

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 91-005

WASTE DISCHARGE REQUIREMENTS
FOR
COUNTY OF RIVERSIDE
BLYTHE WASTE MANAGEMENT FACILITY
CLASS III LANDFILL
CLASS II SURFACE IMPOUNDMENT
Blythe - Riverside County

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

1. The County of Riverside Waste Management Department, (hereinafter also referred to as the discharger), 11728 Magnolia Avenue, Suite A, Riverside, California 92503, owns and operates a municipal solid waste disposal site seven miles north of the City of Blythe with access from Midland Road in the NW $\frac{1}{4}$ and N $\frac{1}{2}$, SW $\frac{1}{4}$ of Section 31 T5S, R23E and S $\frac{1}{2}$, SE $\frac{1}{4}$ of Section 25, T5S, R22E, SBB&M, as shown in Attachments A and B incorporated herein and made a part of this Board Order. The Discharger was granted a Patent Title to the land by the Bureau of Land Management in 1963.
2. The discharger submitted a Report of Waste Discharge dated October 11, 1990. The Blythe Waste Management Facility (WMF) has been subject to waste discharge requirements under Board Order No. 88-067 which was adopted by the Regional Board on May 12, 1988. The waste discharge requirements are being updated to comply with Section 13263 of the California Water Code.
3. The discharger submitted a Solid Waste Assessment Testing (SWAT) report on February 18, 1988 as required by Section 13273 of the California Water Code.
4. The SWAT report contains technical information describing the site hydrogeology, topography, disposal operations and waste classification. In view of the technical information that has become available, it is appropriate that the Regional Board adopt revised waste discharge requirements for the Blythe Waste Management Facility to include more stringent requirements to protect the quality of the ground water in the vicinity of the site.
5. The discharger reports that an average of 113 cubic yards per day of non-hazardous solid waste, as defined in Chapter 15, Division 3, Title 23 of the California Code of Regulations (hereinafter also referred to as Chapter 15), are being discharged to a Class III Landfill within a 335-acre site.
6. The non-hazardous solid waste consists of garbage, rubbish, demolition materials, dead animals, abandoned automobiles, sewage sludge residue, household trash, manure, plant residue, and cleansed pesticide containers.

9-15-98
Adopted
Amended
Order # 93-071

1 9-17-98
ADOPTED REVISED ORDER
NO. 98-012

7. In addition to the non-hazardous solid wastes discharged, the site receives an average of 1500 gallons-per-day of septic tank pumpings, chemical toilet wastes, and grease trap pumpings. The liquid wastes are discharged into an unlined evaporation pond that is separated from the landfill area.
8. The total remaining capacity of the landfill is 3,229,000 cubic yards. It has an estimated remaining life of 37 years.
9. Waste disposal at the site is accomplished by the area landfill method of operation. This operation consists of a working face from 40 to 60 feet in width in front of which refuse is placed. The waste is compacted to an estimated density of 1000 pounds-per-cubic-yard. At the end of each day, six inches of cover soil is placed on the working face and the top surface is covered with one foot of soil.
10. The terrain in the vicinity of the site is characterized by gently sloping, relatively flat alluvial surfaces which extend from the Big Maria Mountains northeast of the site to the edge of the Palo Verde Mesa directly south of the site. The land surface within the boundaries of the site is predominantly flat with scattered erosional channels that trend in a southeasterly direction. Maximum elevation at the site is 450 feet above sea level in the north. Minimum elevation is about 380 feet above sea level in the southwest and southeast corners of the site.
11. The site is underlain by alluvial sediments composed of poorly-sorted, unconsolidated sand, gravel, cobbles, silt and clay. The alluvial deposits are in excess of 300 feet thick. The alluvium is underlain by the Bouse Formation, and indurated deposits of continental and marine rocks of Pliocene age.
12. The soil used as cover material at the site is derived from the Carrizo Soil Series. This soil is characterized as a well-graded sand, with gravelly sand to poorly-graded gravel. Permeability of this soil ranges from 6.3 to 20.0 inches per hour, which is relatively high.
13. Ground water depth measured in January 1988 in monitoring wells constructed as part of the SWAT program were 180.48 feet below ground surface in the downgradient well BG-1 at the northern edge of the site and 161.67 feet below ground surface in upgradient well BG-2 at the western edge of the site. Ground water gradient in the vicinity of the site is generally toward the west to southwest.
14. Surface water drainage from the watershed above the facility is south to southeastward into the Palo Verde Valley. Ultimately, all surface flows drain towards the Colorado River.
15. A large, normally dry, wash 20 feet deep and at most 500 feet wide, passes directly to the east of the active portion of the site. The drainage area that is tributary to the site is about 5500 acres.
16. The surface water nearest to the site flows southward in canals constructed by the Palo Verde Irrigation District providing Colorado River water to farmlands in the Palo Verde Valley. The closest canal passes nearly one mile to the southeast of the site.

17. Land within 1000 feet of this site is natural desert to the east and north of the site, and agricultural lands to the south of the site.
18. The average annual rainfall for the general vicinity of the site is 4 inches, while evaporation at the site averages 86 inches annually.
19. The discharger installed two 4-inch ground water monitoring wells, and is required to install additional ground water monitoring wells in accordance with Cleanup and Abatement Order No. 90-078, which was issued by the Executive Officer on October 21, 1990.
20. Analyses of ground water samples collected from monitoring wells at the site indicate a total dissolved solids content range between 812 mg/l and 1070 mg/l.
21. The SWAT data and the succeeding verification testing of ground water samples from two monitoring wells located on the periphery of the waste management unit have indicated the presence of hazardous waste constituents in quantities exceeding the State drinking water standards. The Regional Board Executive Officer consequently issued the discharger Cleanup and Abatement Order No. 90-078 requiring the discharger to conduct additional field investigation of the site and the surrounding area to define the nature and extent of ground water contamination and determine how disposal should continue at the existing WMF.
22. The WMF characteristics listed in Section 2533 (b)(1) of Chapter 15 are not sufficient to ensure protection of the quality of ground water in the vicinity of the site. It is not feasible to remove the wastes already in place and retrofit the site with a clay or synthetic liner and a leachate collection and removal system as specified in Article 4 of said Chapter 15. New waste disposal cells, however, must have an adequate liner and a leachate collection and removal system.
23. The Water Quality Control Plan for the Colorado River Basin Region of California designates the beneficial uses of ground and surface waters in this Region.
24. The beneficial uses of ground waters in the Colorado Hydrologic Unit are:
 - a. Municipal supply (MUN)
 - b. Industrial supply (IND)
 - c. Agricultural supply (AGR)
25. The Board has notified the discharger and all known interested agencies and persons of its intent to update waste discharge requirements for this discharge.
26. The Board in a public meeting heard and considered all comments pertaining to this discharge.

27. 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 the discharger shall comply with the following:

A. Discharge Specifications

1. New waste management units constructed after January 1, 1994 on top of virgin land (land which does not contain solid waste) must have adequate liner and leachate collection and removal systems as specified in Chapter.
2. Liquid waste discharged at this site after April 1, 1992 shall be discharged into a Class II surface impoundment designed and constructed in accordance with the criteria contained in Chapter 15. New liquid waste ponds constructed prior to April 1, 1992 must also be designed in accordance with Chapter 15.
3. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050(1) and 13050(m) of Division 7 of the California Water Code.
4. Waste materials shall be confined to the waste management facility as described on the attached site maps.
5. 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.
6. Waste material shall not be discharged on any ground surface which is less than five feet above the highest anticipated ground water level.
7. This discharge shall not cause degradation of any water supply.
8. The waste management units shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods having a predicted frequency of once in 100 years.
9. 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.
10. The discharger shall provide a final cover for closure of the landfill units in conformance with the requirements of said Chapter 15.
11. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
12. Water used for site maintenance shall be limited to amounts necessary for dust control.
13. No solid waste shall be placed in ponded water.

14. The discharger shall maintain a hazardous waste load checking program at the WMF. The discharger shall report the finding of said program in the quarterly monitoring reports submitted in accordance with Provision C.4 of this Board Order.

B. Discharge Prohibitions

1. The discharge or deposit of hazardous waste (as defined in Chapter 15) at this site is prohibited.
2. The discharge of liquid or semi-solid waste (i.e., waste containing less than 50 percent solids) to the landfill units is prohibited.
3. The discharge of wastes to surface waters, surface water drainage courses, or to ground waters is prohibited.
4. The discharge or deposit of waste to land not owned or controlled by the discharger is prohibited.
5. The co-disposal of incompatible wastes is prohibited.

C. Discharge Provisions

1. The discharger shall maintain a copy of this Board Order at the site and make it available at all times to site-operating personnel.
2. The discharger shall notify the Regional Board, in writing, of any proposed change in ownership or responsibility for construction or operation of the waste management facility.
3. The discharger shall notify the Regional Board of any material change or proposed change in the character, location, or volume of the wastes discharged and of any proposed expansion plans. This notification shall be accompanied by an amended report of waste discharge and any additional information as may be required by the Regional Board's Executive Officer.
4. The discharger shall comply with "Monitoring and Reporting Program No. 91-005", and future revision thereto, as specified by the Regional Board's Executive Officer.
5. 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.
6. The discharger shall maintain visible monuments identifying the boundary limits of the entire waste management facility.

7. One year prior to the anticipated closure of the facility or any unit (portion) thereof, the discharger shall submit to the Regional Board, for review and approval by the Executive Officer, a closure and post-closure maintenance plan in accordance with Section 2597 of Chapter 15.
8. 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.
9. The discharger shall comply with all applicable provisions of Chapter 15 that are not specifically referred to in this Board Order.
10. In the event of any change in ownership of the disposal site, the discharger shall notify the succeeding owner or operator in writing of the existence of this Board Order. A copy of that notification shall be sent to the Regional Board.
11. All containment structures and erosion and drainage control systems shall be designed and constructed under direct supervision of a California registered civil engineer and shall be certified by the individual as meeting the prescriptive standards and performance goals of Chapter 15.
12. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of wastes over the operating life, closure and post-closure maintenance period of the landfill.
13. In-place permeabilities of liners shall be determined in the field using techniques approved by the Executive Officer. Construction methods and quality assurance procedures shall be sufficient to ensure that all parts of the liners are adequate to contain landfill leachate.
14. Each disposal cell shall have a leachate collection and removal system. Leachate collection sumps shall be designed and operated to keep leachate levels at the minimum needed to ensure efficient pump operation. Leachate collected shall be disposed of in accordance with local, state, and federal regulations.
15. Materials used to construct leachate collection and removal systems shall have appropriate physical and chemical properties to ensure the required transmission of leachate through the system over the operating life, closure and post-closure maintenance period of the landfill. Materials shall have sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials and equipment used on the landfill.

16. In order to comply with Discharge Specification No. A.2, the discharger shall comply with the following time schedule:

<u>TASK</u>	<u>COMPLIANCE DATE</u>
a. Submit proposal for construction of the liner systems and leachate collection and removal systems for liquid waste management units;	September 1, 1991
b. Begin installation of liner and leachate collection and removal systems;	December 1, 1991
c. Complete Task b.	April 1, 1992

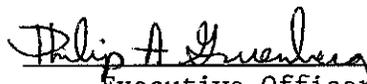
17. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.

18. 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; changes in the discharge characteristics, in three year increments from the effective date of this Board Order.

19. 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.

IT IS FURTHER ORDERED that Board Order No. 88-67 be superseded by this Board Order.

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 March 13, 1991.



Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 91-005

FOR

COUNTY OF RIVERSIDE
BLYTHE WASTE MANAGEMENT FACILITY
CLASS III LANDFILL
CLASS II SURFACE IMPOUNDMENT
Blythe - Riverside County

Location of Discharge: NW $\frac{1}{4}$ and N $\frac{1}{2}$, SW $\frac{1}{4}$ of Section 31 T5S, R23E and S $\frac{1}{2}$, SE $\frac{1}{4}$ of Section 25, T5S, R22E, SBB&M.

The discharger shall monitor all wastes discharged to the waste management facility and report to the Regional Board as follows:

WASTE MONITORING

<u>ITEM</u>	<u>UNIT</u>	<u>REPORTING FREQUENCY</u>
a. Solid waste discharged	Cubic Yards	Quarterly
b. Septic tank pumpings and chemical toilet wastes	Gallons	Quarterly
c. Type of materials discharged	-	Quarterly
d. Remaining capacity of the waste management facility	Cubic Yards	Quarterly
e. Any wastes discharged other than those allowed in the requirements	Type, Volume and Location	Immediately upon becoming aware that the waste has been discharged

GROUND WATER MONITORING

The ground water monitoring wells shall be sampled quarterly during March, June, September and December. The samples shall be analyzed for the following:

<u>Parameters and Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Reporting Frequency</u>
a. pH	Number	Grab	Quarterly
b. TDS	mg/l	Grab	Quarterly
c. Specific Conductance	micromhos/cm	Grab	Quarterly
d. Temperature	°C	Grab	Quarterly

SUPERSEDED BY
BOARD ORDER NO. 98-012
9/17/98

<u>Parameters and Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
e. COD	mg/l	Grab	Quarterly
f. Ground Water Elevations	Feet (USGS Datum)	Measurement	Quarterly
g. Calcium	mg/l	Grab	Quarterly
h. Magnesium	mg/l	Grab	Quarterly
i. Sulphate	mg/l	Grab	Quarterly
j. Sodium	mg/l	Grab	Quarterly
k. Nitrate	mg/l	Grab	Quarterly
l. Organic Nitrogen	mg/l	Grab	Quarterly
m. Volatile Organics (EPA Method 524.2)	mg/l	Grab	Quarterly
n. Semi-Volatile Organics (EPA Method 525)	mg/l	Grab	Quarterly

The collection, preservation and holding times of all samples shall be in accordance with EPA-approved methods. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.

REPORTING

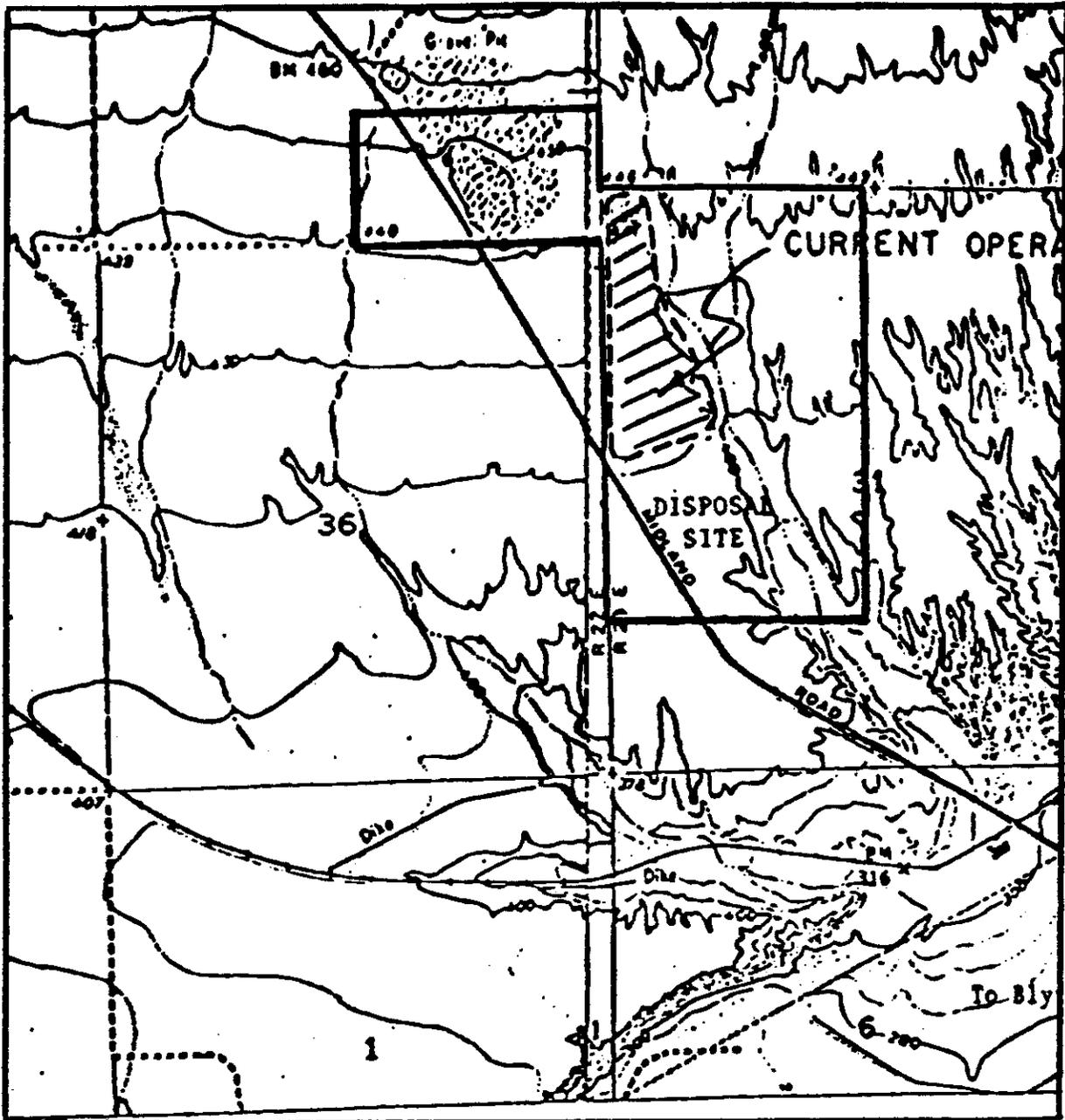
1. Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15 of each year.
2. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the waste management unit is operating in compliance with waste discharge requirements.
3. Submit monitoring reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-271 Highway 111, Suite 21
Palm Desert, CA 92260

ORDERED BY: Philip A. Greenberg
Executive Officer

March 13, 1991

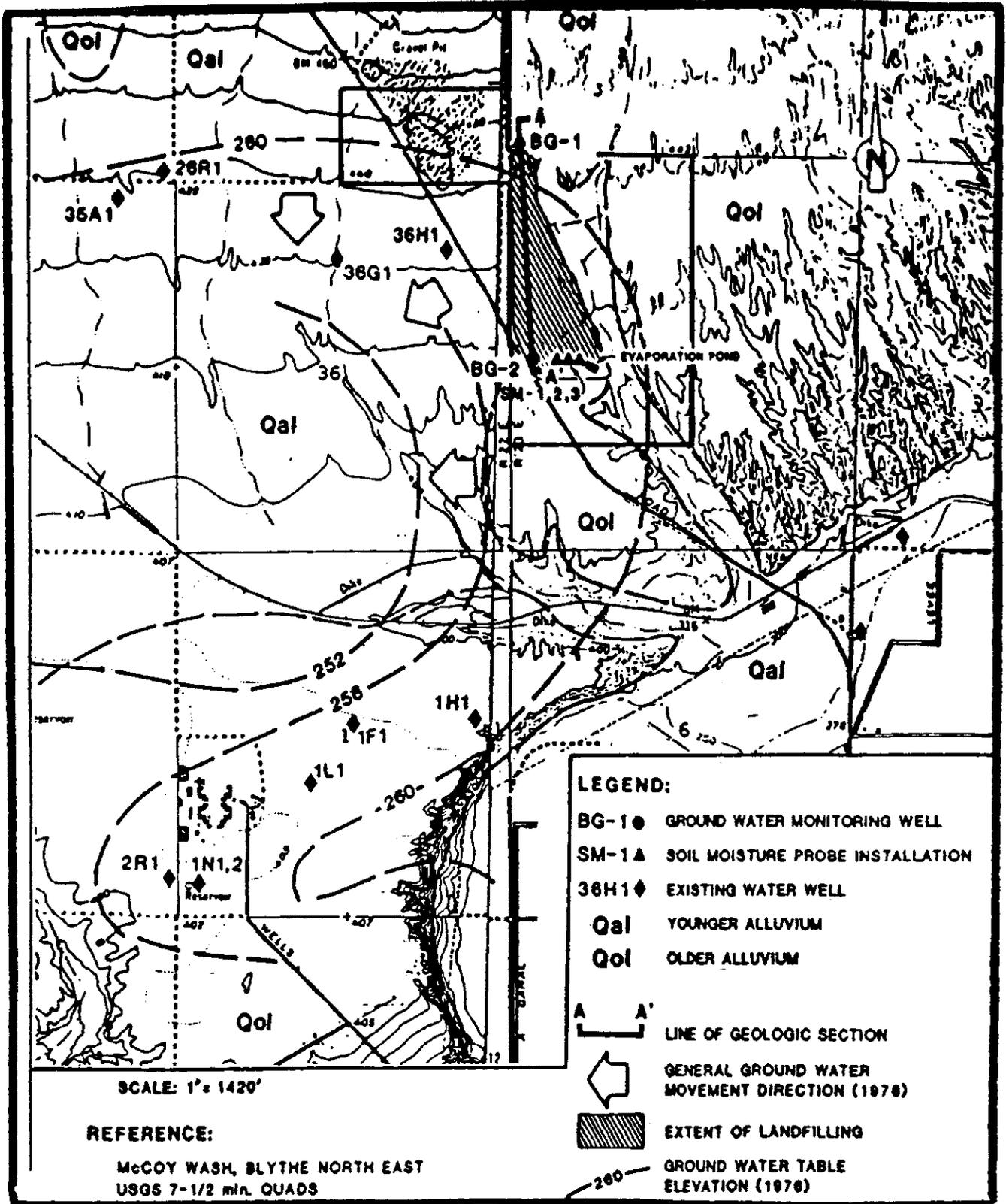
Date



ATTACHMENT A

COUNTY OF RIVERSIDE
BLYTHE WASTE MANAGEMENT FACILITY
CLASS III LANDFILL
CLASS II SURFACE IMPOUNDMENT
Blythe - Riverside County
NW $\frac{1}{4}$ and N $\frac{1}{2}$, SW $\frac{1}{4}$ of Section 31 T5S, R23E
and S $\frac{1}{2}$, SE $\frac{1}{4}$ of Section 25 T5S, R22E SBB&M

Board Order No. 91-005



ATTACHMENT B

COUNTY OF RIVERSIDE
 BLYTHE WASTE MANAGEMENT FACILITY
 CLASS III LANDFILL
 CLASS II SURFACE IMPOUNDMENT
 Blythe - Riverside County
 NW¹/₄ and N¹/₂, SW¹/₄ of Section 31 T5S, R23E
 and S¹/₂, SE¹/₄ of Section 25 T5S, R22E SBB&M