

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 88-68

WASTE DISCHARGE REQUIREMENTS
FOR
COUNTY OF SAN BERNARDINO
BIG BEAR CLASS III WASTE MANAGEMENT FACILITY
North of Baldwin Lake - San Bernardino County

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

1. The County of San Bernardino, (hereinafter also referred to as the discharger), 825 East Third Street, San Bernardino, California 92415, submitted a report of waste discharge on March 21, 1988, and current information to update the waste discharge requirements for an existing Class III landfill.
2. The Big Bear Waste Management Facility (WMF) has been subject to waste discharge requirements under Board Order No. 83-36. The waste discharge requirements are being updated to comply with Section 13263 of the California Water Code, and to incorporate the applicable provisions of Subchapter 15, Chapter 3, Title 23 of the California Code of Regulations.
3. The discharger submitted a Solid Waste Assessment Testing (SWAT) report on December 30, 1987 as required by Section 13273 of the California Water Code. The SWAT report contains most of the information required in said Subchapter 15. The remainder of the information required will be submitted in accordance with a time schedule included in the provisions of this Order.
4. The WMF consists of two waste management units designated the "upper level" and "lower level". The "upper level" is the active landfill, covers 35 acres. On January 21, 1987 the Regional Board adopted Cease and Desist Order No. 87-18 for the "lower level" with a time schedule for closure.
5. The facility will be reclassified, in accordance with the criteria set forth in Subchapter 15 for Class III landfills, and a determination will be made as to the need to construct a liner with a leachate collection and removal system in the new landfill areas within the "upper level", based on technical data contained in the SWAT report and other relevant information.
6. It will be necessary to determine background water quality of the ground water in the proximate area of the facility from a minimum of one year's sampling, after which the Regional Board may revise this Order to set numerical limitations on water quality constituents for protection of the ground water from the effects of the waste management facility. The revised Order will also include the detection and verification monitoring programs and the corrective action program required in Section 2551 of said Subchapter 15.

7. The discharger discharges 100 cubic yards per day of non-hazardous solid waste as defined in said Subchapter 15, to a Class III landfill in the SW $\frac{1}{2}$ of Section 30 and the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 31, T3N, R2E, SBB&M as shown in Attachment A incorporated herein and made part of this Order. The

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site is located 1½ miles north of Baldwin Lake along Holcomb Valley Road 1½ miles north of State Highway 18.

8. The land on which the site is located is owned by the United States Department of Agriculture with administration by the United States Forest Service, 144 North Mountain Avenue, San Bernardino, California 92415.
9. The discharger submitted a closure and post-closure maintenance plan for the "lower level" of the WMF in compliance with Cease and Desist Order No. 87-18. The plan was approved by the Regional Board on June 30, 1987. Closure of the "lower level" is scheduled to be completed by July 30, 1988.
10. The site has a capacity of 675,000 cubic yards and a remaining capacity of approximately 75,000 cubic yards.
11. The non-hazardous solid waste typically consists of household refuse, tree and lawn clippings, scrap lumber and metal, appliances, furniture, wood chips, roofing material, paper, gravel, tires, wooden pallets, asphalt, tile, concrete rubble, and agricultural wastes. The approximate composition of the waste material at the site has been estimated to be 70 percent decomposable waste and 30 percent non-water soluble and non-decomposable inert waste.
12. Waste disposal at the site is accomplished by the area landfill method of operation. The wastes are discarded at the working face, compacted, and enclosed on all sides by soil. The wastes are covered daily with a minimum of six inches of compacted soil. Once a cell is completed, an intermediate cover of at least 12 inches of compacted soil is placed over the cell, if the cell is not to be covered by another cell within a one week period during the rainy season.
13. The site is located in a mountainous region along the northeastern flank of Nelson Ridge. Elevations range from approximately 6,900 feet in the southern part of the site to approximately 6,500 feet in the northern part. The site is located on the axis of a surface drainage divide. Natural drainage along the northeast flank of Nelson Ridge flows northeast towards Cactus Flat. The drainage along the southwest flank of the ridge flows south towards Baldwin Lake.
14. The site is entirely underlain by bedrock. The bedrock consists of highly faulted and fractured Paleozoic Saragossa quartzite and marble-localized Mesozoic granite and quartz monozonite; and pre-Columbian gneiss and schist.
15. Although the rocks have very low permeabilities, the existing faults and fractures result in overall bulk permeabilities, which may be quite high, and which appear to be hydraulically interconnected. There is no indication of recent (Holocene) faulting.
16. Ground water depths measured in November 1987 in monitoring wells constructed by the discharger as part of the SWAT program ranged from 33.02 feet to 234.12 feet. The vicinity of the landfill is a surface-water divide as well as a ground water divide. Most of the ground water beneath the site flows in a northeasterly direction toward Cactus Flat. A lesser amount flows in a southerly direction towards Baldwin Lake.

17. The discharger has constructed five 4-inch ground water monitoring wells at the site, which meet the requirements of Article 5 of said Subchapter 15, as shown in Attachment B incorporated herein and made part of this Order.
18. Analyses of ground water samples collected in December 1987 from upgradient Monitoring Well BB-3 indicate that the ground water has a total dissolved solids content of 260 mg/l.
19. There is one intermittent spring, below the lower level, approximately 700 feet northeast of the site. It is located along a trace of the Helendale Fault, which acts as a ground water barrier forcing the ground water to the surface.
20. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted by the Board on November 14, 1984.
21. The Basin Plan delineates the location of the discharge to be in the Johnson Hydrologic Unit which has the following beneficial uses of ground water:
 - a. Municipal supply
 - b. Industrial supply
 - c. Agricultural supply
22. The average annual rainfall for the general vicinity of the site is 15 inches, while evaporation rates average 56 inches. Most precipitation falls in the form of snow during storm events that occur in the months of November through March.
23. Land within 1000 feet of this site falls within the San Bernardino National Forest, administered by the United States Forest Service. The current land use is largely recreational. An electric power substation is located immediately south of the site.
24. The Board has notified the discharger and interested agencies and persons of its intent to update waste discharge requirements for the discharge.
25. The Board in a public meeting heard and considered all comments pertaining to the existing discharge.
26. These waste discharge requirements govern an existing facility, which the discharger is currently operating, and therefore is exempt from the provisions of the California Environmental Quality Act in accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations.

IT IS HEREBY ORDERED, the discharger shall comply with the following:

A. Discharge Specifications

1. The treatment or disposal of waste shall not cause pollution or a nuisance as defined in Section 13050(1) and 13050(m) of the California Water Code.
2. Waste material shall not be discharged outside the designated waste disposal area as shown in Attachment A.

3. 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.
4. The exterior surfaces of the landfill, including intermediate and final covers, shall be graded and maintained to promote lateral runoff of precipitation and to prevent ponding.
5. Solid waste shall not be placed in ponded water.
6. The waste management units shall be designed, constructed, operated and maintained to prevent inundation or washout due to floods which could occur as a result of a 100-year, 24 hour storm.
7. New landfill areas within the "upper level" shall be constructed with liners and a leachate collection and removal system as required.
8. Dewatered sewage or water treatment sludge shall be discharged only to landfill areas equipped with a leachate collection and removal system as required in Section 2523(c) of said Subchapter 15.
9. Annually, prior to the 1st 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 or flooding of the site and the completion of such work shall be reported to the Regional Board by November 15.
10. Water used for site maintenance shall be limited to the minimum amount necessary for dust control.
11. The discharger shall remove and properly relocate any wastes which are discharged at this site in violation of these requirements.
12. The discharge shall not cause degradation of ground or surface waters.

B. Prohibitions

1. The discharge or deposit of hazardous waste (as defined in said Subchapter 15) at this site is prohibited.
2. The discharge or deposit of designated waste (as defined in said Subchapter 15) at this site is prohibited unless otherwise approved by the Executive Officer.
3. The discharge of liquid or semi-solid waste (i.e., waste containing less than 50 percent solids) to this site is prohibited.
4. The discharge of any waste to the "lower level" of this site is prohibited.
5. The discharge of wastes to surface waters, or surface water drainage courses is prohibited.

C. Provisions

1. The discharger shall maintain a copy of this 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. 88-68" and future revisions thereto, as specified by the Regional Board's Executive Officer.
5. The discharger shall develop background water quality data of the ground water at the site, as specified in Section 2595(g)(7) in said Subchapter 15. Samples shall be collected quarterly from the background monitoring wells and analyzed for each of the parameters and constituents listed in the Monitoring and Reporting Program No. 88-68. During each sampling a minimum of four discrete samples shall be taken from the background monitoring wells.
6. 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 Board at any time during normal business hours.
7. The discharger shall maintain monuments identifying the boundary limits of the entire waste management facility.
8. By September 1, 1988, the discharger shall submit to the Regional Board for approval by the Executive Officer, a plan and time schedule for compliance with the requirements of the following sections of said Subchapter 15:
 - a. Section 2555: General Ground Water Monitoring Requirements
 - b. Section 2595: Waste Management Unit Characteristics
 - c. Section 2596: Design Report and Operations Plan
 - d. Section 2523(b.2): Periodic Load-Checking Program
9. 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 said Subchapter 15.
10. 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.

11. 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 Order. A copy of that notification shall be sent to the Regional Board.
12. The discharger shall comply with all applicable provisions of said Subchapter 15 that are not specifically referenced in this Order.
13. This Order supersedes Board Order No. 83-36.

I, Arthur Swajian, 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 May 12, 1988.


Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

MONITORING AND REPORTING PROGRAM NO. 88-68
FOR
COUNTY OF SAN BERNARDINO
BIG BEAR CLASS III WASTE MANAGEMENT FACILITY
North of Baldwin Lake - San Bernardino County

Location of Discharge: SW $\frac{1}{2}$ of Section 30 and the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 31,
T3N, R2E, SBB&M

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

MONITORING

<u>Item</u>	<u>Unit</u>	<u>Reporting Frequency</u>
a. Solid Wastes Discharged	Cubic Yards	Quarterly
b. Type of Materials Discharged	-	Quarterly
c. Remaining Capacity of the Waste Management Facility	Cubic Yards	Annually
d. Any Wastes Discharged Other Than Those Allowed in the Requirements	Type, Volume and Location	Immediately Upon Becoming Aware that the Waste has been Discharged Together with Action for Immediate Correction and Prevention of Recurrence

GROUND WATER MONITORING

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

<u>Parameters and Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
1. pH	Number	Grab	Quarterly
2. TDS	mg/l	Grab	Quarterly
3. Specific Conductance	micromohs/cm	Grab	Quarterly
4. Temperature	°F	Grab	Quarterly

<u>Parameters and Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
5. COD	mg/l	Grab	Quarterly
6. Calcium	mg/l	Grab	Quarterly
7. Magnesium	mg/l	Grab	Quarterly
8. Sulphate	mg/l	Grab	Quarterly
9. Sodium	mg/l	Grab	Quarterly
10. Nitrate	mg/l	Grab	Quarterly
11. Ground Water Elevations (USGS Datum)	Feet	Measurement	Quarterly
12. Volatile Organics (EPA Methods 601, 602)	ug/l	Grab	Quarterly

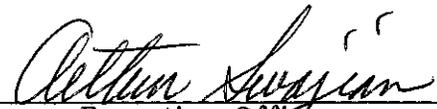
The collection, preservation and holding times of all samples shall be in accordance with EPA approved methods. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.

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. Annual monitoring reports shall be submitted by the 15th day of January 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 to clearly illustrate whether the waste management facility 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

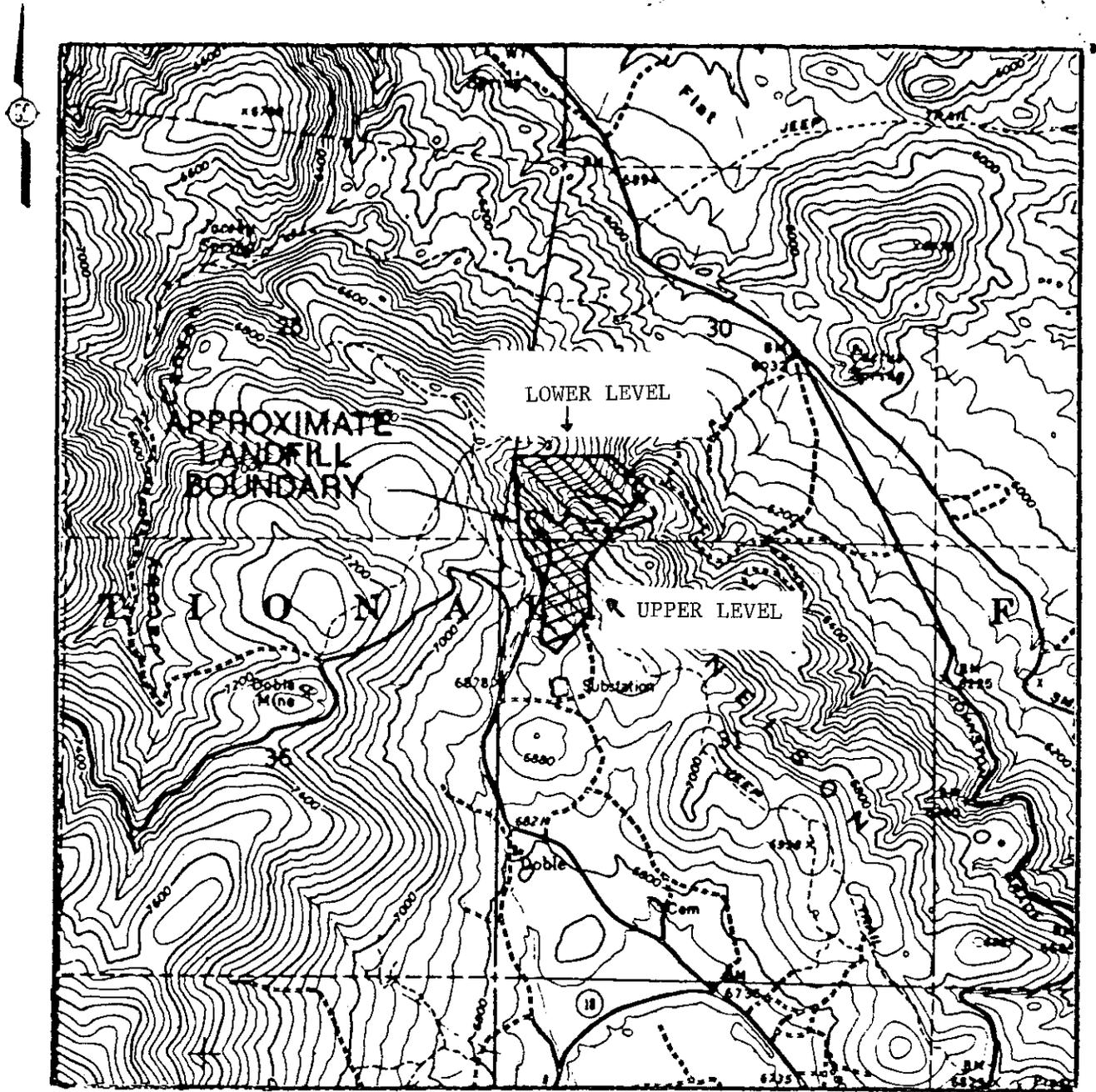
ORDERED BY:


Executive Officer

May 12, 1988

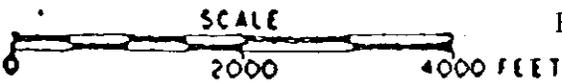
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



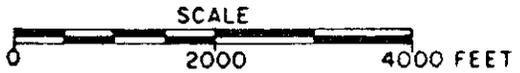
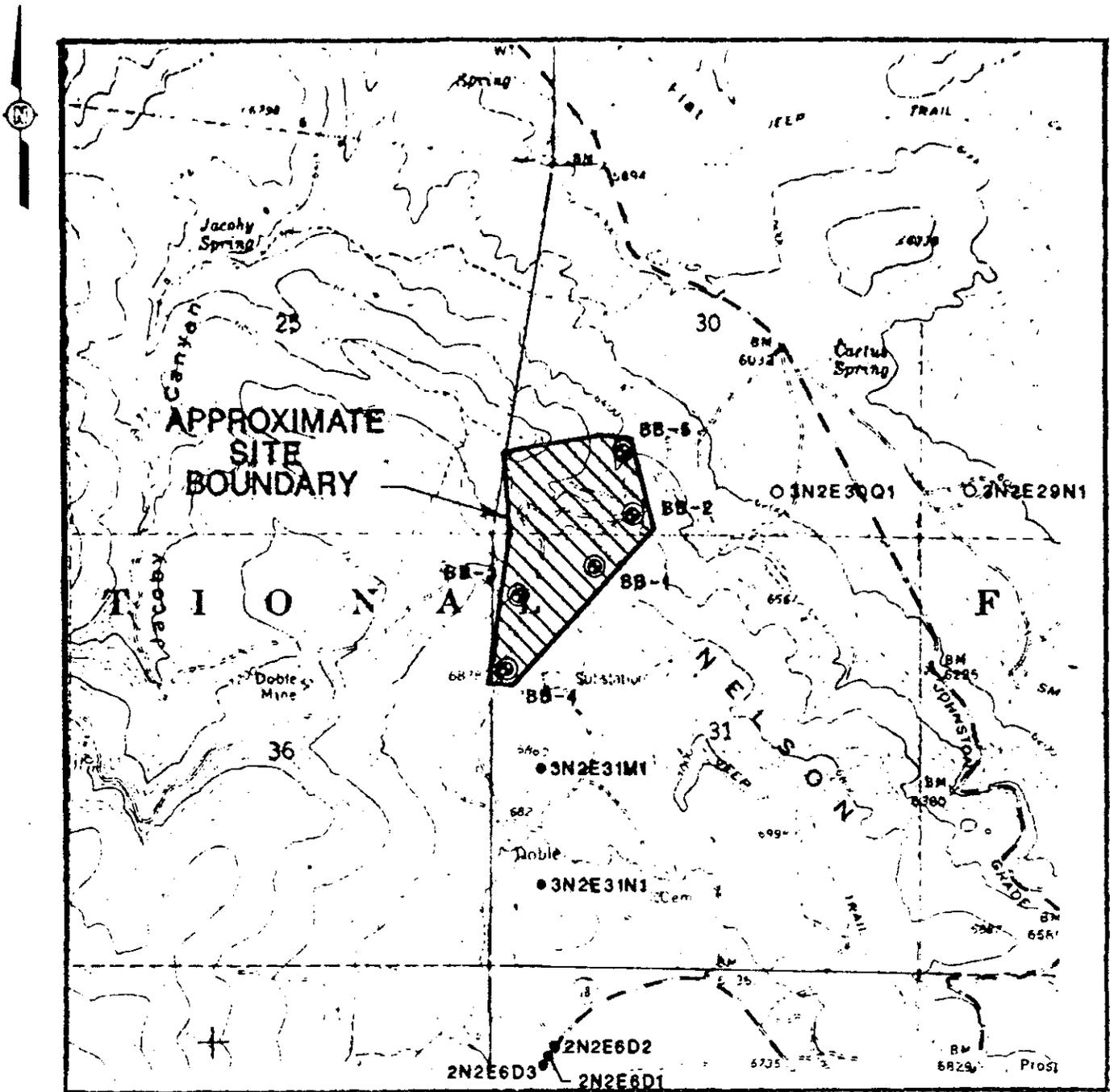
Attachment A

COUNTY OF SAN BERNARDINO
BIG BEAR CLASS III WASTE MANAGEMENT FACILITY
North Baldwin Lake - San Bernardino County



Order No. 88-68

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



Attachment B

LEGEND:

**BIG BEAR CLASS III WASTE MANAGEMENT FACILITY
North Baldwin Lake - San Bernardino County**

- 2N2E6C1 WATER WELL LOCATION
- 3N2E30Q1 ABANDONED OR DESTROYED WELL
- ⊙ BB-1 MONITORING WELL LOCATION

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