and Geothermal Resources regulations and requirements.
- 22. Landfill slopes will be designed and constructed in a manner that will accommodate settlement and remain stable during the design earthquake event in accordance with section 20370 of 27 CCR.
- 23. The CIWMB has approved the Discharger to use tarps as alternative daily cover materials at the Landfill. The Discharger may evaluate the use of other materials as alternative

cover materials in the future consistent with section 20690 of 27 CCR.

- 24. The waste management facility is underlain by thin alluvium deposits in canyon drainages, and by sedimentary rocks (sandstones, siltstones and conglomerates) of the middle Miocene Puente Formation and the Pliocene Fernando Formation. Canyon waters, where present, move at slow rates through weathered bedrock, creating low-permeability perched and semi-perched zones.
- 25. The waste management facility does not overlie any designated groundwater basin (Department of Water Resources 1961). However, surface water, perched groundwater, and semi-perched canyon water, when present, drains into the Los Angeles Central Groundwater Basin.
- 26. The beneficial uses of surface waters in Savage Canyon are not individually identified in the Basin Plan, however application of the tributary rule requires the beneficial uses of any specifically identified water body apply to its tributary streams. The requirements in this Order, as they are met, are in conformance with beneficial uses identified in the Basin Plan for canyons/streams at the Landfill that are tributary to the Central Hydrologic Subarea of the Coastal Plain Hydrologic Area of the Los Angeles San Gabriel Hydrologic Unit.
- 27. The following are water quality objectives established in the Basin Plan for groundwater in the Los Angeles Central Groundwater Basin:

Constituents	Units	Maximum Value
TDS	milligrams per liter (mg/L)	700
Sulfate	mg/L	250
Chloride	mg/L	150
Boron	mg/L	1.0

In addition, the Basin Plan indicates that water designated for use as domestic or municipal supply shall not contain concentrations of chemical constituents in excess of the limits specified in provisions of title 22 of the CCR, including section 64431 for inorganic chemicals, section 64431 for fluoride, and section 64444 for organic chemicals.

28. The USEPA under title 40 of the code of federal regulations (40 CFR) section 257 and section 258 (Subtitle D) revised existing regulations for municipal solid waste disposal facilities in response to the 1984 Hazardous and Solid Waste Amendments of RCRA and added new detailed requirements addressing the issues of location restriction, facility operation and design criteria, groundwater monitoring and corrective action, closure and postclosure maintenance, and financial assurance. USEPA delegated the responsibility for implementing these regulations to states with a fully approved landfill regulatory program. As responsible agencies for an approved state, the State Board and the Regional Board adopted the federal Subtitle D regulatory requirements (State Board Resolution No. 93-62 and Regional Board Order No. 93-062, respectively). Regional Board Order No.

93-062 was adopted September 27, 1993.

- 29. While the State Board and Regional Boards are the state agencies designated to protect water quality resulting from solid waste disposal activities, the CIWMB regulates all other aspects of solid waste disposal in the state. To remove regulatory overlap, conflict, and duplication between the CIWMB and the State Board/Regional Boards, the California Legislature, under the Solid Waste Disposal Regulatory Reform Act of 1993, streamlined the state's solid waste disposal regulatory process by developing one consolidated set of solid waste disposal facility regulations. The revised regulations, under 27 CCR promulgated on July 18, 1997 clarify the roles and responsibilities of the CIWMB and the State Board/Regional Boards in regulating municipal solid waste disposal sites.
- 30. Pursuant to section 402.p of the federal Clean Water Act (CWA) and 40 CFR section 122, section 123, and section 124 the State Board adopted Order No. 97-03-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001, "Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities". The Landfill was enrolled under the general industrial stormwater permit (Permit No. 419I004119) on March 27, 1992. The Discharger has implemented a stormwater pollution prevention plan (SWPPP) at the Landfill as required by the general industrial stormwater permit.
- 31. On February 24, 2005, Regional Board staff issued a Notice of Violation to the Discharger for an inadequate SWPPP, inadequate stormwater monitoring program, and failure to implement Best Management Practices. The Discharger submitted a revised SWPPP on June 17, 2005 compliant with requirements of State Board Order No. 97-03-DWQ.
- 32. On June 13, 1994, this Regional Board adopted a revised 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.
- 33. This Order includes the attached definition of terms and acronyms (Attachment 1).

This Regional Board has notified the Discharger and interested agencies and persons of its intent to adopt WDRs for this discharge and has provided them with an opportunity to submit their written views and recommendations.

This Regional Board in a public meeting heard and considered all comments pertaining to the discharge and to the tentative requirements.

Pursuant to section 13320 of CWC, any aggrieved party may seek review of this Order by filing a petition with the State Board. The petition must be received by the State Water Resources Control Board, P.O. Box 100, Sacramento, CA 95812, within 30 days of the date this Order is

adopted.

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

#### A. PROHIBITIONS

- 1. Discharges of waste to land as a result of inadequate waste disposal 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 discharge of waste 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 water quality objectives for the groundwater or surface water as established in the Basin Plan to be exceeded; and
  - g. Cause pollution, contamination, or nuisance, as defined in CWC section 13050, or adversely affect beneficial uses of groundwater or surface water as established in the Basin Plan.
- 3. Odors, vectors, and other nuisances of waste origin beyond the limits of the Landfill are prohibited.
- 4. The discharge of waste to surface drainage courses or to usable groundwater is prohibited.
- 5. Basin Plan prohibitions shall not be violated.
- 6. All applicable 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.

#### B. REQUIREMENTS FOR ACCEPTABLE MATERIALS

- 1. The Discharger shall only accept waste for disposal at the Landfill as deemed acceptable for a municipal solid waste (Class III) facility by the Regional Board through orders or regulations.
- 2. Wastes disposed of at the Landfill shall be limited to certain non-hazardous solid wastes (as described in section 20220.a of 27 CCR), inert solid wastes (as described in section 20230 of 27 CCR), and treated wood waste.
- 3. Non-hazardous solid waste means all putrescible and non-putrescible solid, semi-solid and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes, and other discarded waste (whether of solid or semi-solid consistency); provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation to waters of the state (i.e., designated waste).
- 4. Treated wood waste may be disposed of at the Landfill under the following conditions:
  - a. Discharge of treated wood waste shall only be to composite-lined portions of the Landfill.
  - b. The treated wood waste is managed so as to prevent scavenging.
  - c. Any management of the treated wood waste at the Landfill prior to disposal, or in lieu of disposal, complies with applicable Health and Safety Code requirements.
  - d. Treated wood waste disposal shall be discontinued if monitoring of the composite-lined portion of the Landfill where treated wood waste disposal has occurred indicates a verified release until corrective action results in cessation of the release.

#### C. REQUIREMENTS FOR UNACCEPTABLE MATERIALS

1. No hazardous wastes (as defined in 22 CCR section 66261.3 et seq.), designated wastes (as defined in CWC section 13173), or special wastes (as defined in 22 CCR), such as liquids, oils, waxes, tars, soaps, solvents, or readily water-soluble solids, such as salts, borax, lye, caustic or acids shall be disposed of at the

Landfill.

- 2. No semi-solid wastes shall be disposed of at the Landfill unless they are first processed in a solidification operation approved by the Executive Officer. Semi-solid waste means waste containing less than 50 percent solids, as described in section 20200 of 27 CCR. In cases of spoiled semi-solid food or consumer semi-solid wastes, Regional Board staff is authorized to approve solidification or waste disposal operations at the Landfill on a case-by-case basis.
- 3. No materials that are of a toxic nature, such as insecticides or poisons, shall be disposed of at the Landfill.
- 4. No radioactive waste, including low level radioactive waste, as defined by the agency with jurisdictional authority, shall be disposed at the Landfill.
- 5. No infectious materials or hospital or laboratory wastes, except those authorized for disposal to land by official agencies charged with control of plant, animal and human disease shall be disposed of at the Landfill.
- 6. No pesticide containers shall be disposed of at the Landfill, unless they are rendered non-hazardous by triple rinsing. Otherwise, they must be hauled off-site to a legal point of disposal.
- 7. No septic tank or chemical toilet wastes shall be disposed of at the Landfill.

#### D. REQUIREMENTS FOR DISPOSAL SITE OPERATIONS

- 1. 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 section 20365 and section 21090.b.1 of 27 CCR. When necessary, temporary structures shall be installed as needed to comply with this requirement.
- 2. 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.
- 3. Wastes deposited at the Landfill shall be confined thereto, and shall not be permitted to blow, fall, or otherwise migrate off-site, or to enter off-site water drainage facilities or watercourses.
- 4. The periodic waste load-checking program shall continue to be implemented to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable wastes.

- 5. The Discharger shall comply with notification procedures contained in section 13271 of the CWC with regard to the discharge of hazardous wastes. The Discharger shall remove and relocate to a legal point of disposal, any wastes that are discharged at the Landfill in violation of these requirements. The Regional Board shall be informed via quarterly monitoring reports when relocation of wastes is necessary. The source and final disposition (and location) of the wastes, as well as methods undertaken to prevent future recurrence of such disposal shall also be reported.
- 6. Waste material shall not be discharged on any ground surface that is less than five feet above the highest anticipated groundwater level, including capillary rise.
- 7. All wastes shall be covered at least once during each 24-hour period in accordance with section 20680 and section 20705 of 27 CCR. Intermediate cover over wastes discharged to the Landfill shall be designed and constructed to minimize percolation of precipitation through wastes and contact with materials deposited.
- 8. Alternative daily cover at the Landfill may be used consistent with section 20690 of 27 CCR.
- 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. No surface water, wastewater or stormwater shall leave the Landfill except as permitted by a NPDES permit issued in accordance with the federal CWA and the CCR. The Discharger shall maintain and modify, as necessary, the SWPPP developed for the Landfill.
- 11. 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. 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.
- 12. 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 back to the Landfill unless it meets the requirements of this Order for onsite reuse as described in Section G, below and satisfies leachate handling requirements contained in 27 CCR section 20340.g. Any leachate determined to be hazardous shall be transported by a licensed hazardous waste hauler to an approved treatment or disposal facility.

- 13. In any area within the Landfill where a natural spring or seep is observed, provisions shall be made and/or facilities shall be provided to ensure that this water will not come in contact with decomposable refuse. The locations of all springs and seeps found prior to, during, or after placement of waste material that could affect the Landfill shall be reported to the Regional Board.
- 14. The Discharger shall develop/maintain permanent survey monuments at the Landfill throughout the development, closure and postclosure maintenance periods. 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.
- 15. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) 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.
- 16. The Discharger shall report any noncompliance or any incident resulting from Landfill operations that are in violation of this Order. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also 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.
- 17. Upon the discovery of any abandoned oil wells at the Landfill the Discharger shall properly decommission such well(s) according to the appropriate Oil, Gas, and Geothermal Resources requirements.

#### E. REQUIREMENTS FOR CONTAINMENT SYSTEMS

- 1. The Discharger shall install 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 are subject to review and approval by the Executive Officer prior to any construction.
- 2. 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 the prescriptive standards and/or performance goals of 27 CCR.

- 3. The Discharger shall submit detailed preliminary plans, specifications, and descriptions for all proposed containment structures and construction features for Executive Officer approval at least 60 days prior to construction. The preliminary plans shall contain detailed quality assurance/quality control for the proposed construction. No disposal shall occur in a new area until the corresponding construction is completed and certified. The Discharger shall also submit a description of, and location data for, ancillary facilities, including roads, waste handling areas, buildings, and equipment cleaning facilities. As-built plans shall be submitted within 60 days after the completion of construction. If the as-built plans are virtually identical to the approved preliminary plans and specifications, only change sheets need be submitted in lieu of complete as-built plans.
- 4. Cut and subgrade slopes, fill slopes, refuse cells and visual berms shall be designed and excavated or constructed in a manner that will resist settlement and remain stable during the design earthquake event specific to the Landfill in accordance with section 20370 of 27 CCR.
- 5. Landfill refuse slopes shall be designed per requirements in 27 CCR and constructed in a manner that will resist settlement and prevent failure during a maximum probable earthquake (MPE) for interim slopes, or maximum credible earthquake (MCE) for final refuse slopes.
- 6. Prior to the start of construction of any containment structure, a geologic map shall be prepared of the final excavation grade for review, approval, and confirmation in the field by Regional Board staff.
- 7. No disposal shall occur in a new area until the corresponding construction is completed and certified.
- 8. The Discharger shall perform an annual testing for any LCRS to demonstrate their operating efficiency during the compliance period of the waste management units.

#### F. REQUIREMENTS FOR GROUNDWATER MONITORING

- 1. The Discharger shall implement the attached M&RP No. CI-4469 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 to the Landfill. M&RP No. CI-4469 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 M&RP No. CI-4469. 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-4469, as directed by the Executive Officer.
- 4. The Discharger shall conduct required monitoring and response programs in accordance with section 20385 of 27 CCR. (A detection monitoring program per section 20420 of 27 CCR, an evaluation monitoring program per section 20425 of 27 CCR, and a corrective action program per section 20430 of 27 CCR).
- 5. The effectiveness of all monitoring wells, monitoring devices, and leachate and gas collection systems shall be maintained throughout the Landfills operational, closure, and postclosure maintenance periods in accordance with acceptable industry standards. The Discharger shall maintain a groundwater 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 seven 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).
- 6. If a 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.
- 7. The Discharger shall provide for proper handling and disposal of water purged from monitoring wells at the Landfill during sampling. Water purged from a monitoring well shall not be returned to that well (or any other Landfill well).
- 8. Any abandoned 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.

- 9. 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:
    - i. casing and test hole diameter;
    - ii. casing materials;
    - iii. depth of each hole;
    - iv. the means by which the size and position of perforations shall be determined, or verified, if in the field;
    - v. method of joining sections of casing;
    - vi. nature of filter materials;
    - vii. depth and composition of soils; and
    - viii. method and length of time of well development.
- 10. The compliance point(s) where water quality protection standards (WQPS) apply shall be located along downgradient edges of waste management facilities at the Landfill or an alternate location approved by the Executive Officer.
- 11. The compliance monitoring wells at the Landfill shall consist of those wells listed in Item No. I.3 of M&RP No. CI-4469. All compliance monitoring wells shall be monitored pursuant to this Order and as directed by the Executive Officer through future revisions of M&RP No. CI-4469.
- 12. Within 60 days of the adoption of this Order (i.e. December 11, 2006) the Discharger shall submit a technical workplan, for the approval by the Executive Officer, to revise the groundwater monitoring network for the Landfill, specifically one that establishes groundwater monitoring downgradient of the Landfill.
- 13. The compliance period for which WQPS are applicable shall be the entire active life of a waste management facility, and during the closure and postclosure maintenance periods.

14. If necessary, the Discharger shall install additional water quality monitoring devices necessary to comply with M&RP No. CI-4469, as adopted or as revised by the Executive Officer.

#### G. REQUIREMENTS FOR ON-SITE USE OF WATER

- 1. No water shall be routinely applied to refuse fill areas except for landscape irrigation, surface dust control, winter deck construction, road construction, final cover construction or non-emergency uses approved by the Executive Officer. Any water used at the Landfill, except for potable water, recycled water, and any other water allowed by the Executive Officer, shall be subject to these WDRs. Water used for these purposes shall be applied only on completed lifts, in quantities not to exceed that necessary to reduce immediate dust hazards, support plant life, or to achieve desired compaction. Overflow or runoff caused by the over-application or improper management of irrigation or dust control water are prohibited.
- 2. No wastewater shall leave the Landfill except as permitted by an NPDES permit issued in accordance with the federal CWA and CWC. The Discharger shall maintain and modify, as necessary, the SWPPP developed for the Landfill.
- 3. Wastewater produced at the Landfill shall not be subject to these WDRs, pursuant to Provision No. G.2 above, if it meets applicable requirements of the CWC, CCR, and HSC for recycled water. In order for wastewater to not be subject to WDRs it shall comply with regulatory criteria promulgated by the California Department of Health Services (DHS), currently set forth in title 22, division 4, section 60301 et seg., CCR, which includes specified approved uses of recycled water, numerical limitations and requirements, treatment method requirements and performance standards to be considered equivalent to recycled water. Because the DHS is statutorily required (CWC section 13521) to establish uniform statewide reclamation criteria for the various uses of recycled water to assure protection of public health where recycled water use is involved, pursuant to CWC section 13523, the Regional Board has consulted with and considered recommendations of the DHS in issuing waste discharge/water recycling requirements. 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. Mixing any Landfill wastewater source with recycled or potable water to achieve equivalence to recycled water standards, as described in Provision No. G.3 above, is prohibited.
- 5. 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.

- 6. 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.
- 7. 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.
- 8. 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.

# H. 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 seven days of its discovery of the omission.
- 4. The Regional Board shall be notified of any incident resulting from Landfill operations that may endanger the environment, by telephone within 24 hours, and in writing within fourteen days. 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. All instances of noncompliance with this Order shall also be reported to the Regional Board in the same manner as stated above.

- 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 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 is liable from the transfer date on. The agreement shall include an acknowledgement that the new owners accept responsibility for compliance with this Order.
- 6. The Discharger shall notify the Regional Board in writing within seven days, if fluid is detected in a previously dry LCRS.
- 7. The Discharger shall submit or update an existing "Operations Plan" for the Landfill within 90 days after adoption of this Order, to be approved by the Executive Officer, describing Landfill operations which shall include:
  - a. A description of proposed treatment, storage, and disposal methods.
  - b. Contingency plans for the failure or breakdown of waste handling facilities which could potentially have water quality effects, including notice of any such failure, or any detection of waste or leachate in monitoring facilities, to the Regional Board, appropriate local governments, and water users downgradient of the Landfill.
  - c. A description of inspection and maintenance programs which will be undertaken regularly during disposal operations, the closure, and the postclosure maintenance period of facilities or equipment, which could have potential water quality effects.
- 8. The Discharger shall notify the Regional Board of changes in information submitted in a Joint Technical Document and supplementary information, including any material change in the types, quantities, or concentrations of wastes discharged; or Landfill operations and features. The Discharger shall notify the Regional Board at least 120 days before any material change is made at the Landfill.
- 9. The Discharger shall comply with the closure and postclosure maintenance requirements and notification requirements contained in 27 CCR section 21769. Closure must be in accordance with a closure plan and postclosure maintenance plan approved by the Executive Officer and the CIWMB.
- 10. The Discharger shall report (on a quarterly basis) the total volume of all irrigation water used at the Landfill each month and the area(s) where it is applied.
- 11. 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."

#### I. GENERAL PROVISIONS

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

- 2. Beneficial uses of surface waters in the canyons/streams at the Landfill are not specifically designated in the Basin Plan. However, since these canyon/streams are tributary to the Central Hydrologic Subarea of the Coastal Plain Hydrologic Area of the Los Angeles San Gabriel Hydrologic Unit, the Regional Board finds that the beneficial uses identified in the Basin Plan for the Central Hydrologic Subarea of the Coastal Plain Hydrologic Area of the Los Angeles San Gabriel Hydrologic Unit apply to these tributary canyons/streams.
- 3. The Discharger shall comply with all the other applicable provisions, requirements, and procedures contained in the most recent version of 27 CCR and any future amendments.
- 4. 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.
- 5. 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.
- 6. The Discharger shall maintain a copy of this Order at the Landfill so as to be available at all times to Landfill operating personnel.
- 7. 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 and do not affect further restraints on the disposal of wastes at this waste management facility that may be contained in

other statutes.

- 8. This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements", adopted November 7, 1990 (Attachment 2) which is incorporated herein by reference. The Landfill continues to be subject to Regional Board Order No. 93-062 incorporating federal Resource Conservation and Recovery Act (42 USC section 6901, et seq.) regulations, which are also incorporated herein by reference. If there is any conflict between provisions stated herein and the standard provisions, Regional Board Order No. 93-062, or federal regulations, the provisions stated herein will prevail.
- 9. The requirements adopted herein do not 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.
- 10. 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.
- 11. This Order does not convey any property rights of any sort, or any exclusive privilege.
- 12. The Discharger is the responsible party for these WDRs and any M&RP for the Landfill. 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.
- 13. 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 with 30 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 Savage Canyon Landfill site, or as measured as a VI on the Modified Mercalli Scale.
- 14. The Discharger shall immediately notify the Regional Board of any flooding, slope failure or other change in Landfill conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
- 15. The Discharger shall submit to the Regional Board and to the CIWMB evidence

- of financial assurance for postclosure maintenance, pursuant to 27 CCR, division 2, chapter 6. The postclosure period shall be at least 30 years. However, the postclosure shall extend as long as wastes pose a threat to water quality.
- 16. Within 90 days of the adoption of this Order, the Discharger shall submit to the CIWMB, in accordance with 27 CCR section 22222, assurance of financial responsibility in an amount acceptable to the Executive Officer for initiating and completing corrective action for all known or reasonably foreseeable releases from the Landfill.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. In accordance with CWC section 13263.g, these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification. All discharges of waste into the waters of the state are privileges, not rights.
- 21. 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.
- 22. This Order becomes effective on the date of adoption by the Regional Board.
- 23. 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.
- 24. This Order in no way limits the authority of the Regional Board, as contained in the CWC, to require additional investigations and cleanups pertinent to this project. This Order may be revised by the Executive Officer as additional information from the project becomes available.
- 25. 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.

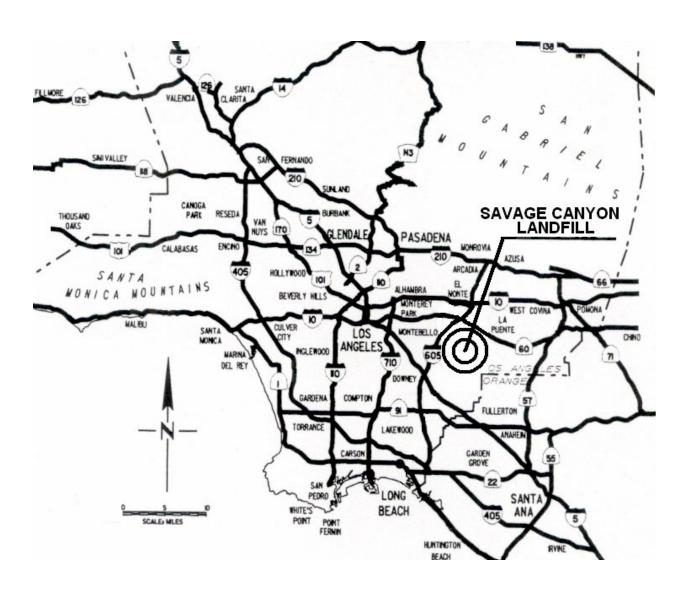
#### J. RESCISSIONS

1. Except for violation enforcement purposes, Regional Board Order No. 00-047, adopted on April 13, 2000, is hereby rescinded. Because Order No. 93-062 also applies to other municipal waste landfills in the region, incorporating federal regulations, it is not rescinded.

I, Jonathan S. Bishop, 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 October 24, 2006.

Jonathan S. Bishop
Executive Officer

# FIGURE 1: LOCATION MAP



ORDER NO. R4-2006-0080

FIGURE 2: MONITORING WELL LOCATIONS

