CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 97-007 13-AA-0008

WASTE DISCHARGE REQUIREMENTS
FOR
COUNTY OF IMPERIAL, OWNER/OPERATOR
BRAWLEY CLASS III MUNICIPAL SOLID WASTE MANAGEMENT FACILITY
North of Brawley - Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. On November 13, 1996, the County of Imperial (hereinafter referred to as the discharger) owner and operator of the Brawley Class III Municipal Solid Waste Management Facility (hereinafter referred to as the waste management facility (WMF)), submitted an application to the Regional Water Quality Control Board (Regional Board) for Waste Discharge Requirements (WDRs).

2. The WMF is located in the NW 1/4 of Section 28, NE 1/4 of Section 29, T13S, R14E, SBB&M. The discharger reports that there is no assigned address to the WMF. However, the general location of the WMF is south of the New River, east of Western Avenue at Brawley Dump Road, Brawley, as shown on the attached Site Map.

3. On June 17, 1993, the State Water Resources Control Board (State Board) adopted Resolution No. 93-062 as the Policy for Regulation of Discharges of Municipal Solid Waste (Policy). The Policy directs each Regional Water Quality Control Board to revise the waste discharge requirements for each Municipal Solid Waste (MSW) landfill in its respective region to comply with the federal MSW regulations.

4. On September 15, 1993, the Regional Board adopted waste discharge requirements in Board Order No. 93-071 for all municipal solid waste landfills in the Colorado River Basin Region to implement State Board Resolution No. 93-062 until the existing facility-specific waste discharge requirements are updated.

5. Definitions: The following terms used in this Board Order are as defined:

   a. Waste Management Facility (WMF) - means the entire parcel of property at which waste discharge operations are conducted. Such a facility may include one or more waste management units.

   b. Waste Management Unit - means an area of land or a portion of a property at which waste is discharged. The term includes containment features and ancillary features for precipitation and drainage control and monitoring.

   c. Landfill - means a waste management unit at which waste is discharged in or on land for disposal. It does not include surface impoundments, waste pile, land treatment, or soil amendments.

   d. Working Face - means that portion of the active landfilling area where waste is not covered by daily cover.

e. Contact Water - means Surface/Storm run-on that cannot be diverted from the immediate working face area or that comes into contact with MSW.

f. Non-Contact Water - means Surface/Storm Water that has not come into contact with MSW.

g. Surface/Storm Water - means any rainwater, leachate or other liquid that drains over and from or onto any part of the waste management facility. It may serve as a monitoring medium to confirm the effectiveness of (1) landfill cover materials; and (2) the separation of Contact Water from Non-Contact Water.

6. On April 21, 1995, the discharger submitted to the Regional Board a revised preliminary closure plan. The present volume of material disposed at this WMF is 600,000 cubic yards. It has an estimated remaining life of 4 years. The WMF occupies an area of 52 acres. The footprint area is approximately 34 acres.

7. The WMF has a total potential waste capacity of approximately 400,000 tons, with an approximate total volume of 995,000 cubic yards.

8. Land use within one mile of the WMF includes agricultural, light and heavy industrial, and open space. The City of Brawley is located within one mile of the WMF. The discharger has determined a postclosure land use for the WMF as open space.

9. The New River flows along the northern boundary of the WMF. The discharger reports that runoff of Non-Contact Water from the WMF discharges into the New River.

10. The discharger reports that the WMF is not located in a 100-year flood plain.

11. The WMF is located in the Imperial Valley. The valley slopes gently to the northeast on a very flat plain. General land elevation is between 120 and 125 feet below mean sea level in the vicinity of the WMF.

12. The dominant geomorphic feature in the region is the Salton Trough, a part of the Colorado Desert Geomorphic Province. The Imperial Valley is essentially a flat featureless alluvial basin. Below the alluvial cover of Imperial Valley lies an unexposed succession of Tertiary and Quaternary sedimentary rocks thought to be at least 20,000 feet thick. Surface sediments consist of Holocene clay and silt alluvium grading to sandy gravel near the mountains.

13. During Quaternary times, from at least 13,000 years ago to as recently as several hundred years ago, the central parts of Imperial Valley, including the site, periodically lay beneath ephemeral lakes such as ancient Lake Cahuilla. Lake Cahuilla resulted from periodic overflow and diversions of the Colorado River into the Salton Basin. Sediments from these ephemeral lakes consist primarily of silt and clay in the central portion of the basin.

14. Active fault zones occur in the Imperial Valley. The principal fault zone is the San Andreas system, which runs parallel to the northeast margin of the Salton Trough. The Clark and Coyote Creek branches of the San Jacinto fault zone transect the southwest flank of the Salton Trough. The Brawley fault zone, including the seismic zone that marks its northward extension, and the Imperial, Superstition Hills and the Superstition Mountain faults are situated on or near the axis of the Trough. With the exception of the Brawley fault zone, all the above named faults display the surficial features characteristic of the San Andreas system throughout California: linearity, northwest-southeast trend, physiographic evidence of recent activity and right-lateral displacement.

15. The climate of the region is arid. Climatological data obtained from measurements at Imperial from 1951 to 1980 indicate an average seasonal precipitation of 2.5 inches and an average annual pan evaporation rate greater than 50 inches.

16. The wind direction follows two general patterns:

    a. From late fall to early spring, prevailing winds are from the west and northwest. Humidity is lowest under these conditions.

    b. Summer weather patterns are often dominated by an intense, heat-induced low pressure area that forms over the interior deserts, drawing air from the area to the south of the WMF. Humidity is highest under these conditions.

17. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted on November 17, 1993 and designates the beneficial uses of ground and surface waters in this Region.

18. The Brawley WMF is located in the Imperial Hydrologic Unit. The designated beneficial uses of ground waters in the Imperial Hydrologic Unit are:

    a. Municipal supply (MUN)
    b. Industrial supply (IND)

19. Within the Imperial Valley area of the Imperial Hydrologic Unit, much of the ground water is too saline for municipal use.

20. The beneficial uses of waters in the New River are:

    a. Fresh Water Replenishment of Salton Sea (FRSH)
    b. Water Contact Recreation (REC I)
    c. Noncontact Water Recreation (REC II)
    d. Warm Water Habitat (WARM)
    e. Wildlife Habitat (WILD)
    f. Preservation of Rare, Endangered or Threatened Species (RARE)

21. Federal regulations for storm water discharges were promulgated by the U. S. Environmental Protection Agency on 16 November 1990 (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharge storm water associated with industrial activity to obtain NPDES permits and to implement Best Conventional Pollutant Technology (BCT) to reduce or eliminate industrial storm water pollution.

22. The State Water Resources Control Board adopted Order No. 91-13-DWQ (General Permit No. CAS000001), as amended by Water Quality Order No. 92-12-DWQ, specifying waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the Permit.

23. This discharge has been subject to waste discharge requirements adopted in Board Order No. 91-031 as amended by Board Order No. 93-071.

24. The discharger proposes to close the Landfill in year 2000.

25. This Board Order updates the waste discharge requirements to comply with current laws and regulations as set forth in the California Water Code and the California Code of Regulations.

26. The Board has notified the discharger and all known interested agencies and persons of its intent to update waste discharge requirements for said discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.

27. The Board in a public meeting heard and considered all comments pertaining to this discharge.

28. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these waste discharge requirements, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et. seq.).

IT IS HEREBY ORDERED, that Board Order No. 91-031 is rescinded, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the discharger shall comply with the following:

A. Prohibitions

1. The direct discharge of any waste to any surface waters or surface drainage courses is prohibited.

2. The discharge of waste to land not owned or controlled by the discharger is prohibited.

3. The discharge or deposit of hazardous waste (as defined in Chapter 15, Division 3, Title 23, California Code of Regulations (hereinafter referred to as Chapter 15)) at this site is prohibited.

4. The discharge or deposit of designated waste (as defined in Chapter 15) at this site is prohibited unless approved by the Regional Board's Executive Officer.

5. The discharge of liquid or semi-solid waste (i.e., waste containing less than 50 percent solids) to the waste management facility is prohibited unless approved by the Regional Board's Executive Officer.

6. The co-disposal of incompatible wastes is prohibited.

7. The discharge shall neither cause nor contribute to any surface water contamination or pollution, including, but not limited to:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Increases in bottom deposits or aquatic growth;

   c. An adverse change in temperature, turbidity, or apparent color beyond natural background levels;

   d. The creation or contribution of visible, floating, suspended or deposited oil or other products of petroleum origin; and,

e. The introduction or increase in concentration of toxic or other pollutants/contaminants resulting in unreasonable impairment of beneficial uses of waters of the State.

B. Specifications

1. Waste materials shall be confined as described in Finding 5 c. and on the attached site maps.

2. Waste material shall not be discharged on any ground surface which is less than five feet above the highest anticipated ground water level.

3. The WMF shall be operated and maintained to prevent inundation or washout due to floods having a predicted frequency of once in 100 years.

4. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources, shall not contact or percolate through the wastes discharged at this site.

5. The exterior surfaces of the disposal area, including the intermediate and final landfill covers, shall be graded and maintained to promote lateral runoff of precipitation and to prevent ponding.

6. There shall be no discharge of liquid wastes at this site unless approved by the Regional Board's Executive Officer.

7. The discharger shall implement the attached Monitoring and Reporting Program No. 97-007 in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the WMF, or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the WMF.

8. The discharge shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed its respective background value in any monitored medium at any Monitoring Point assigned to Detection Monitoring pursuant to Part II.C.4. of the attached Monitoring and Reporting Program No. 97-007.

9. The discharge shall not cause the release of pollutants, or waste constituents in a manner which could cause a condition of contamination, or pollution to occur, as indicated by the most appropriate statistical (or non-statistical) data analysis method and retest method listed in Part III of the attached Monitoring and Reporting Program No. 97-007.

10. The discharger shall comply with the Water Quality Protection Standard (Standard) for Detection Monitoring. The five parts of the Standard (Section 2550.2 of Chapter 15) are as follows:

    a. Constituents of Concern (Section 2550.3 of Chapter 15). The list of Constituents of Concern (1) for water-bearing media (i.e. ground water, surface water, and soil-pore liquid) consists of the combined listing of all constituents in Appendices I and II to 40 CFR Part 258 in addition to TDS, Sulfate, Carbonate, pH, and chloride, and (2) for soil-pore gas consists of all volatile organic constituents (VOCs) detectable via gas chromatography. Constituents of Concern, and many other terms of art used in this Order, are defined in Part I.C. of the attached Monitoring and Reporting Program No. 97-007.

    b. Concentration Limits (Section 2550.4 of Chapter 15). For each Monitoring Point assigned to a Detection Monitoring Program (M&R Part II.C.4.), the Concentration Limit for each Constituent of Concern (or Monitoring Parameter) shall be its background value as obtained during that Reporting Period (defined in M&R Part I.C.9.), as follows:

1. If 10% or more of the samples taken during a given Reporting Period from the Background Monitoring Points for a monitored medium exceed their respective Facility-Specific Method Detection Limit (MDL) - see M&R Part I.C.7. - for a given constituent, then the Concentration Limit for that medium and constituent shall consist of the mean (or median, as appropriate) and the standard deviation (or other measures of central tendency, as appropriate) of all the background data obtained for that constituent from the medium during that Reporting Period; otherwise

2. The Concentration Limit for that medium and constituent shall be its MDL.

c. Monitoring Points and Background Monitoring Points for Detection Monitoring (Section 2550.5, of Chapter 15) shall be those listed in Part II.C.4. of the attached Monitoring and Reporting Program No. 97-007 and shown on Attachment No. 1, appended to and made a part of this Board Order.

d. Points of Compliance (Section 2550.5 of Chapter 15). The Points of Compliance, B-WW-3, B-WW-4, B-WW-5 and B-WW-6 are shown on Attachment No. 1, and extend down through the Zone of Saturation (Section 2601 of Chapter 15).

e. Compliance Period (Section 2550.6 of Chapter 15). The estimated duration of the Compliance Period for this WMF is 30 years. Each time the Standard is broken (i.e., a release is discovered), the WMF begins a Compliance Period on the date the Regional Board directs the discharger to begin an Evaluation Monitoring Program. If the discharger's Corrective Action Program (CAP) has not achieved compliance with the Standard by the scheduled end of the Compliance Period, the Compliance Period is automatically extended until the WMF has been in continuous compliance for at least three consecutive years (Section 2550.6(c) of Chapter 15).

11. The Monitoring Parameters for Detection Monitoring for water samples include:

1. pH, Total Dissolved Solids (TDS), Chloride, Nitrate Nitrogen, and each VOC that exceeds its respective (facility-specific) MDL in at least ten percent of the background samples from a given water body (surface water body, aquifer, perched zone, or soil-pore liquid) during that Reporting Period. These Monitoring Parameters are subject to the most appropriate statistical test under M&R Part III.A.1.

C. Provisions

1. The discharger shall immediately notify the Regional Board of any flooding, slope failure or other change in site conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.

2. The discharger shall maintain legible records on the volume and type of each waste discharged at the site. These records shall be available for review by representatives of the Regional Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Board.

3. The discharger shall maintain visible monuments identifying the boundary limits of the entire waste management facility.

4. One year prior to the anticipated closure of the WMF the discharger shall submit to the Regional Board, for review and approval by the Regional Board's Executive Officer, a closure and post-

closure maintenance plan in accordance with California Code of Regulations, Title 23, Chapter 15 (hereinafter referred to as Chapter 15), Section 2597.

5. The discharger shall comply with all applicable provisions of Chapter 15 that are not specifically referred to in this Board Order.

6. Annually, prior to the first day of November, any necessary erosion control measures shall be implemented and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion and flooding of the site; and the report thereon shall be submitted to the Regional Board by November 15 of each year.

7. Water used for site maintenance shall be limited to amounts necessary for dust control.

8. All containment structures and erosion and drainage control systems 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 performance goals of Chapter 15.

9. The discharger shall maintain in good working order, and operate as efficiently as possible, any facility or control system installed by the discharger to achieve compliance with these waste discharge requirements.

10. This Board Order is subject to Regional Board review and updating, as necessary to comply with changing State or Federal laws, regulations, policies, or guidelines, or changes in the discharge characteristics.

11. The Regional Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge.

12. The discharge shall neither cause nor contribute to the contamination or pollution of ground water via the release of waste constituents in either liquid or gaseous phase.

13. The discharge shall not cause any increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil or other geologic materials outside the WMF if such waste constituents could migrate to waters of the State in either the liquid or the gaseous phase, and cause a condition of contamination or pollution.

14. The discharger shall comply with all prohibitions, specifications and provisions of this Board Order immediately upon adoption of this Board Order.

15. The discharger, within 18 hours of a significant earthquake event, shall inform the Regional Board's Executive Officer by telephone of any physical damages to the containment features and ground water monitoring facilities, and within 10 working days submit to the Regional Board a detailed post-earthquake report describing any physical damages to the containment features, ground water monitoring and/or leachate control facilities, and a corrective action plan to be implemented at the landfill.

16. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.

17. The discharger shall ensure that all site operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.

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

19. 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 premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;

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

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

    d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at the WMF.

20. The discharger shall comply with all of the conditions of this Board Order. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act and is grounds for enforcement action.

21. This Board Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

22. The discharger may be required to submit technical reports as directed by the Regional Board's Executive Officer.

23. The discharger shall develop and implement a Storm Water Pollution Prevention Plan for this facility. The plan must be submitted to the Regional Board's Executive Officer for review and approval no later than 90 days after adoption of this Board Order.

24. All storm water discharges from this facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to storm water drain systems or other courses under their jurisdiction.

25. The discharger shall submit a Notice of Intent (NOI) to the State Water Resources Control Board to be covered under the Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, Order No. 91-13-DWQ (as amended by Order No.92-12-DWQ), NPDES No. CAS000001. The discharger shall comply with all the discharge prohibitions, receiving water limitations, and provisions of the General Permit, including the development and implementation of a Storm Water Pollution Prevention Plan. The Storm Water Pollution Prevention Plan shall be submitted to the Regional Board's Executive Officer for review and approval no later than 90 days after the adoption of this Board Order.

26. The discharger shall submit a sampling and monitoring plan for storm water discharges to the Regional Board's Executive Officer for review and approval no later than 90 days after the adoption of this Board Order. The plan shall meet the minimum requirements of Section B,

Monitoring Program and Reporting Requirements of the Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, Order No. 91-13-DWQ (as amended by Order No. 92-12-DWQ), NPDES No. CAS000001.

27. Storm water discharges from the facility shall not cause or threaten to cause pollution or contamination.

28. Storm water discharges from the facility shall not contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.

29. The discharger shall submit to this Regional Board and to the California Integrated WasteManagement Board, evidence of Financial Assurance for Closure and Post Closure, pursuant to Section 2580(f) of Chapter 15. The post-closure period shall be at least 30 years. However, the post-closure maintenance period shall extend as long as the waste poses a threat to water quality.

30. Within 180 days of the adoption of this Board Order, the discharger shall submit to the Regional Board, in accordance with Section 2550(b) of Chapter 15, assurances of financial responsibility acceptable to the Regional Board's Executive Officer for initiating and completing corrective action for all known or reasonably foreseeable releases from the landfill.

I, Philip A. Gruenberg, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on January 22, 1997.

Philip A. Gruenberg
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 97-007
FOR
COUNTY OF IMPERIAL , OWNER/OPERATOR
BRAWLEY CLASS III MUNICIPAL SOLID WASTE MANAGEMENT FACILITY
North of Brawley - Imperial County

CONSISTS OF
PART I, PART II AND PART III

PART I

A. GENERAL

Responsibilities of waste dischargers are specified in Section 13225(a), 13267(b), and 13387(a) of the California Water Code, and the State Water Resources Control Board's Resolution No. 93-062. This self-monitoring program is issued pursuant to Specification No. 7 of Regional Board Order No. 97-007. The principal purposes of a self-monitoring program by a waste discharger are:

1. To document compliance with waste discharger requirements and prohibitions established by the Regional Board;

2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge;

3. To conduct water quality analyses.

B. SAMPLING AND ANALYTICAL METHODS

Sampling collection, storage, and analysis shall be performed according to the most recent version of Standard USEPA methods, and in accordance with an approved sampling and analysis plan. Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. Specific methods of analysis must be identified. If methods other than USEPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board's Executive Officer prior to use. The director of the laboratory whose name appears on the certification 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. In addition, the discharger is responsible for seeing that the laboratory analysis of all samples from Monitoring Points and Background Monitoring Points meets the following restrictions:

1. The methods and analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e. "trace" or "ND") in data from Background Monitoring Points for that medium, the analytical methods having the lowest "facility-specific method detection limit (MDL)", defined in Part I.C.7., shall be selected from among those methods which would provide valid results in light of any "Matrix Effects" (defined in Part I.C.6.) involved.

2. "Trace" results, results falling between the MDL and the facility-specific practical quantitation limit (PQL), shall be reported as such, and shall be accompanied both by the estimated MDL and PQL values for that analytical run and by an estimate of the constituents concentration.

3. MDLs and PQLs shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. These MDLs and PQLs shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab, rather than simply being quoted from USEPA analytical method manuals. If the lab suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-

derived MDL/PQL values, the results shall be flagged accordingly, along with an estimate of the detection limit and quantitation limit actually achieved.

4. All QA/QC data shall be reported, along with the sample results to which it applies, including the method, equipment, and analytical detection limits, the recovery rates, an explanation of 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. Sample results shall be reported unadjusted for blank results or spike recovery.

5. Upon receiving written approval from the Regional Board's Executive Officer, an alternative statistical or non-statistical procedure can be used for determining the significance of analytical results for a constituent that is a common laboratory contaminant (i.e., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given Reporting Period in which QA/QC samples show evidence of laboratory contamination for that constituent. Nevertheless, analytical results involving detection of these analytes in any background or downgradient sample shall be reported and flagged for easy reference by Regional Board staff.

6. Unknown chromatographic peaks shall be reported, along with an estimate of the concentration of the unknown analyte. When unknown peaks are encountered, second column or second method confirmation procedures shall be performed to attempt to identify and more accurately quantify the unknown analyte.

7. In cases where contaminants are detected in QA/QC samples (i.e. field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged.

8. The MDL shall always be calculated such that it represents a concentration associated with a 99% reliability of a non-zero result.

C. DEFINITION OF TERMS

1. The "Monitored Media" are those water- or gas-bearing media that are monitored pursuant to this Monitoring and Reporting Program. The Monitored Media may include: (1) ground water in the uppermost aquifer, in any other portion of the zone of saturation (Section 2601 of Chapter 15) in which it would be reasonable to anticipate that waste constituents migrating from the WMF could be detected, and in any perched zones underlying the WMF, (2) any bodies of surface water that could be measurably affected by a release, (3) soil-pore liquid beneath and/or adjacent to the WMF, and (4) soil-pore gas beneath and/or adjacent to the WMF.

2. The "Constituents of Concern (COC)" are those constituents which are likely to be in the waste in the WMF or which are likely to be derived from waste constituents, in the event of a release. The Constituents of Concern for this WMF are listed in Specification 10 of Board Order, No. 97-007.

3. The "Monitoring Parameters" consist of a short list of constituents and parameters used for the majority of monitoring activity. The Monitoring Parameters for this WMF are listed in Specification 11 of Board Order No.97-007. Monitoring for the short list of Monitoring Parameters constitutes "indirect monitoring", in that the results are used to indirectly indicate the success or failure of adequate containment for the longer list of Constituents of Concern.

4. The "Volatile Organics Composite Monitoring Parameter for Water (VOC_{water})" and the "Volatile Organics Composite Monitoring Parameter for Soil-Pore Gas (VOC_{spg}) are composite Monitoring Parameters addressing all volatile organic constituents detectable in a sample of water or soil-pore gas, respectively. (See Part III.A.2. of this Program for additional discussion of these Monitoring Parameters).

5. "Standard Observations" refers to:

   a. For 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;

      3. Evidence of odors: presence or absence, characterization, source, and distance of travel from source;

      4. Evidence of beneficial use: presence of water-associated wildlife;

      5. Flow Rate; and

      6. Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

   b. Along the perimeter of the WMF:

      1. Evidence of liquid leaving or entering the WMF, estimated size of affected area, and flow rate (show affected area on map);

      2. Evidence of odors: presence or absence, characterization, source, and distance of travel from source; and

      3. Evidence of erosion and/or of exposed refuse.

   c. For the WMF:

      1. Evidence of ponded water at any point on the waste management facility (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 of daylighted refuse; and

      4. "Standard Analysis and Measurements", which refers to:

         a. Turbidity (only for water samples) in NTU:

         b. Water elevation to the nearest 1/100th foot above mean sea level (only for ground water monitoring); and

c. Sampling and statistical/non-statistical analysis of the Monitoring Parameters.

6. "Matrix Effect" refers to any increase in the Method Detection Limit or Practical Quantitation Limit for a given constituent as a result of the presence of other constituents - either of natural origin or introduced through a release - that are present in the sample of water or soil-pore gas being analyzed.

7. "Facility-Specific Method Detection Limit (MDL)", for a given analytical laboratory using a given analytical method to detect a given constituent (in spite of any Matrix Effect) means the lowest concentration at which the laboratory can regularly differentiate - with 99% reliability - between a sample which contains the constituent and one which does not.

8. "Facility-Specific Practical Quantitation Limit (PQL)", for a given analytical laboratory using a given analytical method to determine the concentration of a given constituent (in spite of any Matrix Effect) means the lowest constituent concentration the laboratory can regularly quantify within specified limits of precision that are acceptable to the Regional Board's Executive Officer.

9. "Reporting Period" means the duration separating the submittal of a given type of monitoring report from the time the next iteration of that report is scheduled for submittal; therefore, the reporting period for analysis of all Constituents of Concern is five years, and for Monitoring Parameters it is six months ("Summer/Fall" = April 1 to September 30; "Winter/Spring" = October 1 to March 31). The Reporting Period for the Annual Summary Report extends from April 1 of the previous year to March 31 of the current year. The due date for any given report will be 30 days after the end of its Reporting Period, unless otherwise stated.

10. "Receiving Waters" refers to any surface water which actually or potentially receives surface or ground waters which pass over, through, or under waste materials or contaminated soils. In this case the following surface water bodies are considered Receiving Waters: The New River.

11. "Affected Persons" refers to all individuals who either own or reside upon the land that directly overlies any part of that portion of a gas-or liquid-phase release that has migrated beyond the facility boundary.

D. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger or laboratory, 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 Regional Board. Such records shall show the following for each sample:

1. Identity of sample and of the Monitoring Point or Background Monitoring Point from which it was taken, along with the identity of the individual who obtained the sample;

2. Date and time of sampling;

3. Date and time that analyses were started and completed, and the name of the personnel performing each analysis;

4. Complete procedure used, including method of preserving the sample, and the identify and volumes of reagents used;

5. Calculations of results; and

6. Results of analyses, and the MDL and PQL for each analysis.

E. REPORTS TO BE FILED WITH THE BOARD

1. A written "Detection Monitoring Report" shall be submitted twice annually (Part II.C.2.), in addition to an "Annual Summary Report" (Part I.E.3.). Every five years, the discharger shall submit a report concerning the direct analysis of all Constituents of Concern as indicated in Part II.C.3. ("COC Report"). All reports shall be submitted no later than one month following the end of their respective Reporting Period. The reports shall be comprised of at least the following:

   a. Letter of Transmittal

      A letter transmitting the essential points in each report shall accompany each report. Such a letter shall include a discussion of any requirement violations found since the last such report was submitted, and shall describe actions taken or planned for correcting those violations. If the discharger has previously submitted a detailed time schedule for correcting said requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice-president or above, or by his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain 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;

   b. Each Detection Monitoring Report and each COC Report shall include a compliance evaluation summary. The summary shall contain at least:

      1. For each monitored ground water body, a description and graphical presentation of the velocity and direction of the ground water flow under/around the WMF, based upon water level elevations taken during the collection of the water quality data submitted in the report;

      2. <u>Pre-Sampling Purge for Samples Obtained From Wells</u>: For each monitoring well addressed by the report, a description of the method and time of water level measurement, of the type of pump used for purging and the placement of the pump in the well, and of the method of purging (the pumping rate, the equipment and methods used to monitor field pH, temperature, and conductivity during purging, the calibration of the field equipment, results of the pH, temperature, conductivity, and turbidity testing, the well recovery time, and the method of disposing of the purge water);

      3. <u>Sampling</u>: For each Monitoring Point and Background Monitoring Point addressed by the report, a description of the type of pump - or other device - used and its placement for sampling, and a detailed description of the sampling procedure

(number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the type of 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);

4. Post-Sampling Purge (Section 2550(e)(12)(B) of Chapter 15): For each monitoring well addressed by the report, a description of how the well was purged to remove all portions of the water that was in the well bore while the sample was being taken;

c. A map or aerial photograph showing the locations of observation stations, Monitoring Points, and Background Monitoring Points;

d. For each Detection Monitoring Report and each COC Report, include laboratory statements of results of all analyses demonstrating compliance with Part I.B.;

e. An evaluation of the effectiveness of the run-off/run-on control facilities;

f. A summary and certification of completion of all Standard Observations (Part I.C.7.) for the WMF, for the perimeter of the WMF, and for the Receiving Waters; and

g. The quantity and types of wastes discharged and the locations in the WMF where waste has been placed since submittal of the last of such report.

2. CONTINGENCY REPORTING

a. The discharger shall report by telephone concerning any seepage from the disposal area immediately after it is discovered. A written report shall be filed with the Regional Board within seven days, containing at least the following information:

1. A map showing the location(s) of seepage;
2. An estimate of the flow rate;
3. A description of the nature of the discharge (e.g., all pertinent observations and analyses); and
4. Corrective measures underway or proposed.

b. Should the initial statistical comparison (Part III.A.1.) or non-statistical comparison (Part III.A.2.) indicate, for any Constituent or Concern of Monitoring Parameter, that a release is tentatively identified, the discharger shall immediately notify the Regional Board verbally as to the Monitoring Point(s) and constituents(s) or parameter(s) involved, shall provide written notification by certified mail within seven days of such determination (Section 2550.8(j)(1) of Chapter 15), and shall carry out a discrete retest in accordance with Parts II.C.1., and III.A.3. If the retest confirms the existence of a release, the discharger shall carry out the requirements of Part I.E.2.d. In any case, the discharger shall inform the Regional Board of the outcome of the retest as soon as the results are available, following up with written results submitted by certified mail within seven days of completing the retest.

c. If either the discharger or the Regional Board determines that there is significant physical evidence of a release (Section 2550.1(3) of Chapter 15), the discharger shall immediately notify the Regional Board of this fact by certified mail (or acknowledge the Regional Board's determination) and shall carry out the requirements of Part I.E.2.d. for all potentially-affected monitored media.

d. If the discharger concludes that a release has been discovered:

   1. If this conclusion is <u>not</u> based upon "direct monitoring" of the Constituents of Concern, pursuant to Part II.C.3., then the discharger shall, within thirty days, sample for all Constituents of Concern at all Monitoring Points and submit them for laboratory analysis. Within seven days of receiving the laboratory analytical results, the discharger shall notify the Regional Board, by certified mail, of the concentration of all Constituents of Concern at each Monitoring Point. Because this scan is not to be tested against background, only a single datum is required for each Constituent of Concern at each Monitoring Point (Section 2550.8(k)(1) of Chapter 15);

   2. The discharger shall, within 90 days of discovering the release, submit a Revised Report of Waste Discharge proposing an Evaluation Monitoring Program meeting the requirements of Section 2550.8(k)(5) and Section 2550.9 of Chapter 15; and

   3. The discharger shall, within 180 days of discovering the release, submit a preliminary engineering feasibility study meeting the requirements of Section 2550.8(k)(6) of Chapter 15.

e. Any time the discharger concludes - or the Regional Board Executive Officer directs the discharger to conclude - that a liquid- or gaseous-phase release from the WMF has proceeded beyond the facility boundary, the discharger shall so notify all persons who either own or reside upon the land that directly overlies any part of the plume (Affected Persons).

   1. Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the discharger's current knowledge of the nature and extent of the release; and

   2. Subsequent to initial notification, the discharger shall provide updates to all Affected Persons - including any newly Affected Persons - within 14 days of concluding there has been any material change in the nature or extent of the release.

3. ANNUAL SUMMARY REPORT

The discharger shall submit an annual report to the Regional Board covering the previous monitoring year. The Reporting Period ends March 31. This report shall contain:

a. <u>A Graphical Presentation of Analytical Data</u> (Section 2550.7(e)(14) of Chapter 15). For each Monitoring Point and Background Monitoring Point, submit in graphical format the laboratory analytical data for all samples taken within at least the previous five calendar years. Each such graph shall plot the concentration of one or more constituents over time for a given Monitoring Point and Background Monitoring Point, at a scale appropriate to show trends or variations in water quality. The graphs shall plot each

datum, rather than plotting mean values. For any given constituent or parameter, the scale for background plots shall be the same as that used to plot downgradient data. On the basis of any aberrations noted in the plotted date, the Regional Board's Executive Officer may direct the discharger to carry out a preliminary investigation (Section 2510(d)(2) of Chapter 15), the results of which will determine whether or not a release is indicated;

b. All monitoring analytical data obtained during the previous two six-month Reporting Periods, presented in tabular form as well as on 5.25" diskettes, either in MS-DOS/ASCII format or in another file format acceptable to the Regional Board's Executive Officer. Data sets too large to fit on a single 360 K.B. diskette may be submitted on disk in a commonly available compressed format (e.g., PK-ZIP or NORTON BACKUP). The Regional Board regards the submittal of data in hard copy and on diskette as "...the form necessary for..." statistical analysis (Section 2550.8(h) of Chapter 15), in that this facilitates periodic review by the Regional Board's statistical consultant;

c. A comprehensive discussion of the compliance record, and the result of any correction actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements;

d. A map showing the area, if any, in which filling has been completed during the previous calendar year;

e. A written summary of the ground water and soil-pore gas analyses, indicating any changes made since the previous annual report; and

f. An evaluation of the effectiveness of the leachate monitoring/control facilities, pursuant to Section 2543 (b, c, & d) of Chapter 15.

4. Each report shall contain the following statement

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, 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 for knowing violations.:

5. Submit all reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring, Suite 100
Palm Desert, CA 92260

PART II: MONITORING AND OBSERVATION SCHEDULE

A. WASTE MONITORING

Report twice annually, as part of the Monitoring Report (Winter/Spring and Summer/Fall Reporting Periods on March 31, and September 30, respectively):

1. Record the total volume and weight of refuse in cubic yards and tons) disposed of at the site during each month, showing locations and dimensions on a sketch or map.

2. Record a description of the waste stream, including the percentage of the waste type (i.e., residential, commercial, industrial, or construction debris).

3. Record the location and aerial extent of disposal of each waste type.

B. ON-SITE OBSERVATIONS

Report twice annually, as part of the Monitoring Report (Winter/Spring and Summer/Fall Reporting Periods ending on March 31, and September 30, respectively):

STATION	DESCRIPTION	OBSERVATIONS	FREQUENCY
V-1 through V-'n'	Located on waste disposal area as delineated by a 500-foot grid network	Standard Observations for the WMF	Weekly
P-1 through P-'n'	Located at equidistant intervals not exceeding 1000 feet around the perimeter of the WMF	Standard Observation for the Perimeter	Weekly

C. WATER ANALYSIS FOR DETECTION MONITORING

Monitoring Parameter Report due twice annually, Constituent of Concern Reports due every five years (details below).

1. Thirty-Day Sample Procurement Limitation. For any given monitored medium, the samples taken from all Monitoring Points and Background Monitoring Points to satisfy the data analysis requirements for a given reporting period shall all be taken within a span not exceeding 30 days, and shall be taken in a manner that insures sample independence to the greatest extent feasible (Section 2550.7(e)(12)(B) of Chapter 15). Ground water sampling shall also include an accurate determination of the ground water surface elevation and field parameters (temperature, electrical conductivity, turbidity) for that Monitoring Point or Background Monitoring Point (Section 2550.7(e)(13) of Chapter 15); ground water elevations taken prior to purging the well and sampling for Monitoring Parameters shall be used to fulfill the Spring and Fall ground water flow rate/direction analyses required under

Part II.C.6. Statistical or non-statistical analysis shall be carried out as soon as the data is available, in accordance with Part III of this program.

2. "Indirect Monitoring" for Monitoring Parameters Done Twice-Annually. For each monitored medium, all Monitoring Points assigned to Detection Monitoring (Part II.C.4., below) and all Background Monitoring Points shall be monitored once each Spring and Fall (Winter/Spring and Summer/Fall Reporting Periods ending on March 31 and September 30, respectively) for the Monitoring Parameters listed in Specification 11 of this Board Order. Monitoring for Monitoring Parameters shall be carried out in accordance with Parts II.C.1. and III of this Program.

3. "Direct Monitoring" of all Constituents of Concern Every Five Years. In the absence of a release being indicated (1) pursuant to Parts II.C.2. and III.A.3. for a Monitoring Parameter, (2) based upon physical evidence, pursuant to Part I.E.2.c., or (3) by a study required by the Regional Board's Executive Officer based upon anomalies noted during visual inspection of graphically-depicted analytical data (Part I.E.3.a.), then the discharger shall sample all Monitoring Points and Background Monitoring Points of water-bearing media, not including soil-pore gas, for all Constituents of Concern every fifth year, beginning with the year of adoption of this Board Order, with successive direct monitoring efforts being carried out alternately in the Spring of one year (Report Period ends March 31) and the Fall of the fifth year thereafter (Reporting Period ends September 30). Direct monitoring for Constituents of Concern shall be carried out in accordance with Parts II.C.1. and III of this program, and shall encompass only those Constituents of Concern that do not also serve as a Monitoring Parameter.

4. Monitoring Points and Background Monitoring Points for Each Monitored Medium: The discharger shall sample the following Monitoring Points and Background Monitoring Points in accordance with the sampling schedules given under Parts II.C.2. and II.C.3. (immediately foregoing), taking enough samples to qualify for the most appropriate test under Part III.

   a. For ground water in the uppermost aquifer: The Monitoring Points shall be Point of Compliance wells B-WW-5, and B-WW-6, and B-WW-3, and B-WW-4; The Background Monitoring Points shall be wells B-WW-2, and B-WW-1.

5. Initial Background Determination: For the purpose of establishing an initial pool of background data for each Constituent of Concern at each Background Monitoring Point in each monitored medium (Section 2550.7(e)(6) of Chapter 15):

   a. Whenever a new Constituent of Concern is added to the Water Quality Protection Standard, including any added by the adoption of this Board Order, the discharger shall collect at least one sample quarterly for at least one year from each Background Monitoring Point in each monitored medium and analyze for the newly-added constituent(s); and

   b. Whenever a new Background Monitoring Point is added, including any added by this Board Order, the discharger shall sample it at least quarterly for at least one year, analyzing for all Constituents of Concern and Monitoring Parameters.

6. Quarterly Determination of Ground Water Flow Rate/Direction (Section 2550.7(e)(15) of Chapter 15): The discharger shall measure the water level in each well and determine ground water flow rate and direction in each ground water body described in Part II.C.4. at least quarterly, including the times of expected highest and lowest elevations of the water level for the respective ground water body. This information shall be included in the twice-yearly monitoring reports required under Part II.C.2.

PART III: STATISTICAL AND NON-STATISTICAL ANALYSES OF SAMPLE DATA DURING A DETECTION MONITORING PROGRAM

A. The discharger shall use the following methods to compare the downgradient concentration of each monitored constituent or parameter with its respective background concentration to determine if there has been a release from the WMF. For any given data set, proceed sequentially down the list of statistical analysis methods listed in Part III.A.1., followed by the non-statistical method in Part III.A.2., using the first method for which the data qualifies. If that analysis tentatively indicates the detection of a release, implement the retest procedure under Part III.A.3.

1. Statistical Methods. The discharger shall use one of the following statistical methods to analyze Constituents of Concern or Monitoring Parameters which exhibit concentrations exceeding their respective MDL in at least ten percent of the background samples taken during that Reporting Period. Each of these statistical methods is more fully described in the Statistical Methods Discussion which is attached to this Program and is hereby incorporated by reference. Except for pH, which uses a two-tailed approach, the statistical analysis for all constituents and parameters shall be one-tailed (testing only for statistically significant increase relative to background):

   a. One-Way Parametric Analysis of Variance ANOVA followed by multiple comparisons (Section 2550.7(e)(8)(A) of Chapter 15). This method requires at least four independent samples from each Monitoring Point and Background Monitoring Point during each sampling episode. It shall be used when the background data from the parameter of constituent, obtained during a given sampling period, has not more than 15% of the data below PQL. Prior to analysis, replace all 'trace' determinations with a value halfway between the PQL and the MDL values reported for that sample run, and replace all "non-detect" determinations with a value equal to half the MDL value reported for that sample run. The ANOVA shall be carried out at the 95% confidence level. Following the ANOVA, the data from each downgradient Monitoring Point shall be tested at a 99% confidence level against the pooled background data. If these multiple comparisons cause the Null Hypothesis (i.e., that there is no release) to be rejected at any Monitoring Point, the discharger shall conclude that a release is tentatively indicated from that parameter or constituent;

   b. One-Way Non-Parametric ANOVA (Kruskal-Wallis Test), followed by multiple comparisons. This method requires at least nine independent samples from each Monitoring Point and Background Monitoring Point, therefore, the discharger shall anticipate the need for taking more than four samples per Monitoring Point, based upon past monitoring results. This method shall be used when the pooled background data for the parameter or constituent, obtained within a given sampling period, has not more than 50% of the data below the PQL. The ANOVA shall be carried out 95% confidence level. Following the ANOVA, the data from each downgradient Monitoring Point shall be tested at 99% confidence level against the pooled background data. If these multiple comparisons cause the Null Hypothesis (i.e., that there is no release) to be rejected at any Monitoring Point, the discharger shall conclude that a release is tentatively indicated for that parameter or constituent; or

c. Method of Proportions. This method shall be used if the "combined data set", the data from a given Monitoring Point in combination with the data from the Background Monitoring Points, has between 50% and 90% of the data below the MDL for the constituent or parameter in question. This method (1) requires at least nine downgradient data points per Monitoring Point per Reporting Period, (2) requires at least thirty data points in the combined data set, and (3) requires that $N * P > 5$ (where N is the number of data points in the combined data set and P is the proportion of the combined set that exceeds the MDL); therefore, the discharger shall anticipate the number of samples required, based upon past monitoring results. The test shall be carried out at the 99% confidence level. If the analysis results in rejection of the Null Hypothesis (i.e., that there is no release), the discharger shall conclude that a release is tentatively indicated for that constituent or parameter; or

2. Non-Statistical Method. The discharger shall use the following non-statistical method for the VOC_{water} Composite Monitoring Parameters and for all Constituents of Concern which are not amenable to the statistical tests under Part III.A.1.; each of these groupings of constituents utilizes a separate variant of the test, as listed below. Regardless of the variant used, the method involves a two-step process: (1) from all constituents to which the variant applies, compile a list of those constituents which exceed their respective MDL in the downgradient sample, yet do so in less than ten percent of the applicable background samples; and (2) (where several independent samples have been analyzed for that constituent at a given Monitoring Point) from the sample which contains the largest number of constituents. Background shall be represented by the data from all samples taken from the appropriate Background Monitoring Points during that Reporting Period (at least one sample from each Background Monitoring Point). The method shall be implemented as follows:

   a. For the Volatile Organics Composite Monitoring Parameter for Water Samples (VOC_{water}): For any given Monitoring Point, the VOC_{water} Monitoring Parameter is a composite parameter addressing all VOCs detectable using USEPA Method 524-2, including at least all 47 VOCs listed in Appendix I, 40 CFR Part 258, and all unidentified peaks. Compile a list of each VOC which (1) exceeds its MDL in the Monitoring Point sample (an unidentified peak is compared to its presumed (MDL), and also (2) exceeds its MDL in less than ten percent of the samples taken during that Reporting Period from that medium's Background Monitoring Points. The discharger shall conclude that a release is tentatively indicated for the VOC_{water} Composite Monitoring Parameter if the list either (1) contains two or more constituents, or (2) contains one constituent that exceeds its PQL;

   b. For Constituents of Concern: Compile a list of constituents that exceed their respective MDL at the Monitoring Point yet do so in less than ten percent of the background samples taken during that Reporting Period. The discharger shall conclude that a release is tentatively indicated if the list either (1) contains two or more constituents, or (2) contains one constituent which exceeds its PQL.

3. Discrete Retest (Section 2550.7(e)(8)(E) of Chapter 15). In the event that the discharger concludes that a release has been tentatively indicated (under Parts III.A.1. or III.A.2.), the discharger shall, within 30 days of this indication, collect two new suites of samples for the indicated Constituent(s) of Concern or Monitoring Parameter(s) at each indicating Monitoring Point, collecting at least as many samples per suite as were used for the initial test. Resampling of the Background Monitoring Points is optional. As soon as the data is available, the discharger shall rerun the statistical method (or non-statistical comparison) separately upon each suite of retest data. For any indicated Monitoring Parameter or

Constituent of Concern at an affected Monitoring Point, if the test results of either (or both) of the retest data suites confirms the original indication, the discharger shall conclude that a release has been discovered. All retests shall be carried out only for the Monitoring Point(s) for which a release is tentatively indicated, and only for the Constituent of Concern or Monitoring Parameter which triggered the indication there, as follows:

a. If an ANOVA method was used, the retest shall involve only a repeat of the multiple comparison procedure, carried out separately on each of the two new suites of samples taken from the indicating Monitoring Point;

b. If the Method of Proportions statistical test was used, the retest shall consist of a full repeat of the statistical test for the indicated constituent or parameter, using the new sample suites from the indicating Monitoring Point;

c. If the non-statistical method was used:

1. Because the VOC Composite Monitoring parameters (VOC_{water}) each address, as a single parameter, an entire family of constituents which are likely to be present in any landfill release, the scope of the laboratory analysis for each retest sample shall include all VOCs detectable in that retest sample. Therefore, a confirming retest for either parameter shall have validated the original indication even if the suite of constituents in the confirming retest sample(s) differs from that in the sample which initiated the retest;

2. Because all Constituents of Concern that are jointly addressed in the non-statistical testing under Part III.A.2.c. remain as individual Constituents of Concern, the scope of the laboratory analysis for the non-statistical retest samples shall be narrowed to involve only those constituents detected in the sample which initiated the retest.

B. Response to VOC Detection in Background

1. Except as indicated in Part III.B.2., any time the laboratory analysis of a sample from a Background Monitoring Point, sampled for VOCs under Part III.A., shows either (1) two or more VOCs above their respective MDL, or (2) one VOC above its respective PQL, then the discharger shall immediately notify the Regional Board by phone that possible background contamination has occurred, shall follow up with written notification by certified mail within seven days,, and shall obtain two new independent VOC samples from that Background Monitoring Point and send them for laboratory analysis of all detectable VOCs within thirty days. If either or both the new samples validates the presence of VOC(s) at that Background Monitoring Point, using the above procedure, the discharger shall:

a. Immediately notify the Regional Board about the VOC(s) verified to be present at that Background Monitoring Point, and follow up with written notification submitted by certified mail within seven days of validation; and

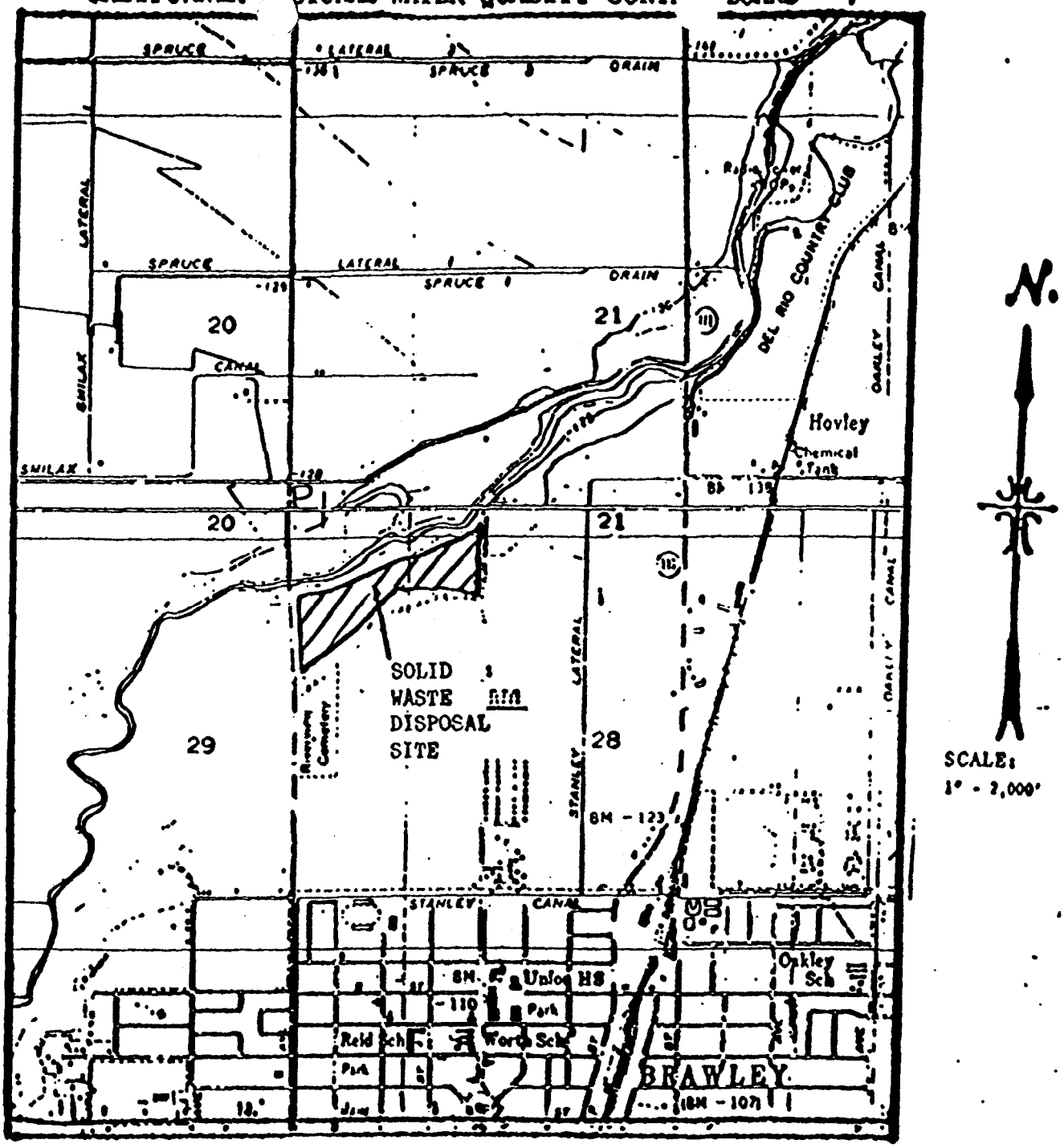
b. Within 180 days of validation, submit a report, acceptable to the Regional Board's Executive Officer, which examines the possibility that the detected VOC(s) originated from the WMF and proposing appropriate changes to the Monitoring Program.

2. If the Regional Board's Executive Officer determines, after reviewing the report submitted under Part III.B.1.b., that the VOC(s) detected originated from a source other than the WMF, the Regional Board's Executive Officer will make appropriate changes to the Monitoring Program.

3. If the Regional Board's Executive Officer determines, after reviewing the report submitted under Part III.B.1.b., that the detected VOC(s) most likely originated from the WMF, the discharger shall assume that a release has been detected and shall immediately begin carrying out the requirements of Part I.E.2.d.

Ordered by: Philip A. Gruenberg
Executive Officer

January 22, 1997
Date



SITE MAP

COUNTY OF IMPERIAL, OWNER/OPERATOR
BRAWLEY CLASS III MUNICIPAL SOLID WASTE MANAGEMENT FACILITY
North of Brawley - Imperial County
NW 1/4 of Section 28, NE 1/4 of Section 29, T13S, R14E, SBB&M
USGS Brawley and Westmorland 7.5 Topographic Map

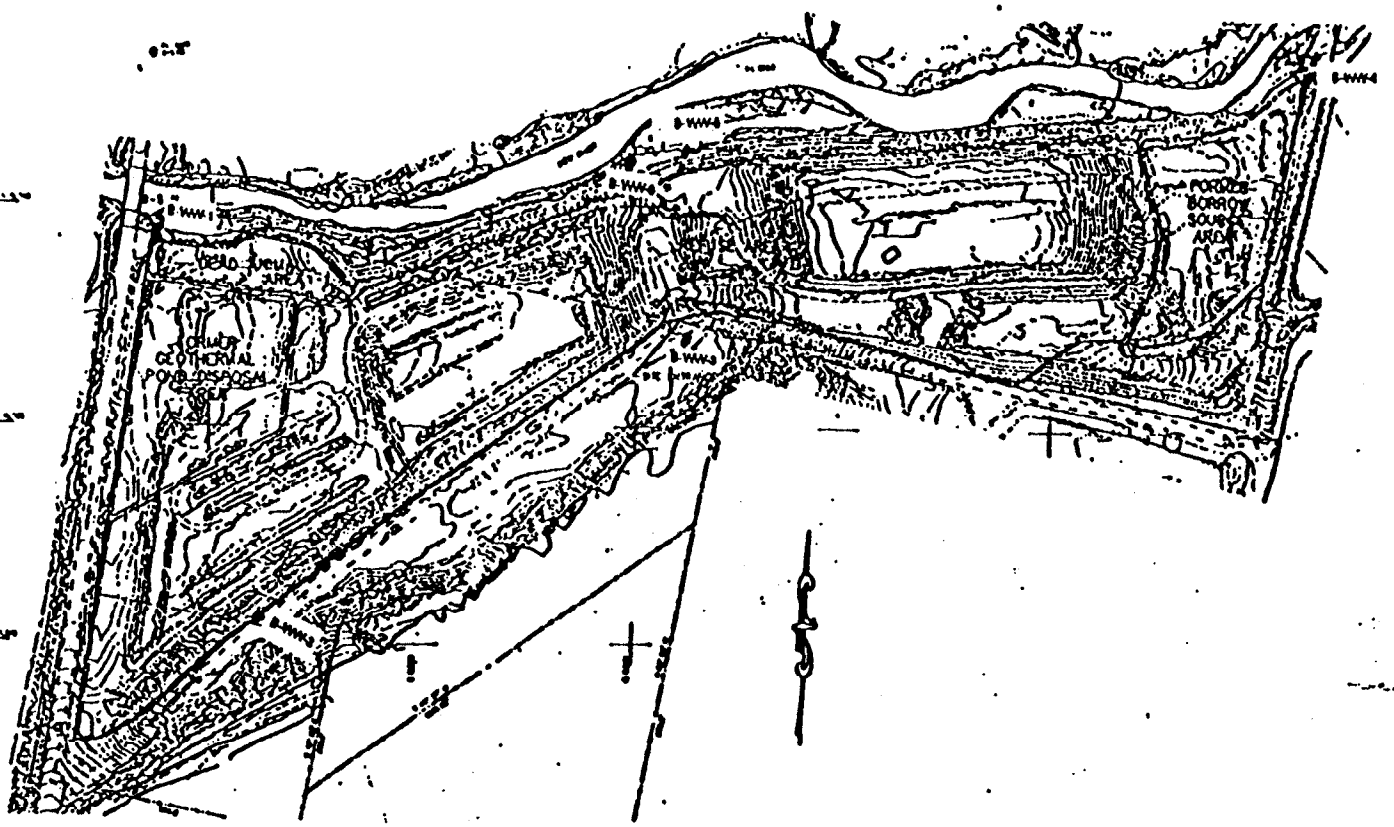


PHOTO-REDUCED; NOT TO SCALE

ATTACHMENT NO. 1

COUNTY OF IMPERIAL, OWNER/OPERATOR
BRAWLEY CLASS III MUNICIPAL SOLID WASTE MANAGEMENT FACILITY
North of Brawley - Imperial County

NW 1/4 of Section 28, NE 1/4 of Section 29, T13S, R14E, SBB&M
USGS Brawley and Westmorland 7.5 Topographic Map