

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 90-001
NPDES No. CA0105040

WASTE DISCHARGE REQUIREMENTS
FOR
ORMESA GEOTHERMAL
30 MW (GROSS) GEOTHERMAL BINARY POWER PLANT,
WELLFIELD, AND COOLING TOWER BLOWDOWN
Southeast of Holtville - Imperial County

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

1. Ormesa Geothermal (hereinafter also referred to as the discharger), 610 East Glendale Avenue, Sparks, Nevada 89431, submitted a National Pollutant Discharge Elimination System (NPDES) application for permit to discharge, dated September 16, 1986. Said application was assigned Application No. CA 0105040.
2. Due to a project expansion which increased the amount of cooling tower blowdown discharge into the Holtville Main Drain significantly, the discharger submitted two new NPDES applications for permit to discharge. Both applications were received in the Regional Board's office on June 29, 1989 and were deemed complete on July 17, 1989. The discharger also submitted two new Reports of Waste Discharge which were received in the Regional Board's office on June 29, 1989 and were deemed complete on July 17, 1989. The Board Order for the Ormesa I discharge and wellfield have been covered by Board Order No. 86-019, Board Order No. 86-079 and NPDES No. CA 0105040. They are being updated with this Board Order No. 90-001. The expansion project is being covered by Board Order No. 90-002 and NPDES No. CA0105104.
3. The discharger also submitted a Report of Waste Discharge, dated August 20, 1985 for this project, and the Board issued Board Order No. 86-019 on March 19, 1986.
4. The discharger proposes to discharge a maximum daily flow of 1.36 million gallons per day, and an average daily flow of approximately 800,000 gallons per day of cooling tower blowdown wastewater from the Ormesa I project into the Holtville Main Drain in the SE $\frac{1}{4}$, SE $\frac{1}{4}$, Section 25, T15S, R16E, SBB&M.
5. The discharger utilizes ground water for cooling tower makeup water. In the future, a supply of water from the East Highline Canal will be made available to the discharger by the Imperial Irrigation District.
6. Chemicals are added to the cooling tower water for pH control purposes and for corrosion, scale, and biological growth inhibition.
7. The existing wellfield for the Ormesa I Project consists of the following geothermal wells:

<u>WELL NO.</u>	<u>TYPE</u>
16-29	Production
16-30	Production
38-30	Production
56-30	Production
58-30	Production

*3/29/95
supervised by
95-022*

<u>WELL NO.</u>	<u>TYPE</u>
74-30	Production
78-30	Production
36-31	Production
54-31	Production
72-31	Production
76-31	Production
88-31	Production
56-19	Injection
78-19	Injection
18-28	Injection
52-29	Injection
34-30	Injection
76-30	Injection

All of these wells are in Sections 19, 28, 29, 30, and 31.

Additional injection and production wells may be drilled and developed as replacement or makeup wells within Sections 19, 25, 28, 29, 30 & 31, during the course of this permit period, which is five (5) years.

8. United States Department of Energy Well No. 5-1, sometimes referred to as Well 11-31 by the discharger, is regulated by Board Order No. 89-027, adopted by the Regional Board on May 17, 1989, and not by this Board Order No. 90-001.
9. Geothermal fluids produced from the Ormesa I facility have had the following chemical composition:

Ormesa I Project Geothermal Fluid Chemistry
Geothermal Wells¹

<u>Chemical Parameters^{2,3,4}</u> <u>(mg/l)</u>	<u>74-30</u>	<u>16-30</u>	<u>38-30</u>	<u>74-30</u>	<u>72-31</u>	<u>76-31</u>	<u>88-31</u>
TDS	2950	6034	1978	2950	5064	3220	7480
Na	1049.0	1102.0	714.2	1049.0	1911.7	1169.6	2786.4
K	38.0	42.0	28.0	38.0	94.4	37.9	122.6
Ca	2.1	0.6	0.7	2.1	19.2	9.5	27.8
Mg	<0.49	<0.49	<0.49	<0.49	5.3	0.79	4.0
Fe	0.23	<0.02	0.03	0.23	ND	ND	ND
SiO ₂	228.0	229.0	220.0	228.0	164.7	215.3	172.1
B7	5.8	7.5	1.7	5.8	7.0	1.9	9.2
Li	1.1	1.3	0.7	1.1	4.8	1.9	9.2
Sr	0.3	0.3	0.4	0.3	2.9	1.3	6.7
Zn	<0.12	<0.12	<0.12	<0.12	ND	ND	ND
As	<0.61	0.81	<0.61	<0.61	ND	ND	ND
Ba	<0.61	<0.61	<0.61	<0.61	0.63	ND	0.87

¹Data is from selected geothermal wells.

²Chemical parameters in mg/l (milligrams per liter).

³N.D. - Not Detected.

⁴N.A. - Data Not Available.

Chemical
Parameters^{5,6,7}

(mg/l)	<u>74-30</u>	<u>16-30</u>	<u>38-30</u>	<u>74-30</u>	<u>72-31</u>	<u>76-31</u>	<u>88-31</u>
F	3.6	3.2	3.3	3.6	0.9	5.3	1.1
HCO ₃	1440.0	1504.0	584.0	1440.0	475.0	429.0	348.0
CO ₃	84.0	84.0	48.0	84.0	ND	29.0	ND
Cl	574.0	663.0	583.0	574.0	2640.0	1340.0	4100.0
SO ₄	206.0	170.0	191.0	206.0	113.0	268.0	9.0
pH	9.1	9.1	9.2	9.1	8.3	9.0	8.4
Conductivity µmhos/cm	NA	NA	NA	NA	8900	5500	13000

Well
Characteristics

Total Depth (ft.)	7659	8000	9000	7659	6503	6410	6004
Completion Interval (ft.)	5923- 7659	6403- 8000	6366- 8909	4760- 5795	3400- 6480	3093- 6395	2697- 5980

10. Upon completion, wells discharge into temporary containment basins for short-term production flow tests.
11. Following analysis of the data from these flow tests, the wells may be flowed again for one or more tests of one week or longer duration. The flow from these tests are either discharged into the on-site storage basins or other test facilities via permanent, or as necessary, temporary pipelines placed on the ground adjacent to access roads.
12. Discharged fluids are removed from the storage basins or other containers and discharged by subsurface injection into the geothermal reservoir or the fluid is allowed to evaporate. These production fluids are reinjected into the geothermal reservoir.
13. A mud pit, capable of containing the expected discharge of drilling mud and cuttings, was constructed at each well site. Additional mud pits would be constructed at any newly drilled well sites.
14. A lined containment basin consisting of a minimum of 6 inches of compacted clay with a maximum permeability of 1×10^{-6} cm/sec was constructed on each well site. Additional containment basins with similar construction parameters will be constructed at each newly drilled well site. These basins receive and store geothermal fluids and sands from production tests and sand separator and injection filter backwash.
15. All such containment basins and mud pits described in Findings No. 11, 12, 13, and 14, above, have been protected and maintained to ensure their effectiveness.

⁵Chemical parameters in mg/l (milligrams per liter).

⁶N.D. - Not Detected.

⁷N.A. - Data Not Available.

16. The geothermal fluid injection system consists of injection pumps, distributing piping, injection well metering facilities, and other components necessary to dispose of the geothermal liquid from the power plant.
17. Mechanical draft cooling towers have been built at the power plant in two batteries containing five cells each. These cooling towers are erected on concrete basins which are used for cooling water storage.
18. Two shallow ponds, each approximately five (5) acres in size, are located within the SE¼ of Section 6, T16S, R17E, SBB&M. The Imperial Irrigation District's East Highline Canal is located approximately 1-3/4 miles west of the power plant site.
19. Shallow ground water produced from Sweetwater Well 3 located near the center of Section 6, T16S, R17E, SBB&M, has a reported Total Dissolved Solids (TDS) concentration of 1776 mg/l.
20. The cooling tower blowdown water is discharged into the Holtville Main Drain which eventually flows into the Salton Sea.
21. This discharge has been subject to waste discharge requirements, Board Orders No. 86-079, adopted on November 19, 1986 (NPDES No. CA0105040) which allows drainage into the Holtville Main Drain; and by Board Order No. 86-019, adopted on Mrch 19, 1986.
22. In accordance with Water Code Section 13389 and Section 15263, Chapter 3, Title 14 of the California Code of Regulations, the issuance of waste discharge requirements for NPDES permits is exempt from the California Environmental Quality Act requirement to prepare an Environmental Impact Report or Negative Declaration (Public Resources Code, Section 21100 et seq.).
23. The Regional Board approved on March 19, 1986, a Negative Declaration (State Clearinghouse Number #86022622) for this project in accordance with the California Environmental Quality Act and State Guidelines. This Negative Declaration supplements the previously approved EA-EIR 99-100 (SCH #78071842). The Board determined that there will be no substantial adverse affect on the environment as a result of this project.
24. The Water Quality Control Plan (Basin Plan) for the Colorado River Basin Region of California was adopted by the Regional Board on November 14, 1984.
25. Beneficial uses of ground water in certain portions of the Imperial Hydrologic Unit are:
 - a. Industrial Supply (IND)
 - b. Municipal Supply (MUN) (this use is limited to a small portion of the hydrologic unit, with the existing use being practically inconsequential.)
26. The primary purpose of drains in the Imperial Valley is for conveyance of surface and subsurface drainage in support of agricultural production.
27. The beneficial uses of water in the Imperial Valley Drains are:
 - a. Freshwater replenishment for Salton Sea (FRSH)
 - b. Warmwater habitat for fish and wildlife (WARM)
 - c. Recreation - non-water contact (REC II)
 - d. Wildlife Habitat (WILD)

28. Geothermal projects are also regulated by the California Division of Oil and Gas and appropriate federal agencies. The Regional Board and the local District of the Division of Oil and Gas (located in El Centro) have reviewed this project in accordance with the Memorandum of Agreement between the State Water Resources Control Board and the Division of Oil and Gas as originally approved in August 1982, with subsequent amendments approved on May 19, 1988.
29. The Board has notified the discharger and interested agencies and persons of its intent to update waste discharge requirements for the proposed discharges.
30. The Board in a public meeting heard and considered all comments pertaining to the discharges.

IT IS HEREBY ORDERED, that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. Representative samples of wastewater discharged to Holtville Main Drain shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	<u>30-Day Arithmetic Mean Discharge Rate</u>	<u>Maximum Concentration (Flow) For Any One Sample</u>
Total Dissolved Solids	mg/l	4,000	4,500
Suspended Solids	mg/l	30	100
Settleable Matter	ml/l	0.3	1.0
Zinc	mg/l	-	1.0
Chromium	mg/l	-	0.2
Chlorine	mg/l	0.2	0.5
(Free Available)			
Flow ^b	gpd	800,000	1,360,000
Bioassay			Quarterly for first year, Annually, thereafter

2. Neither free available chlorine nor total residual chlorine may be discharged for more than two hours in any one day, and not more than one generating unit at the plant may discharge free available or total residual chlorine at any one time.
3. There shall be no discharge of any of EPA's designated 126 priority pollutants [40 CFR Part 423.15 (j)(i)], except as set forth for zinc and chromium in Effluent Limitation A.1., above.
4. There shall be no discharge of polychlorinated biphenyl compounds.
5. The effluent values for pH shall remain within the limits of 6.0 to 9.0.

^bFor each day with average monthly flow calculated.

6. Discharged wastewater shall not cause the temperature of the Holtville Main Drain to be increased by more than 5°F from the immediately upstream temperature.

B. Discharge Specifications

1. Geothermal cleanout fluid and geothermal test fluid shall be discharged for temporary storage into either:
 - a. Earthen basins with a minimum 6-inch compacted clay lining having a liner permeability of 1×10^{-6} cm/sec or less. A clay lining shall be defined as at least 40 percent of the material, by weight, passing a No. 200 U. S. Standard Sieve;
 - b. Earthen basins lined with a synthetic liner of not less than 40 mil thickness, approved by the Executive Officer; or
 - c. Metal or other type containers approved by the Executive Officer.
2. Permanent (longer than 1 year) disposal or storage of geothermal waste in on-site temporary containment basins is prohibited.
3. A minimum of 2 feet of freeboard shall be maintained in all containment basins at all times.
4. At least 10 days prior to the initial discharge of any material into a new containment basin, the discharger shall submit to the Regional Board a report signed by a California Registered Civil Engineer or Certified Engineering Geologist advising the Regional Board's Executive Officer that all facilities are constructed to meet the requirements of the Order.
5. Once any new well at any well site described in Finding No. 7, above, has been completed, its respective mud pit shall have all of the drilling muds and cuttings removed and disposed of in a manner acceptable to the Regional Board's Executive Officer. The final disposal of these wastes and the final closure of the respective mud pits shall be completed within 60 days of the completion of the drilling of the respective wells.
6. Fluids discharged by subsurface injection shall be reinjected into the same aquifer from which the geothermal fluids are produced.
7. Fluids discharged by subsurface injection shall be injected below the fracture pressure of the receiving aquifer and of the confining layer immediately above the receiving aquifer.
8. Fluids discharged by subsurface injection shall not be injected into any subsurface aquifer which has a TDS concentration of less than 10,000 mg/l, unless the TDS of the injection water is less than or equal to that of the receiving water, or the discharger can demonstrate to the satisfaction of the Regional Board's Executive Officer that injection into said zone will not pose a threat to water quality.
9. Solids which may accumulate in the concrete cooling tower basins may not be spread on the surrounding property until an analysis has been performed to ensure that there are no constituents in hazardous concentrations and verbal or written approval for such disposal is obtained by the discharger from the Regional Board's Executive Officer.

10. Prior to the disposal of any materials removed from the temporary storage basins other than by subsurface injection, well pads, or other developed project locations, the discharger shall inform the Regional Board's Executive Officer concerning the nature and volume of the materials and the proposed location of disposal.
11. Only cooling tower blowdown and fluids from the wells described in Finding No. 7, above, shall be injected into the disposal wells described in Finding No. 7 and 8, above, and then only in accordance with the requirements set forth in this Board's Order No. 90-001.

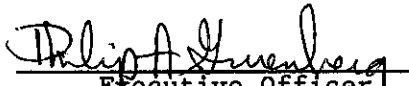
C. Provisions

1. Neither the treatment nor the discharge of wastewater shall create pollution or nuisance as defined in Division 7 of the California Water Code.
2. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
3. This Order includes the attached "Monitoring and Reporting Program No. 90-001," and future revisions thereto, as specified by the Regional Board's Executive Officer, and Standard Provisions, dated December 23, 1985.
4. Prior to any modifications in this facility which would result in material change in the quality or quantity of wastewater discharged, or any material change in location of discharge, the discharger shall report in writing to the Regional Board.
5. Bioassays shall be performed quarterly to evaluate the toxicity of the discharged wastewater in accordance with the following procedures:
 - a. Bioassays shall be conducted on a sensitive fish species and an invertebrate species as approved by the Regional Board's Executive Officer. Pimephales promelas (fathead minnow) and Ceriodaphnia are suggested test species which may be utilized. The bioassays shall be conducted in accordance with the protocol given in EPA/600/4-85/014 - Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms.
 - b. The bioassay test specified in 5.a. shall be performed quarterly for a period of one year (minimum of four tests per organisms).
 - c. When the program described in 5.a. and 5.b. has been completed, this permit will be reopened. At that time, effluent variability will be calculated and a numerical effluent limit established for toxicity. Compliance monitoring shall then be based on annual bioassays of the organism which showed greater sensitivity during the effluent characterization program. Selection of the more sensitive species will be made by the Regional Board's Executive Officer.
6. The discharger shall submit to the Regional Board, at least 30 days prior to commencement of operations at each new well, a written report on the proposed method and estimated costs of cleanup and closure in accordance with the requirements of this Order.
7. The discharger shall submit to the Regional Board, at least 10 days prior to the discharge of any material into a new basin as defined in Discharge Specification No. 1, above, a report prepared by a California Registered Civil Engineer or Certified Engineering Geologist certifying that the sump is constructed to meet the requirements of this Order.

8. The discharger shall submit to the Board within 30 days of adoption of this Board Order, written adequate assurance that financial responsibility for cleanup of the facilities is feasible. This shall be in the form of the latest annual report from the discharger, as well as a Securities and Exchange Commission Form 10-K. Should the Regional Board's Executive Officer determine that the Annual Report and Form 10-K are not adequate to prove financial assurance, then a closure bond of \$100,000 shall be submitted to the Regional Board's office within 60 days from the date of said determination.
9. None of the geothermal fluids or cooling tower waters may be used on access roads, well pads, or other developed project locations for dust control.
10. This Order expires five (5) years from January 17, 1990 and the discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, at least 180 days in advance of such date as an application for issuance of new waste discharge requirements.
11. Adequate protective works shall be provided to assure that a flood which would be expected to occur on a frequency of once in a 100-year period, would not erode or otherwise render portions of the treatment and discharge facilities inoperable.
12. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objections.
13. Any proposed change in corrosion control or biological control treatment(s) utilized in the cooling towers and a listing of any of EPA's 126 priority pollutants contained in said treatment(s) shall be reported to the Regional Board.
14. In the event of any change in operation, or in control or ownership of land or waste disposal facilities owned or controlled by the discharger, the discharger shall:
 - a. Notify this Board of such change; and
 - b. Transmit a copy of this Order to the succeeding owner or operator, and file a copy of the transmittal letter with this Board.
15. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site-operating personnel.

IT IS FURTHER ORDERED that Board Order No. 86-079 and Board Order No. 86-019 be superseded by this 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 January 17, 1990.


Executive Officer

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

MONITORING AND REPORTING PROGRAM NO. 90-001
FOR

ORMESA GEOTHERMAL
30 MW (GROSS) BINARY POWER PLANT,
WELL FIELD, AND COOLING TOWER BLOWDOWN
Southeast of Holtville - Imperial County

Location of Discharge: SE $\frac{1}{4}$, SE $\frac{1}{4}$, Section 25, T15S, R16E, SBB&M

Federal Geothermal Leases No.: CA-966, CA-1903, and CA-17568, Sections 23, 24, 25, and 26, T15S, R16E, and Sections 19,20,21, 27,28, 29, 30, and 31, T15S, R17E, SBB&M

Ormesa Geothermal shall report the following monitoring data to the Regional Board:

EFFLUENT MONITORING

1. Cooling tower blowdown water and other waters covered by this Order that are discharged into the Holtville Main Drain shall be monitored separately and reported as follows:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/l	Grab	Weekly
Total Suspended Solids	mg/l	Grab	Weekly
Settleable Matter	ml/l	Grab	Weekly
Free Available Chlorine	mg/l	Grab	Daily
Zinc	mg/l	Grab	Daily
Chromium	mg/l	Grab	Daily
Iron	mg/l	Grab	Daily
pH	pH Units	Grab	Daily
Temperature	°F	Grab	Daily
Flow	GPD	Daily	Reported Monthly in average daily flow (calculated)
Bioassay	-	-	Quarterly

2. Prior to commencement of use of any new cooling tower maintenance chemical, the discharger shall report thereon in accordance with Provisions No. B.5. and B.9. of Board Order No. 90-001.

ADDITIONAL MONITORING

1. The discharger shall submit to the Regional Board, at least 30 days prior to commencement of operation at each well, a written report on the proposed method and estimated costs of cleanup and closure of each well site in a manner which would not adversely affect water quality.
2. At least ten (10) days prior to the initial discharge of any materials into a temporary storage basin or other container, the discharger shall submit to the Regional Board a technical report signed by a California Registered Civil Engineer advising the Executive Officer that the temporary storage basin and attendant facilities are constructed to meet the requirements contained in Board Order No. 90-001.
3. The discharger shall submit to the Regional Board, at least monthly, a report containing the following information:

<u>Constituents</u>	<u>Units</u>	<u>Reporting Frequency</u>
a. Volume of discharges contained in each temporary storage basin	Gallons	Monthly
b. Volume of waste fluid injected into each injection well	Gallons	Monthly
c. Total dissolved solids concentration of waste fluid injected into each injection well	mg/l	Monthly
d. Total dissolved solids concentration of ground water contained in strata proposed to receive waste fluid injection	mg/l	At least ten (10) days prior to commencement of injection

4. Immediate reporting of any accidental spillage or release of waste material, and immediate measures being taken to correct same and to limit detrimental effects.
5. Report of completion of removal of all geothermal waste from temporary storage basins within one (1) week following completion of work.
6. At least ten (10) days prior to destruction of each temporary storage basin, the discharger shall request a Regional Board staff inspection and approval of the cleanup procedures.

REPORTING

1. The discharger shall inform the Regional Board concerning the location of all sampling stations for the above monitoring.
2. Daily, weekly, monthly and quarterly reports shall be submitted to the Regional Board by the 15th day of the following month. Reports for Item 4, above, shall be forwarded immediately and shall be preceded by telephone communication to the Regional Board's office, Phone No. (619) 346-7491. Copies of the reports submitted to the Board pursuant to the Monitoring and Reporting Program shall be maintained at the operations site, and shall also be made available to staff of the Regional Board upon request.

3. Except for Reporting Items No. 1, and No. 2, above, the monitoring program shall be implemented immediately upon commencement of discharge at each site.

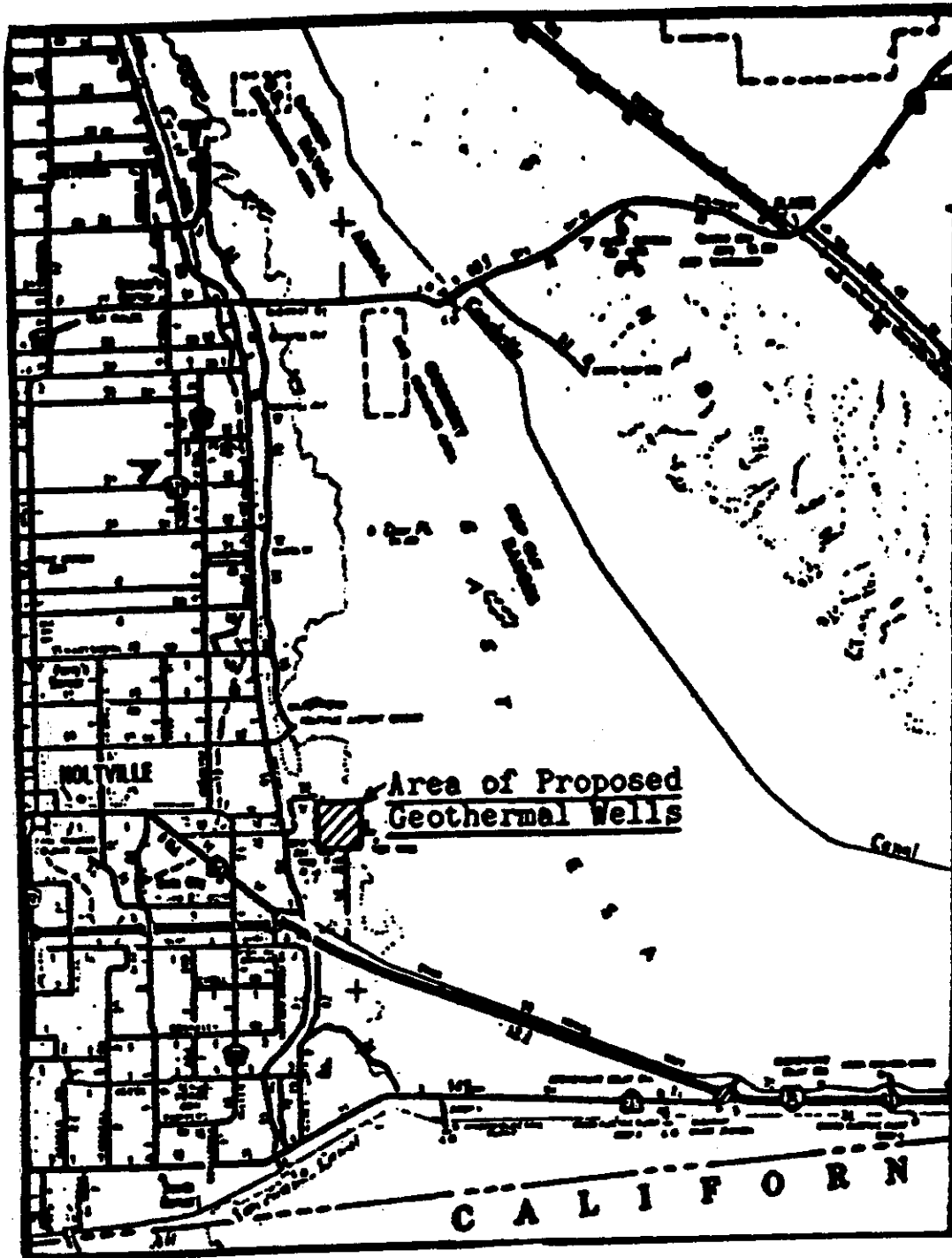
Mail Reports to:

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

January 17, 1990
Date



SITE MAP
ORMESA GEOTHERMAL
30 MW (GROSS) GEOTHERMAL BINARY POWER PLANT
WELLFIELD AND COOLING TOWER BLOWDOWN
EAST MESA KNOWN GEOTHERMAL RESOURCE AREA (KGRA)
Southeast of Holtville - Imperial County
SE $\frac{1}{4}$, SE $\frac{1}{4}$, Section 25, T15S, R16E, SBB&M
Holtville Northeast 7.5' Topographic Map

Order No. 90-001

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

**STANDARD PROVISIONS
FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
December 23, 1985**

1. The permittee must comply with all of the terms, requirements, and conditions of this permit. Any violation of this permit constitutes violation of the Clean Water Act, its regulations and the California Water Code, and is grounds for enforcement action, permit termination, permit revocation and reissuance, denial of application for permit reissuance; or a combination thereof. (40 CFR 122.41(a))¹
2. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement. (40 CFR 122.41(a)(1))
3. The Clean Water Act (CWA) provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, or 308 of the CWA is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing these sections of the CWA is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both. (40 CFR 122.41(a)(2))

The California Water Code provides that any person who violates a waste discharge requirement (same as permit condition), or a provision of the California Water Code is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$20 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.¹

Violation of any of the provisions of the NPDES program or of any of the provisions of this permit may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.¹

4. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. (40 CFR 122.41 (b))
5. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (40 CFR 122.41(c))
6. The permittee shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d))
7. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with this permit. Proper operation

¹ These paragraphs are added or modified pursuant to the California Water Code.

- and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities, or similar systems that are installed by a permittee, only when necessary to achieve compliance with the conditions of this permit. (40 CFR 122.41(e))
8. This permit may be modified, revoked or reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. (40 CFR 122.41(f))
 9. This permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 122.41(g))
 10. The permittee shall furnish, within a reasonable time, any information the Regional Board or EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee shall also furnish to the Regional Board, upon request, copies of records required to be kept by this permit. (40 CFR 122.41(h))
 11. The Regional Board, EPA, and other authorized representatives shall be allowed:
 - a. Entry upon the premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of the permit;
 - b. Access to copy any records that are kept under the conditions of this permit;
 - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - d. To photograph, sample, and monitor for the purpose of assuring compliance with this permit, or as otherwise authorized by the Clean Water Act. (40 CFR 122.41(i))
 12. Monitoring and records
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. The permittee shall retain records of all monitoring information, including all calibration and maintenance monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Board or EPA at any time.
 - c. Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
 - d. Monitoring must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this permit.

- e. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both. (40 CFR 122.41(j))
13. All applications, reports, or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR 122.22. (40 CFR 122.41(k) (1))
14. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. (40 CFR 122.41(k)(2))
15. Reporting requirements
- a. The permittee shall give advance notice to the Regional Board as soon as possible of any planned physical alterations or additions to the permitted facility.
 - b. The permittee shall give advance notice to the Regional Board of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.
 - c. This permit is not transferable to any person except after notice to the Regional Board. The Regional Board may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
 - d. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR).
 - (ii) If the permittee monitors any pollutant more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - (iii) Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
 - e. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit, shall be submitted not later than 14 days following each schedule date.
 - f. Twenty-four hour reporting
 - (i) The permittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the

circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

(ii) The following shall be included as information that must be reported within 24 hours under this paragraph:

- (a) Any unanticipated bypass that exceeds any effluent limitation in the permit.
- (b) Any upset that exceeds any effluent limitation in the permit.
- (c) Violation of a maximum daily discharge limitation for any of the pollutants listed in this permit to be reported within 24 hours.

(iii) The Regional Board may waive the above-required written report on a case-by-case basis.

g. The permittee shall report all instances of noncompliance not otherwise reported under the above paragraphs at the time monitoring reports are submitted. The reports shall contain all information listed in paragraph 15(f) above. (40 CFR 122.41(l))

16. Bypass (the intentional diversion of waste streams from any portion of a treatment facility) is prohibited. The Regional Board may take enforcement action against the discharger for bypass unless:

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.)
- b. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance; and
- c. The permittee submitted a notice at least ten days in advance of the need for a bypass to the appropriate Regional Board.

The permittee may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable.

The permittee shall submit notice of an unanticipated bypass as required in paragraph 15(f) above. (40 CFR 122.41(m))

17. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities,

inadequate treatment facilities, lack of preventive maintenance, or careless or improper action. A permittee that wishes to establish the affirmative defense of an upset in an action brought for noncompliance shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and that the permittee can identify the cause(s) of the upset;
- b. The permitted facility was being properly operated at the time of the upset;
- c. The permittee submitted notice of the upset as required in paragraph 15(f) above; and
- d. The permittee complied with any remedial measures required under paragraph 5.

No determination made before an action for noncompliance, such as during administrative review of claims that noncompliance was caused by an upset, is final administrative action subject to judicial review.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof. (40 CFR 122.41(n))

18. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Board as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur that would result in the discharge of any toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following "notification levels":

- (i) One hundred micrograms per liter (100 ug/l);
- (ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2, 4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
- (iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
- (iv) The level established by the Regional Board in accordance with 40 CFR 122.44 (f).

- b. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant that was not reported in the permit application. (40 CFR 122.42(a))

19. All POTW's must provide adequate notice to the Regional Board of:

- a. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the Clean Water Act, if it were directly discharging those pollutants.
- b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 CFR 122.42(b))

END