

Guadalupe Rubbish Disposal Company  
5/22/01

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**ORDER NO. 01-050**

**UPDATED WASTE DISCHARGE REQUIREMENTS  
AND RESCISSION OF ORDER NO. 90-139, FOR:**

**GUADALUPE RUBBISH DISPOSAL COMPANY, INC.  
CLASS III SOLID WASTE DISPOSAL SITE  
SAN JOSE, SANTA CLARA COUNTY**

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

**SITE OWNER AND LOCATION**

1. The Guadalupe Rubbish Disposal Company, hereafter called the discharger, is a wholly owned subsidiary of Waste Management, Inc. The discharger owns and operates a 411-acre site containing a Class III solid waste management unit, with a permitted waste disposal area of 115 acres. The site is located four miles southeast of the City of Los Gatos as shown on Figure 1.
2. The discharger submitted a Report of Waste Discharge (ROWD) on October 14, 1988, which served as an application for Waste Discharge Requirements for the landfill. The discharger was originally permitted to operate a landfill on 65 acres at the site. In their ROWD, they proposed to develop an additional 50 acres of the site, in accordance with their 1988 Master Plan. This development has started, as detailed below.

**PURPOSE OF ORDER UPDATE**

3. The primary objectives of this Order are to: 1) Revise the groundwater, surface water, subdrain and leachate monitoring programs in order to evaluate the landfill's impact to water quality, and 2) Update the Waste Discharge Requirements and to bring the site into compliance with Title 27, California Code of Regulations (CCR) and Part 268 (Subtitle D), Title 40 of the Code of Federal Regulations.

**SITE DESCRIPTION AND HISTORY**

4. The site was opened by the discharger in 1929, and operated as an open-burn dump until 1959, at which time the facility was converted to a sanitary landfill, in accordance with accepted practices of the time. The existing landfill was developed by placing and compacting refuse on the exposed surface of the site's canyon floor. This constitutes the base of the existing landfill.
5. A 26-acre area of the site, known as Parcel 1, was operated as an unlined landfill until 1979. Part of this area lies over the former burn dump area. This area is now inactive and overlain by at least 20 feet of soil, including several feet of a low-permeability layer, but is not at final grade and has not been formally closed.
6. A 39-acre landfill, known as Parcel 2, was then built south of Parcel 1, and lined with a clay liner. A leachate collection system was built, consisting of a subsurface interceptor trench on the west side of the landfill that drains by gravity to a pipeline running through the currently filled area and the toe berm, to a leachate collection tank.
7. In 1992, a 6-acre landfill expansion was built to the east. This expansion is a portion of the 50-acre expansion, known as Parcel 3, approved in the 1990 EIR. It is lined with a clay liner along the side slopes of the excavation, and lined on the base with a composite liner. A leachate collection and recovery system was built on top of the composite liner, conveying leachate by gravity flow to a collection tank.
8. A five-acre Westside expansion area was started in 1994, in a portion of the area formerly occupied by the old burn dump. This expansion is also known as Modules 2-4 of Parcel 3. The expansion area was built by constructing a toe berm at the downstream or western end of a canyon. The expansion area liner was built in four phases behind and on the toe berm. The expansion area is constructed to meet Subtitle D specifications for containment (composite liner system and LCRS). A groundwater interceptor drain (or I-drain) extends across the bottom of the canyon beneath the expansion cell, downgradient from the LCRS sump. A channel drain extends along the former stream channel beneath the toe berm constructed downstream from the expansion cell.
9. The current Waste Discharge Requirements for the discharger are contained in Board Order No. 90-139, issued by the Board on October 17, 1990. The discharger has also filed a Notice of Intent for the State Water Resources Control Board's General Permit for Stormwater Discharges Associated with Industrial Activities. The Regional Board amended the waste discharge requirements on September 15, 1993, in Order No. 93-113. Order No. 93-113 was a general amendment of waste discharge requirements intended to bring all of this Region's landfills into compliance with federal RCRA Subtitle D requirements for monitoring and waste containment.

## WASTES AND THEIR CLASSIFICATION

10. The landfill accepts municipal solid wastes, non-hazardous wastes, construction and demolition wastes, and dewatered sewage sludges for disposal in the permitted landfill area. These wastes are classified as "non-hazardous solid wastes," or "inert wastes," using criteria set forth in Sections 20220, and 20230 of Division 2, Title 27 of the California Code of Regulations. All newer areas of the landfill have improved waste and leachate containment. The discharger excavated the Old Burn Area, and relocated these wastes and contaminated soils to newly developed areas, that were constructed with composite liners and leachate collection and removal systems. Title 27 contains the regulations promulgated by the State Water Resources Control Board for the water quality aspects of discharges of solid waste to land for disposal. These regulations establish waste and site classifications and waste management requirements for solid waste disposal in landfills.
11. The discharger is allowed to accept up to 3,650 tons per day of waste. Currently, the discharger receives an average of 830 tons of waste per day, or a fill volume of about 1370 cubic yards per day. The design capacity of the landfill is approximately 20,736,000 cubic yards, and is expected to close in 2035. No portions of the landfill have achieved final grade.

## TITLE 27 REQUIREMENTS

12. Title 27, Section 20310, requires that Class III waste management units shall have containment structures which are capable of preventing degradation of waters of the State as a result of waste discharges to landfills. All newly constructed portions of the landfill are designed to isolate wastes from waters of the State pursuant to Title 27, Section 20260. This is accomplished by installing a composite liner system. This Order requires an 80-mil thick High Density Polyethylene (HDPE) liner, overlaying two feet of clay compacted to a permeability of not more than  $1 \times 10^{-7}$  cm/sec for the landfill base liner system.
13. Where conditions warrant, the Regional Board may require liner designs to exceed the minimum standards of Subtitle D, which consist of 60-mil HDPE overlaying two-feet of clay. The following conditions serve as a basis for requiring an 80-mil thick liner at the base of the landfill:
  - The landfill is located upgradient from Santa Clara Valley Water District's groundwater recharge areas.
  - The landfill is located adjacent to Guadalupe Creek.

5/22/01

- The landfill is located in area likely to experience strong seismic events and landslides.
  - The landfill area has fractured and weak bedrock zones.
  - The landfill has experienced past leakage from older cells.
  - Over the past decade the Board has approved 80-mil thick liner for new and expanded landfills as a standard requirement due to its greater strength and water quality protection.
  - 80-mil thick liner has a 33% greater yield and break strength compared to a 60-mil liner, and a 20% greater puncture resistance.
14. The 80-mil thick HDPE liner standard is also intended to apply to canyon wall/side slopes where additional protection from irregular rock surfaces upon which the liner is placed is not provided. Title 27, Section 20080(b) allows the Board to consider the approval of engineered alternatives to the prescriptive standard. Composite liner designs for sideslopes that incorporate an HDPE liner thinner than the 80-mil standard will be considered, as will be manufactured low-permeability components in lieu of the clay liner. Such engineered alternatives will not require revision of this Order.
15. This Order specifies the incorporation of an underdrain as part of the liner design for the landfill and is similar for underdrain requirements specified in Waste Discharge Requirements for canyon landfills in the region. The required underdrain is an engineered alternative to the regulatory requirement, contained in Title 27, Section 20240(C), that waste remain separated from the highest anticipated groundwater by a minimum of five-feet. Support for this requirement is based on the presence of shallow groundwater at the bottom of the canyon and seeps observed along the canyon walls. For this reason, an underdrain is required to ensure an adequate groundwater separation from waste wherever there is a potential for groundwater to come within five feet of the wastes.
16. In order to proceed with the development of any future landfill developments, the discharger must, as required by Title 27, Section 21750(f)(5)(A), provide slope stability analyses, ensuring the integrity of the waste management unit under both static and dynamic conditions throughout the unit's life. Section 21750(f)(5)(C) further provides that the discharger show a factor of safety for the unit's critical slope of at least 1.5 under dynamic conditions. Section 21750(f)(5)(D) allows for an exception where the discharger can estimate the magnitude of movement during the maximum probable earthquake (MPE), and demonstrate that this amount of movement can be accommodated without jeopardizing the integrity of the Unit. The discharger has provided the required slope stability analyses.

## GEOLOGICAL SETTING

17. The site consists of moderately steep canyon land, near the base of the Santa Cruz Mountains along the southwestern edge of the Santa Clara Valley. Three principal geologic units underlay the landfill; canyon fill alluvium/colluvium, Temblor Formation Bedrock, and Franciscan Formation Bedrock. The canyon fill deposits are located predominantly beneath the western portion of the site, near the toe of the landfill. This fill material consists of clay interbedded with gravel and coarse sand particles, approximately 25 to 30 feet thick, and is underlain by both the Temblor and Franciscan Formation Bedrock. The near surface Temblor and Franciscan Formations are separated by a branch of the Shannon Fault, which extends northeast-southwest, approximately through the center of the canyon and bisecting the landfill. The Temblor Formation Bedrock, lying to the north of the fault, is primarily sandstone, while much of the Franciscan Formation which lies to the south of the fault consists of serpentine, greywacke and m $\acute{e}$ lange.
18. Earthquakes posing a threat to the landfill could occur along the San Andreas, Berrocal, or Shannon fault zones. The San Andreas and Berrocal fault zones are located approximately 6 miles and 1 mile from the landfill, respectively. The branch of the Shannon Fault that passes through the landfill is not considered to be active within the landfill, but may be active north of the landfill. It is also believed that movement on the San Andreas Fault may result in impacts to the Shannon Fault. The Maximum Probable Earthquake (MPE) for the San Andreas Fault is estimated to be a magnitude 8.3 event, with a resulting average peak ground accelerations at the landfill calculated at 0.54g. The MPE for the Berrocal and Shannon fault zones have been estimated to be magnitude 6.9 and 6.6 events, respectively. The resulting average peak ground accelerations at the landfill, for both the Berrocal and the Shannon fault zones, have been calculated at 0.70g.

On December 21, 1990, the discharger submitted, pursuant to Provision C.3 of Order No. 90-139, a detailed inspection and corrective action plan to be implemented in the event of any earthquake generating ground shaking of a Modified Mercalli intensity V or greater event at or near the landfill. The plan requires reporting post-earthquake inspection results to the Board within 18 hours of the occurrence of the earthquake. In the event of any damage due to liquefaction, or other slope failure, a corrective action plan shall be implemented immediately, and the Board notified immediately.

19. The site is located within the New Almaden mercury-mining district, and consequently, numerous historic mines are located in the vicinity of the landfill. Most of the ore mined in the district was removed prior to 1890; however, sporadic mining operations have taken place as recently as the mid-1970's. The existing landfill lies generally north of, and beyond a ridge from several mine adits, shafts and slopes, which the ROWD

5/22/01

collectively refers to as the mine workings. The ROWD identified several areas where the existing mine workings could impact the proposed expansion, and discusses various alternative actions intended to minimize the potential for migration of leachate, and maximize the stability of the new landfill areas. The alternative mitigation measures discussed in the ROWD include plugging, backfilling, and partial excavation of mine workings, and/or combinations of these methods. The ROWD also included relocation of proposed roads and disposal units as an alternative for precarious areas where mitigation measures were determined to be insufficient or infeasible. The discharger has now completed mitigation for all mine workings that might have posed a threat to the integrity of the landfill.

20. Some mining tunnels and shafts might extend beneath the southern ridge into areas proposed for future landfill development. However, most of the mine workings lie beneath an area that has been developed as a maintenance yard that is not part of the landfill development.

## **SURFACE WATER**

21. Guadalupe Creek, which drains a large area to the south, west, and east of the site, is the principal drainage in the area. The runoff from the landfill discharges into a tributary creek at the western limit of the fill deposits, then water in this tributary creek flows northwest to Guadalupe Creek. Approximately a mile and a half downstream of this confluence, the Santa Clara Valley Water District (SCVWD) has installed percolation basins along Guadalupe Creek, to facilitate recharge of the region's groundwater municipal water supply.
22. The discharger submitted a surface water quality evaluation program, on May 14, 1993, pursuant to a staff request. This summarized weekly analysis of four surface water-monitoring stations. This study concluded that the runoff from the landfill was not impacting Guadalupe Creek. However, more recent stormwater analyses indicate that there may be impacts as it has been observed that the TDS of the surface water outflow from the site is significantly higher than background.
23. The stormwater runoff from most of the site drains westward to a sedimentation pond; a portion of the site drains to the east to a smaller pond. Both ponds are sized to contain a 100 year, 24 hour storm.

## **HYDROGEOLOGY**

24. Section 13273 of the California Water Code requires that all owners of solid waste disposal sites perform a solid waste assessment test (SWAT) to determine if hazardous wastes have migrated from their site. The discharger submitted the results of this study in

Guadalupe Rubbish Disposal Company

5/22/01

August 1987. The results of the SWAT, and analytical results contained in subsequent Discharge Monitoring Reports indicate that the existing landfill was leaking waste constituents into groundwater adjacent to and downgradient of the fill areas, though not at levels exceeding hazardous waste levels. Some of the waste constituents that had migrated beyond the limits of the landfill exceeded the Maximum Contaminant Levels (MCL) for drinking water recommended by the California Department of Health Services. These constituents include several heavy metals (cadmium, manganese, lead and chromium) some inorganic ions (sulfate), and in a few cases volatile organics. The TDS of the groundwater is naturally elevated, ranging between 1000 to 3000 ppm, and the major ions are magnesium and sulfate. The landfill leachate ions are more typically composed of sodium and chloride ions.

25. The bedrock of the foothills, in the Guadalupe drainage system, contains groundwater that eventually enters the Shannon Fault and the shallow alluvial materials of the Santa Clara Valley. This groundwater also discharges into the tributary creek at the western edge of the site. Groundwater that is not directly recharging Guadalupe Creek flows in the direction of the Water District's percolation basins. Depth to groundwater beneath the existing landfill ranges from 8 to 20 feet. Groundwater, within the Franciscan bedrock west and downgradient of the termination of the canyon fill deposits, occurs at a depth of approximately 30 feet, and appears to be confined beneath low permeability clay materials. The hydraulic conductivity of the bedrock ranges between  $3 \times 10^{-6}$  and  $1 \times 10^{-3}$  cm/sec, and the groundwater primarily exists in various fractures in the rock. The hydraulic conductivity of the alluvium is typically between  $1 \times 10^{-2}$  and  $1 \times 10^{-3}$  cm/sec.
26. While there have been no springs identified at the site, several nonflowing seeps (moist soil conditions caused by localized shallow subsurface flow) have been observed in portions of the landfill. Due to the complex nature of the hydrogeologic conditions at the site, the discharger was requested to provide additional hydrogeologic study to better define localized variations in site conditions. Pursuant to Provision C.4 of Order No. 90-139, the discharger submitted a report titled Characterization of Hydrogeological Conditions on November 23, 1992.

The discharger also submitted an investigation of the East-Side Groundwater Monitoring system on November 20, 1995, and an investigation on the west-side groundwater monitoring system on May 29, 1997, pursuant to staff requests. The 1992 report shows that the Shannon fault zone is more permeable than the bedrock on either side, and that groundwater flows from all areas underlying the landfill toward the fault zone, then migrates along the fault zone toward the western expansion area. A portion of the eastern expansion area lies east of a GW divide, and groundwater in this area moves eastward in the bedrock along the fault zone. The report recommended the installation of a channel drain (or C-drain) to permanently lower water levels and GW flow beneath the expansion area, and an interceptor drain (I-drain) to collect shallow groundwater migrating from

5/22/01

beneath the existing landfill. The 1997 report looked at the high inorganic concentrations in the downgradient detection wells, and concluded that these were naturally occurring. The poorest quality GW comes from the deepest well (G-9C). The I-drain contains low concentrations of VOCs, as it was designed to capture the leading edge of a plume of solvent contaminated GW.

27. The discharger submitted a Leachate Management Plan in April 1991. The Plan was requested by Provision C.5 of Order No. 90-139, and was intended to identify landfill operations to minimize leachate generation, to control migration of the leachate within the landfill, and identify means of collecting, treating, disposing or reusing the collected leachate. This report was updated by a site investigation submitted on April 29, 1994. After review of several options, the leachate from the west-side expansion area (L-3), the leachate from the 39-acre landfill (L-1), the GW interceptor trench along the old burn dump, and a channel drain along a former stream channel beneath the toe berm, are all collected in separate pipes which run westward through the active area of the landfill, then through the toe berm to a secondarily lined area. From there, the leachate, I-drain, and channel drain are pumped to a sewage treatment plant. The leachate from the 6-acre expansion to the east (L-2) is collected separately in a secondarily contained tank, and then hauled on-site to a sewer connection or off-site to the POTW as appropriate. The leachate and drain flows average as follows: L-1 = 1900 GPD, L-2 = 120-5000 GPD, L-3 = 340 GPD, I-drain = 2450 GPD, and the C-drain = 1670 GPD.

### **CORRECTIVE ACTION**

28. A corrective action-monitoring program is required for one area adjacent to the landfill, where VOCs have been detected in groundwater. An evaluation-monitoring program was completed for this area in 1991. Groundwater in the vicinity of wells G-8, G-10, G-11, G-15, G-13 and G-14 had shown traces of five different VOCs. The discharger continues to monitor wells G-8, G-10, and G-11R and extracted groundwater from these wells is applied as dust control when available and necessary. This extraction is generally 600-4000 gallons at a time, for a total of up to 20,000 gallons per month. The concentrations of VOCs detected in this area have decreased over the past several years, and the discharger believes that the groundwater in this area flows towards, and is captured by, the I-drain. The discharger shall continue to extract groundwater from G-10 and G-11R until such time that a technical demonstration indicates that containment of VOC impacted groundwater can be achieved by the existing groundwater interceptor barrier or by other means, and the corrective-action program is modified or found complete by the Executive Officer.

## MONITORING PROGRAMS

29. A groundwater-monitoring program has been conducted by the discharger since 1987. Order No. 90-139 contained several provisions concerning groundwater monitoring and leachate management. Pursuant to Order No. 93-113, the discharger submitted a proposed Subtitle D Self-Monitoring Program, on January 1994. This was approved by the Board in July 1995, with revisions, then modified again on the following dates: July 18, 1996; May 1, 1997; July 25, 1997; August 27, 1997; June 18, 1998; and February 25, 1999.
30. Groundwater: The discharger conducts quarterly detection monitoring at 6 wells, the I-drain and the C-drain, in areas downgradient from the landfill. The discharger also performs semiannual monitoring of the leachate (L-1, L-2, L-3) and semiannual correction action monitoring (wells G8, G10 and G11R). The detection-monitoring program relies mainly on volatile organic compounds to detect a release from the landfill. The high background concentrations of inorganic parameters already in the groundwater underlying the landfill preclude the use of these parameters to detect a release.
31. Leachate: The discharger measures the quantity of leachate pumped to the sewage treatment plant weekly, and semi-annually samples and analyses it.
32. Surface Water: The stormwater discharges from the site are currently monitored at 5 locations, quarterly during dry weather, and monthly during wet, as required by the State Board's General Permit for Stormwater Discharges Associated with Industrial Activities.
33. Vadose Zone: Vadose Zone monitoring, as required by Section 20415 (Title 27) is not technically feasible at this site. Groundwater is currently in contact with the subdrain, effectively eliminating the vadose zone.

## BASIN PLAN AND BENEFICIAL USES

34. The Regional Board adopted a revised Water Quality Plan for the San Francisco (Basin Plan) in June 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20 and November 13, respectively, of 1995. The Basin Plan defines beneficial uses and water quality objectives for Waters of the State, including both surface water and groundwater.
35. The existing and potential beneficial uses of the surface waters in the vicinity of the site include:

Guadalupe Rubbish Disposal Company  
5/22/01

Municipal Water Supply  
Wildlife Habitat  
Warm Fresh Water Habitat

36. The existing and potential beneficial uses of the ground waters in the vicinity of the site include:

Municipal Water Supply  
Agricultural Supply  
Industrial Process Water Supply  
Industrial Service Supply

A total of eight drinking water wells have been identified within one mile of the landfill.

### **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

37. This update of the Waste Discharge Requirements is exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15308, Title 14 of the California Code of Regulations.

### **NOTIFICATIONS AND MEETING**

38. The Board has notified the discharger and interested agencies and persons of its intent to update these waste discharge requirements, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
39. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Guadalupe Rubbish Disposal Company, and their agents, successors and assigns shall meet the applicable provisions contained in Title 27, Division 2, Subdivision 1 of the California Code of Regulations and Division 7 of the California Water Code, and shall comply with the following:

#### **A. PROHIBITIONS**

1. The discharge of "hazardous waste" or "designated waste" at this facility, except for waste that is hazardous due only to its friable asbestos content, is prohibited. For the purposes of this Order, the term "hazardous waste" is as defined in Section 2521 of Chapter 15, and "designated waste" is defined at Section 20210 of Title 27.

Guadalupe Rubbish Disposal Company

5/22/01

2. The discharge of liquid or semi-solid waste to any landfill unit, (i.e. waste containing less than 50% solids by weight), other than dewatered sewage or water treatment sludge as described in Section 20220(c) of Title 27, is prohibited per Section 20200(d)(3) of Title 27, unless the discharger obtains the prior approval of the Executive Officer and such discharge does not exceed the moisture holding capacity of the landfill, either initially or as a result of waste management operations, compaction, or settlement.
3. The discharge of wastes which have the potential to cause corrosion or decay, or otherwise reduce or impair the integrity of the containment structures or which, if mixed or commingled with other wastes in the unit, could produce a violent reaction (including heat or pressure, fire or explosion, or the production of toxic by-products) which:
  - a. requires a higher level of containment than provided by the unit,
  - b. are "restricted hazardous wastes," or
  - c. impairs the integrity of the containment structures,is prohibited per Section 20200(2)(b) of Title 27.
4. Neither the treatment nor the discharge of waste shall create a condition of pollution, contamination or nuisance as defined in Section 13050 of the California Water Code (CWC) (Health & Safety Code Section 5411, CWC Section 13263).
5. Wastes **shall not** be placed in any portion of a newly constructed phase until the Executive Officer receives and has approved the detailed plans relating to the design and construction of the containment structures. Construction of the containment features of all future phases must be in compliance with this Order and Title 27 requirements. Waste **shall not** be placed in any portion of a newly constructed phase until the Executive Officer receives and approves the supporting Final Construction Quality Assurance (CQA) documentation for the construction of the containment structures, and has received written certification by a California registered civil engineer or certified engineering geologist that the containment structures have been constructed in accordance with those plans.
6. Wastes **shall not** be placed in or allowed to contact ponded water from any source whatsoever.
7. Wastes **shall not** be disposed of in any position where they migrate from the disposal site to adjacent geologic materials, waters of the State or of the United States during disposal operations, closure, and during the post-closure maintenance period, per Section 20310(a) of Title 27.

Guadalupe Rubbish Disposal Company

5/22/01

8. The discharger, or any future owner or operator of this site, shall not cause the following conditions to exist in waters of the State at any place outside the waste management facility:

a. Surface Waters

- Floating, suspended, or deposited macroscopic particulate matter or foam.
- Bottom deposits or aquatic growth.
- Adversely alter temperature, turbidity, or apparent color beyond natural background levels.
- Visible, floating, suspended or deposited oil or other products of petroleum origin.
- Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

b. Groundwater

- The groundwater shall not be degraded as a result of the waste disposal operation.

9. Leachate from wastes and ponded water containing leachate or in contact with solid waste **shall not** be discharged to waters of the State or the United States.

10. Surface water collected from within the limits of waste disposal area **shall not** be discharged to waters of the State except as permitted by an NPDES Permit.

**B. SPECIFICATIONS**

1. Water used during disposal operations shall be limited to a minimal amount necessary for dust suppression, fire control and earthfill moisture conditioning.

2. The site shall be protected from any washout or erosion of wastes or covering material and from inundation that could occur as a result of a 100-year, 24-hour precipitation event, or as the result of flooding with a return frequency of 100 years.

3. Surface drainage from tributary areas, and internal site drainage from surface and subsurface sources, shall not contact or percolate through wastes during disposal

Guadalupe Rubbish Disposal Company

5/22/01

operations or during the life of the site. Surface drainage from tributary areas, and internal site drainage from surface sources, shall be collected using surface drainage ditches, and/or other conveyance and collection methods. The Stormwater General Permit issued by the State Board shall govern the discharge of these water discharges. Surface drainage ditches shall be constructed and maintained to ensure that rainwater is diverted away from the disposal area

4. The discharger shall design, install and operate a Leachate Collection and Removal System, (LCRS), acceptable to the Executive Officer, for all of the landfill areas, such that no more than one-foot of hydraulic head of leachate remains on any portion of the landfill liner. The system shall be designed and operated to collect and remove twice the potential daily maximum volume of leachate, and to function without clogging (Section 20340 of Title 27), shall be inspected monthly, and any accumulated fluid shall be removed and disposed of to the sanitary sewer. The discharger shall submit reports, on an annual basis, which demonstrate that the leachate control system is functioning properly.

Measures shall be taken to ensure that leachate in the leachate collection system can flow freely into any collection sump. Measures shall also be taken to assure that the LCRS will remain operational throughout the closure/post-closure maintenance period of the landfill.

5. The discharger shall ensure that all engineered structures (including, but not limited to, containment structures) of any part of the landfill shall have a foundation capable of providing support for the structures, and capable of withstanding hydraulic pressure gradients to prevent failure due to settlement, compression, or uplift and all effects of ground motions, from at least the maximum probable earthquake event at the San Andreas, Berrocal and Shannon fault zones.
6. The existing containment, drainage, and monitoring systems at the landfill shall be maintained as long as the wastes and leachate pose a threat to water quality. The discharger shall continue the water quality-monitoring program, pursuant to Section 20410 of Title 27, as long as a threat of a release from the landfill exists.
7. As portions of the landfill are closed, the exterior surfaces shall be graded to promote lateral runoff of precipitation and to prevent ponding and infiltration of water. The final cover for the landfill will be constructed on 2.5:1 (horizontal/vertical) slopes with 20-foot wide benches at 50-foot vertical intervals. This allows for an overall slope angle of 3:1 (horizontal/vertical). In addition, all completed disposal areas shall be covered with a minimum of 4 feet of cover to include 2 feet structural base; 1-foot low permeability clay barrier; and 1-foot vegetative soil. The final cover must also meet all other applicable requirements as described in Title 27.

Guadalupe Rubbish Disposal Company

5/22/01

8. Slopes within and adjacent to the disposal area shall be maintained in such a manner as to minimize the potential for sliding by control of grades, drainage or other means. Any slides shall be stabilized as soon as possible, and the Regional Board shall be notified immediately.
9. The discharger shall operate the waste management facility so as to isolate waste from waters of the State and so as to prevent a statistically significant difference from existing in the concentrations of monitoring parameters (defined in Section 20420 of Title 27) in waters passing through the point of compliance, as defined in Section 20405, Title 27.
10. In the event of a measurably significant evidence of a release of a constituent of concern beyond the Point of Compliance, or where there is significant physical evidence of a release from the landfill, the site begins an Evaluation Monitoring Program under Section 20425 of Title 27. The discharger shall then institute a corrective action program under Section 20430 of Title 27, when the Board determines that the assessment of the nature and extent of the release and the design of a Corrective Action Program have been satisfactorily completed, and the Board approves the application for an amended report of waste discharge for corrective action submitted by the discharger during the evaluation monitoring program. In certain areas of the landfill, the discharger has already implemented Corrective Action measures in response to VOC detections.
11. The discharger shall install any additional groundwater and leachate monitoring devices required to fulfill the terms of any future Discharge-Monitoring Program issued by the Executive Officer.
12. Non-hazardous solid wastes, asbestos and medical wastes may be disposed of provided that all regulations and provisions of the California Integrated Waste Management Board, California Department of Toxic Substances Control, local health agencies and County Land Use Permit requirements are complied with. Hazardous wastes may not be disposed of or stored at this site.
13. The minimum criteria for the landfill base liner shall include, but not be limited to: a one foot thick granular underdrain, overlain by two feet of low permeability clay (with a hydraulic conductivity not more than  $1 \times 10^{-7}$  cm/sec), overlain by an 80-"mil" thick HDPE liner, overlain by a cushion geotextile where required to protect the liner from the LCRS gravel, overlain by a one-foot thick dendritic LCRS designed and operated to prevent the development of hydraulic head on the liner, overlain by a filter geotextile, and lastly overlain by a one-foot thick operations layer. For landfill canyon wall/sideslopes, upon Executive Officer approval, engineered alternatives to this prescriptive standard will be considered, including the use of HDPE liners thinner than 80-mil, as well as the use of manufactured low-permeability components in lieu of the clay layer. In addition,

Guadalupe Rubbish Disposal Company

5/22/01

upon approval of the Executive Officer, the underdrain, where not needed to ensure a five-foot separation between wastes and groundwater, may be deleted for landfill canyon wall/sideslopes.

14. All reports pursuant to this Order shall be prepared under the supervision of a registered civil engineer, California registered geologist or certified engineering geologist.
15. Cover shall be maintained over all wastes, except for the working face of the disposal area of the landfill, as provided for by the performance standards adopted by the California Integrated Waste Management Board.
16. Methane and other landfill gases shall be adequately vented, removed from the landfill units, or otherwise controlled to prevent the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration of gas through the vadose (unsaturated) zone.
17. Interim and final leachate sumps and berms shall be designed and constructed to withstand the maximum probable earthquake at the facility.
18. Landfill leachate shall be discharged to an aboveground, secondarily contained, enclosed tank or piped/transported to the POTW. Recirculation of leachate and landfill gas condensate shall be limited to areas of the landfill equipped with a composite liner and leachate collection and recovery system.
19. This Board considers the property owner and site operator to have continuing responsibility for correcting any problems which arise in the future as a result of this waste discharge or related operations during the active life and post-closure maintenance period.
20. The discharger shall provide a minimum of two surveyed permanent monuments near the landfill from which the location and elevation of wastes, containment structures, and monitoring facilities can be determined throughout the operation and post-closure maintenance period. These monuments shall be installed by a licensed land surveyor or registered civil engineer.
21. 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 by the discharger to achieve compliance with this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary



5/22/01

five-year cycle. These Development Plans shall be updated as they are changed or annually at a minimum.

**REPORT DUE DATE: FIRST REPORT – JULY 23, 2001**

6. The discharger shall submit final design proposals acceptable to the Executive Officer for all future landfill construction. The proposal shall include detailed specifications for construction of composite liners and leachate collection and removal systems and shall include quality assurance & quality control procedures for all aspects of construction and installation. The proposal shall include slope stability analyses (including seismic stability analyses) for the proposed liner. All design reports must be approved in writing by the Executive Officer, prior to disposal of wastes in those areas.

**FINAL DESIGN REPORT DUE DATE:** 2 months prior to start of construction.

7. The discharger shall submit as-built construction drawings and final Construction Quality Assurance (CQA) documentation for the construction of all new liner systems. The CQA will demonstrate that the construction of new containment features was in full compliance with this Order and Title 27 requirements. The CQA will contain written certification by a California registered civil engineer or a certified engineering geologist that the containment structures were built in accordance with a Board approved final design proposal. No waste shall be placed in any portion of a newly constructed phase until the Executive Officer receives and approves the CQA documentation.

**AS-BUILT DRAWINGS AND CQA PLAN DUE DATES:** Prior to anticipated waste disposal.

8. The discharger shall submit a Final Cover Construction Plan, acceptable to the Executive Officer, which shall include, but is not limited to, the following: a schedule for completion of all construction field activities; a CQA testing frequencies for in-place soils and any borrow materials; waste consolidation plans and associated post-removal analyses; final cover design drawings; details of landfill gas and leachate well contingencies during cover construction; proposed final landfill gas and leachate well configuration with system changes.

**PLAN DUE DATE:** 180 days prior to anticipated receipt of last waste, and 180 days prior to any portion of the landfill achieving final grade.

9. The dischargers shall submit a letter report to the Board, acceptable to the Executive Officer, detailing the repair and maintenance activities that need to be completed prior to the commencement of the following rainy season. This letter shall also include a schedule for repair and maintenance activities, and cost analyses detailing the anticipated

Guadalupe Rubbish Disposal Company

5/22/01

expense for all repairs, maintenance, and monitoring during the next 12 months. Repair and maintenance estimates shall be based on rainy season inspections conducted throughout the winter as required in the attached Discharge Monitoring Plan.

**REPORT DUE DATE:** July 31 yearly.

10. The discharger shall submit a Contingency Plan, acceptable to the Executive Officer, intended to stop and contain the migration of pollutants to receiving waters, to be instituted in the event of a surface leak or spill from the leachate facilities. Immediately after an event causing a release from the landfill, the contingency plan shall be implemented and the discharger shall give immediate notification to the Regional Water Quality Control Board and the Local Enforcement Agency.

**REPORT DUE DATE:** July 2, 2001

11. The discharger shall maintain, in conjunction with this Board and the California Integrated Waste Management Board, an **Irrevocable Closure/Postclosure Fund**, pursuant to Title 27, Section 20950. The Closure Fund must provide sufficient funds to properly close the landfill and for the post-closure monitoring and maintenance of the site. For the purposes of planning the amount of the fund, the discharger shall assume a post-closure period of at least 30 years. However, the post-closure maintenance period shall extend as long as the wastes pose a threat to water quality. The discharger shall also maintain, pursuant to Title 27, Section 22222, a Corrective Action Fund, to ensure funds are available to address known or reasonably foreseeable releases from the landfill.

**REPORT DUE DATE:** Revalidate every 5 years.

12. If a groundwater contamination or potential contamination is detected, the discharger shall give immediate notification to the San Francisco Bay Regional Water Quality Control Board, the Local Enforcement Agency (LEA), and the Department of Health Services (DOHS). The discharger shall initiate its corrective action plan to stop and contain the migration of pollutants from the existing landfill.
13. The discharger shall file with the Regional Board Discharge-Monitoring reports performed according to any Discharge Monitoring Program issued by the Executive Officer.
14. The discharger shall comply with all applicable provisions of Title 27 that are not specifically referred to in this Order.
15. The discharger shall remove and relocate any wastes that are discharged at this site in violation of these requirements.

16. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of the waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site.
17. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
18. In the event that the discharger-owned property adjacent to the landfill is developed into residential dwellings, the discharger will notify prospective home purchasers of the presence of the landfill.
19. In accordance with California Water Code Section 13267 (c), the discharger shall, at any time, permit the Regional Board or its authorized representative, upon presentation of credentials:
  - a. Immediate entry upon the premises on which wastes are located or in which any required records are kept.
  - b. Access to copy any records required to be kept under the terms and conditions of this Order.
  - c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order or by any other California State agency.
  - d. Sampling of any discharge or groundwater governed by this Order.
20. The discharger shall immediately notify the Board of any flooding, equipment failure, slope failure, or other change in site conditions that could impair the integrity of waste or leachate containment facilities or precipitation and drainage control structures. Any such failure shall be promptly corrected after approval of the method and schedule by the Executive Officer.
21. The discharger shall notify the Regional Board at least 180 days prior to beginning any intermediate or final closure activities. This notice shall include a statement that all closure activities will conform to the most recently approved closure plan and that the plan provides for site closure in compliance with all applicable regulations.
22. The discharger shall submit, within 90 days after the closure of any portion of the landfill, a closure certification report that documents that the area has been closed according to the requirements of this Order and Title 27. The discharger shall certify under penalty of perjury that all closure activities were performed in accordance with the most recently approved closure plan and in accordance with applicable regulations.

Guadalupe Rubbish Disposal Company

5/22/01

23. This Order does not convey any property rights of any sort or any exclusive privileges. These requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under Federal, State or Local laws; and do not authorize the discharge of wastes without appropriate permits from other agencies or organizations, nor do they create a vested right for the discharger to continue the waste discharge (CWC Sections 13263 (g)).
24. This Order is subject to Board review and updating, as necessary, to comply with changing State or Federal laws, regulations, policies, or guidelines; changes in the Board's Basin Plan; or changes in the discharge characteristics.
25. The discharger shall file a technical report on any changes in site occupancy or ownership associated with the property described in this Order.
26. Provisions of these waste discharge requirements are severable. If any provisions of these requirements are found to be invalid, the remainder of these requirements shall not be affected.
27. Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit and/or correct such facts or information (CWFC Sections 13260 and 13267).
28. Reporting of Hazardous Substance Release: If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it probably will be, the discharger shall report such discharge to the Regional Board by calling (510) 622-2300 during regular office hours (Monday through Friday, 8 – 5). A written report shall be filed with the Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of the incident, cause of the release, estimated size of the affected area, nature of the effect, corrective actions taken or planned, schedule of corrective actions planned, and person/agencies notified. This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.
29. The discharger shall report any noncompliance that may endanger human health or the environment. Any such information shall be provided orally 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 five days of the time 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, and prevent

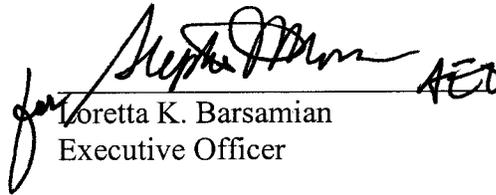
Guadalupe Rubbish Disposal Company

5/22/01

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 (CWC Sections 13263 and 13267).

30. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.
31. All samples shall be analyzed by State-certified laboratories, or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review. This provision does not apply to analyses that can only be reasonably performed onsite (e.g. temperature).
32. Board Order No. 90-139 is hereby rescinded.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 22, 2001.

  
Loretta K. Barsamian  
Executive Officer

Attachments: Figure 1, Site location  
Self-Monitoring Program  
Tables A-1 to A-5, Monitoring points, parameters & frequency

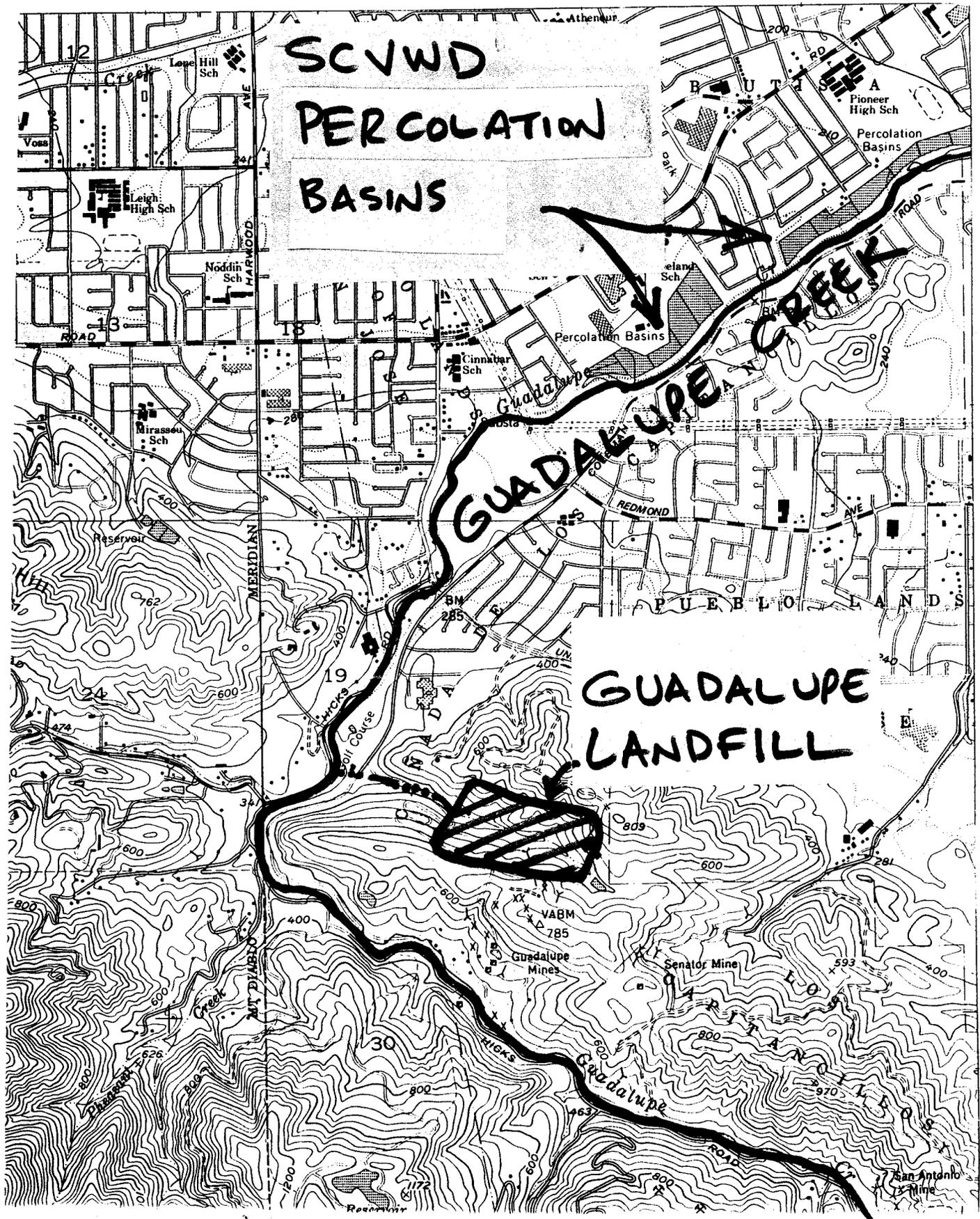


Figure 1. Location Map - Guadalupe Rubbish Disposal Company, San Jose, CA.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

GUADALUPE RUBBISH DISPOSAL COMPANY

CLASS III SOLID WASTE DISPOSAL SITE

SANTA CLARA COUNTY

ORDER NO. 01-050

CONSISTS OF

PART A

AND

PART B

## **DISCHARGE MONITORING AND REPORTING REQUIREMENTS**

### **A. GENERAL**

For discharges of waste to land, water quality monitoring is required pursuant to the California Code of Regulations, Division 2, Title 27, Subdivision 1, Chapter 3, Subchapter 3, Sections 20380 through 20435. The principal purposes of a discharge-monitoring program are: (1) to document compliance with waste discharge requirements and prohibitions established by the Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from the waste discharge, (3) to develop or assist in the development of effluent standards of performance, and toxicity standards, and (4) to assist the discharger in complying with the requirements of Title 27.

### **B. SAMPLING, ANALYTICAL METHODS AND OBSERVATIONS**

The Regional Board may require monitoring of any of the following media pursuant to Title 27 requirements:

1. Groundwater
2. Surface water (streams, stormwater runoff, etc.)
3. Leachate
4. Landfill gas

Sample collection, storage, and analyses shall be performed according to most recent version of EPA Standard Methods and in accordance with an approved sampling and analysis plan. Water and waste analyses shall be performed by a California State approved laboratory for the required analyses. The director of the laboratory whose name appears on the certification (or his/her duly authorized representative) shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

The reporting of standard observations refers to the following:

#### **a. Receiving waters**

1. Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.
2. Discoloration and turbidity: description of color, source, and size of affected area.

Guadalupe Rubbish Disposal Company

5/22/01

3. Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
4. Evidence of beneficial use: presence of water associated with wildlife.
5. Flow rate.
6. Weather conditions; wind direction and estimated velocity, total precipitation.

b. Perimeter of the waste management unit

1. Evidence of liquid leaving or entering the waste management unit, estimated size of affected area and flowrate (show affected area on map)
2. Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
3. Evidence of erosion and/or daylighted refuse.

c. The waste management unit

1. Evidence of ponded water at any point on the waste management facility.
2. Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
3. Evidence of erosion ad/or daylighted refuse.
4. Standard Analysis and measurements are listed on Table A (attached).

C. **REPORTING REQUIREMENTS**

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16 and Order No. 93-113. The reporting frequency and due dates for monitoring reports will be established by the Regional Board. Each monitoring report shall include the following information:

1. **Transmittal Letter:** A letter transmitting the essential points in each self-monitoring report shall accompany each report. The letter shall discuss any violations during the reporting period, and actions taken or planned for correcting the violations. The letter shall also certify the completion of all monitoring requirements. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, and shall include a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.
2. Each monitoring report shall include a compliance evaluation summary. The summary shall contain:

Guadalupe Rubbish Disposal Company

5/22/01

- 1) A graphic description of the velocity and direction of groundwater flow under/around the waste management unit, based upon the past and present water level elevations and pertinent visual observations.
- 2) A summary and certification of completion of all standard observations for the waste management unit, the perimeter of the waste management unit, and the receiving waters.
- 3) The quantity and types of wastes disposed of during the past quarter, and the locations of the disposal operations.
- 4) A map or aerial photograph shall accompany each report showing observation and monitoring station locations.
- 5) Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification (or his/her duly authorized representative) shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.

The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review and approval by the Executive Officer prior to use.

In addition to the results of the analyses, laboratory quality control/quality assurance (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.

- 6) An evaluation of the effectiveness of the leachate monitoring/ control facilities, which includes an evaluation of leachate buildup within the disposal units, a summary of leachate volumes removed from the units, and a discussion of the leachate disposal methods utilized.

**3. Contingency Reporting:**

- a. A report shall be made by telephone of any seepage from the disposal area immediately after it is discovered. A written report shall be filed with the Board within five days. This report shall contain the following information:
  - 1) a map showing the location(s) of discharge;
  - 2) approximate flow rate;
  - 3) nature of effects; i.e. all pertinent observations and analyses; and
  - 4) corrective measures underway or proposed.
- b. A report shall be made in writing to the Board within seven days of determining that a statistically significant difference occurred between a self-monitoring sample set and a WQPS. Notification shall indicate what WQPS(s) have been exceeded. The discharger shall immediately resample at the compliance point(s) where this difference has been found and analyze another sample set of at least four portions split in the laboratory from the source sample.
- c. If resampling and analysis confirms the earlier finding of a statistically significant difference between self-monitoring results and WQPS(s) the discharger must submit to the an amended Report of Waste Discharge as specified in Section 20420 for establishment of an Evaluation Monitoring program meeting the requirements of Section 20425 of Title 27.
- d. Within 180 days of determining statistically significant evidence of a release, submit to the Regional Board an engineering feasibility study for a Corrective Action Program necessary to meet the requirements of Section 20430. At a minimum, the feasibility study shall contained a detailed description of the corrective action measures that could be taken to achieve background concentrations for all constituents of concern.

**4. Appendices**

The method and time of water level measurement, the type of pump used for purging, pump placement in the well; method of purging, pumping rate, equipment and methods used to monitor field pH, temperature, and conductivity during purging, calibration of the field equipment, results of the pH, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water.

5/22/01

Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations.

A boring log shall be submitted for each new sampling well established for this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Department of Water Resources. These shall be submitted within 30 days after well installation.

**D. ANNUAL REPORTING**

By April 30 of each year the discharger shall submit an annual report to the Board covering the previous calendar year. This report shall contain:

- a. Tabular and graphical summaries of the monitoring data obtained during the previous year.
- b. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
- c. A map showing the area, if any, in which filling has been completed during the previous calendar year.
- d. A written summary of the groundwater analyses indicating any change in the quality of the groundwater.
- e. An evaluation of the effectiveness of the leachate monitoring/ control facilities, which include an evaluation of leachate buildup within the disposal units, a summary of leachate volumes removed from the units, and a discussion of the leachate disposal methods utilized.

**E. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS**

Written self-monitoring reports shall be filed by the April 30 and October 31 of each year. As part of the April 30 report, the discharger shall submit an annual monitoring report.

**F. RECORDS TO BE MAINTAINED**

Written reports shall be maintained by the discharger, and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.
2. Date and time of sampling.
3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used. A reference to a specific section of a reference required in Part A, Section B is satisfactory.
5. Calculation of results.
6. Results of analyses, and detection limits for each analyses.

Part B

1. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS

A. WASTE MONITORING – Observe Monthly

1. Record the total volume and weight of refuse in cubic yards and tons disposed at the site during each month showing locations and dimensions on a sketch or map.
2. Record a description of waste stream to include percentage of waste type, i.e., Residential, Commercial, Industrial or Construction/ Demolition debris.
3. Record location and aerial extent of disposal of each waste type since the last reporting period.

B. ON-SITE OBSERVATIONS

**Stations V-1 to V-10:** Weekly Standard observations of the waste disposal.

**Stations P-1 to P-10:** Weekly standard observations of the landfill perimeter

**Receiving Water:** Monthly standard observations.

C. SURFACE, GROUND WATER AND LEACHATE MONITORING

The discharger shall sample surface water, groundwater, and leachate as detailed in Table A-1 to A-5.

D. FACILITIES MONITORING

The discharger shall inspect all facilities to ensure proper and safe operation once per month and report the results of these inspections in the semi-annual monitoring reports. The facilities to be monitored shall include, but not be limited to:

- a. Leachate Collection and Removal System
- b. Sedimentation Pond
- c. Leachate Tanks
- d. Perimeter diversion channels

Guadalupe Rubbish Disposal Company  
5/22/01

e. Leachate Management procedures and containment capacity.

E. REPORT DUE DATES

Reports shall be due on the following schedule:

**FIRST SEMI-ANNUAL REPORT**

**& ANNUAL REPORT:**

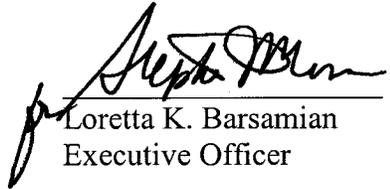
April 30 of each year

**SECOND SEMI-ANNUAL REPORT:**

October 31 of each year

I, Loretta K. Barsamian, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in this Board's Order No. 01-050.
2. Is effective on the date shown below.
3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer.

  
Loretta K. Barsamian  
Executive Officer

Date Ordered: May 22, 2001

Attachment: Tables A-1 to A-5, Monitoring points, parameters & frequency

**TABLE A-1 – GROUNDWATER DETECTION MONITORING**

STATION	SAMPLING FREQUENCY	PURPOSE	ANALYTICAL PARAMETERS
G-3A	Quarterly	Detection	Monitoring parameters (1A)
G-4	Quarterly	Detection	Monitoring parameters (1A)
G-6B	Quarterly	Detection	Monitoring parameters (1A)
G-9A	Quarterly	Detection	Monitoring parameters (1A)
G-9B	Quarterly	Detection	Monitoring parameters (1A)
G-9C	Quarterly	Detection	Monitoring parameters (1A)
I-Drain	Quarterly	Detection	Monitoring parameters (1A), rate of pumping, metals (1B)
C-Drain	Semi-Annual	Detection	Monitoring parameters (1A), rate of pumping, metals (1B)

(1A) VOCs (EPA 8260B plus MTBE), Chloride, Sulfate, Nitrate. Plus the additional field parameters: pH, Temperature, Electrical Conductivity, TDS, Dissolved oxygen. **Every 5 years**, also analyze for the following additional constituents of concern: semi-volatile compounds (EPA 8270), metals (California Title 22 list), organophosphorus compounds (EPA 8141), and chlorinated herbicides (EPA 8151). The next such monitoring is to occur in Spring 2001.

(1B) Semiannual measurements of copper, lead, nickel and zinc, mercury, and amount pumped to POTW.

**TABLE A-2 – GROUNDWATER CORRECTIVE ACTION MONITORING**

STATION	SAMPLING FREQUENCY	PURPOSE	ANALYTICAL PARAMETERS
G-8	Semi-Annual	Corrective Action	Monitoring Parameters (1C), volume extracted
G-10	Semi-Annual	Corrective Action	Monitoring Parameters (1C), volume extracted
G-11R	Semi-Annual	Corrective Action	Monitoring Parameters (1C), volume extracted

(1C) VOCs (EPA 8260B plus MTBE), plus the following field parameters: pH, Temperature, Electrical Conductivity, Dissolved oxygen

**TABLE A-3 – LEACHATE MONITORING**

STATION	SAMPLING FREQUENCY	ANALYTICAL PARAMETERS
L-1	Semi-Annual	Monitoring Parameters (1D), quantity pumped
L-2	Semi-Annual	Monitoring Parameters (1D), quantity pumped
L-3	Semi-Annual	Monitoring Parameters (1D), quantity pumped

(1D) VOCs (EPA 8260 plus MTBE), copper, lead, nickel, zinc, mercury, monthly measurement of quantity pumped, and the following field parameters: pH, Temperature, Electrical Conductivity, Dissolved oxygen.

**TABLE A-4 – STORMWATER MONITORING**

<b>STATION</b>	<b>SAMPLING FREQUENCY</b>	<b>ANALYTICAL PARAMETERS</b>
SW1	Monthly*	Monitoring Parameters (2)
SW1	Annual**	Stormwater metals (3)
SW2	Monthly*	Monitoring Parameters (2)
SW2	Annual**	Stormwater metals (3)
SW3	Monthly*	Monitoring Parameters (2)
SW3	Annual**	Stormwater metals (3), EPA 608
SW4	Monthly*	Monitoring Parameters (4)
SW5	Monthly*	Monitoring Parameters (4)

\*Monthly = First qualifying storm event of every month of the rainy season (October through May of every year).

\*\*Annual = First stormwater event of every rainy season (October through May).

Monitoring parameters (2): TDS, Chloride, nitrate, TOC, TSS, Iron, and the following field parameters: Electrical Conductivity, pH, and Dissolved oxygen.

Stormwater metals (3): Arsenic, cadmium, chromium VI, copper, lead, mercury, nickel, silver and zinc.

Monitoring parameters (4): TSS, Iron, and the following field parameters: Electrical Conductivity, pH, and Dissolved oxygen.

**TABLE A-5 WATER LEVEL MEASUREMENT**

STATION	FREQUENCY
G-3A	Quarterly
G-4	Quarterly
G-6A	Quarterly
G-7	Quarterly
G-8	Quarterly
G-9A	Quarterly
G-9B	Quarterly
G-9C	Quarterly
G-10	Quarterly
G-11R	Quarterly
G-12	Quarterly
G-15	Quarterly
G-16	Quarterly
P-1	Quarterly
P-4	Quarterly
P-5	Quarterly
P-6	Quarterly
P-13	Quarterly
P-14	Quarterly
P-15	Quarterly



# California Regional Water Quality Control Board

## San Francisco Bay Region



Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov>  
1515 Clay Street, Suite 1400, Oakland, California 94612  
Phone (510) 622-2300 • FAX (510) 622-2460

Gray Davis  
Governor

DATE: **MAY 23 2001**  
File No. 2189.8068 (ADF)

CERTIFIED MAIL No. 70993220000146713785  
RETURN RECEIPT REQUESTED

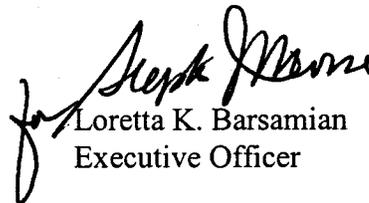
Paul Michael  
Guadalupe Rubbish Disposal Company  
P.O. Box 20957  
San Jose, CA 95160

Subject: **ADOPTION OF ORDER NO. 01-050**

Dear Mr. Michael:

The Regional Board adopted Order No. 01-050 at its regular monthly meeting on Tuesday, May 22, 2001. I have attached the adopted order. Should you have any questions regarding this item, please call Alan Friedman of my staff at (510) 622-2347, or by E-mail at [adf@rb2.swrcb.ca.gov](mailto:adf@rb2.swrcb.ca.gov).

Sincerely,

  
Loretta K. Barsamian  
Executive Officer

Attachment: Order No. 01-050  
Cc: Mailing List

MAILING LIST:

Dennis Ferrier  
City of San Jose  
Solid Waste Local Enforcement Agency  
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