

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

PERMIT NO. 93-007
NPDES NO. CA7000003

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
FOR
SECOND IMPERIAL GEOTHERMAL COMPANY (SIGC), A CALIFORNIA LIMITED PARTNERSHIP
DISCHARGE OF COOLING TOWER WASTEWATER
South of Heber - Imperial County

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

1. Second Imperial Geothermal Company (SIGC), a California limited partnership (hereinafter referred to as the permittee), 4000 Kruse Way Place, Building One, Suite 255, Lake Oswego, Oregon, 97035, submitted a National Pollutant Discharge Elimination System (NPDES) application for permit to discharge, dated September 28, 1992. Said application was assigned Application No. CA7000003.
2. The proposed new project is a 33-megawatt (MW) binary electrical generation facility and related geothermal well field to be constructed south of the town of Heber in Imperial County, as shown on Attachment "A", incorporated herein and made a part of this Permit. The proposed project is located in the Heber Geothermal Unit in close proximity to the defunct Heber Binary Geothermal Demonstration Project.
3. Cooling for the binary geothermal electrical units will be provided by two (2) six-cell cooling towers to be located at the plant site. SIGC proposes to discharge approximately 0.8 million gallons-per-day of the cooling tower blowdown water, which is needed to maintain the required quality of the cooling water, to the Imperial Irrigation District's (IID's) Beech Drain.
4. Chemicals are added to the cooling tower water for pH control purposes and for corrosion, scale, and biological growth inhibition.
5. The cooling tower water treatment will be a total coordinated control program which will consist of pH control with sulfuric acid; Chemco 5468 inhibitor for deposit, scale and corrosion control; and gaseous chlorine for microbiological control. Chemco 5468 is a liquid inhibitor which the permittee states has been designed specifically to treat the IID's All-American Canal water which is used as cooling tower makeup. Chemco 5468 consists of organic and inorganic corrosion inhibitors designed to effectively control ferrous and non-ferrous metal corrosion; polymeric dispersants and sequestering compounds for scale and deposit control. Chemco 5468 usage will be 12.65 gallons-per-day (gpd) per cooling tower, or 25.3 gpd per plant. The active ingredients in Chemco 5468 are acrylic polymer - No CAS #, 1-hydroxyethylidene-1, 1-Diphosphonic Acid-CAS # 2809-21-4, Phosphoric Acid-CAS # 7664-38-2, Sodium Tolytriazole-CAS # 64665-57-2.
6. The permittee proposes to discharge an average of 0.8 million gallons-per-day of cooling tower blowdown wastewater into the IID's Beech Drain in the NE 1/4 of Section 4, T17S, R14E, SBB&M.
7. The permittee proposes to use Colorado River water for cooling tower makeup water. Specifically, the water supply will come from IID's Central Main Canal.

8. The cooling tower blowdown water is discharged to the Beech Drain which flows to the Central Drain which eventually flows into the Salton Sea.
9. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted May 15, 1991 and designates the beneficial uses of ground and surface waters in this Region.
10. The State Water Resources Control Board adopted the California Inland Surface Waters Plan (ISWP) on April 11, 1991. The plan includes water quality objectives and other requirements.
11. Effluent and receiving water limitations in this Permit are based on the Federal Clean Water Act, Basin Plan, California Inland Surface Waters Plan (ISWP), State Water Resources Control Board's plans and policies, U. S. Environmental Protection Agency (EPA) guidance, best professional judgment, and best available technology economically achievable.
12. The Environmental Protection Agency and the Regional Board have classified this discharge as a minor discharge.
13. The beneficial uses of waters in the Imperial Valley Drains and the New River are:
 - a. Fresh Water Replenishment of Salton Sea (FRSH)
 - b. Noncontact Water Recreation (REC II)
 - c. Warm Water Habitat (WARM)
 - d. Wildlife Habitat (WILD)
 - e. Preservation of Rare, Endangered or Threatened Species (RARE)
 - f. Water Contact Recreation (REC I)
14. The beneficial uses of waters in the Salton Sea are:
 - a. Aquaculture (AQ)
 - 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)
15. In accordance with Section 13389, Chapter 5.5, Division 7 of the California Water Code, and Section 15263, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these waste discharge requirements 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.).
16. The primary purpose of drains in the Imperial Hydrologic Unit is for conveyance of drainage in support of agriculture.
17. The Board has notified the permittee, and all known interested agencies and persons of its intent to prescribe an NPDES Permit and waste discharge requirements for said discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
18. The Board in a public meeting heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED that the permittee, 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 the regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. Wastewater discharged to Beech 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 Per Any One Sample</u>
Total Dissolved Solids	mg/L ¹	4,000	4,500
Total Suspended Solids	mg/L	30	100
Settleable Matter	ml/L ²	0.3	1.0
Chlorine ³ (Free Available)	mg/L	--	0.02

2. Neither free available chlorine nor total residual chlorine may be discharged for more than two hours in any one day.
3. The effluent values for pH shall remain within the limits of 6.0 to 9.0.
4. Discharged wastewater shall not cause the temperature of Beech Drain to be increased by more than 5°F from the immediately upstream temperature.
5. There shall be no acute toxicity in the cooling tower effluent being discharged to the Beech Drain. Acute toxicity is defined as less than ninety percent survival, fifty percent of the time, and less than seventy percent survival, ten percent of the time, of standard test organisms in undiluted effluent in a 96-hour static or continuous - flow test.

B. Receiving Water Limitations

1. The discharge shall not cause the following conditions to exist in the receiving waters:
 - a. An increase in turbidity, unless it can be demonstrated to the satisfaction of the Regional Board's Executive Officer that such alteration in turbidity does not adversely affect beneficial uses.
 - b. An increase in the Total Dissolved Solids (TDS) content, unless it can be demonstrated to the satisfaction of the Regional Board's Executive Officer that such an increase does not adversely affect beneficial uses.

¹mg/L = milligram per Liter

²ml/L = milliliter per Liter

³Established for the protection of aquatic organisms.

- c. An increase in aquatic growth to the extent that such growths cause a nuisance or adversely affect beneficial uses.
- d. Objectionable color and/or odor.

C. Discharge Specifications

1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050(l) and 13050(m) of Division 7 of the California Water Code.
2. There shall be no other water treatment chemicals added to the cooling tower waters other than those described above without the written approval of the Regional Board's Executive Officer.
3. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Board will revise and modify this Permit in accordance with such more stringent standards.
4. The discharge of oil, trash, industrial waste sludge, or any other solids directly to the surface waters at this facility or in any manner which permit it to be washed into the surface waters in this Region is prohibited.

D. Provisions

1. The permittee shall, at all times, properly operate and maintain all systems and components of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of this Permit. All systems, both in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Regional Board upon demand.
2. The permittee shall comply with the attached "Monitoring and Reporting Program No. 93-007", and future revisions thereto, as specified by the Regional Board's Executive Officer, and be in accordance with the following:
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. All monitoring must be conducted according to test procedures approved under 40 CFR Part 136 or as specified in this Permit.
 - c. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous 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 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Board's Executive Officer at any time.

- d. Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements.
 2. The individual(s) who performed the sampling or measurements.
 3. The date(s) analyses were performed.
 4. The individual(s) who performed the analyses.
 5. The results of such analyses.
3. Prior to any modifications at this facility which would result in material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the permittee shall report in writing to the Regional Board's Executive Officer.
 4. None of the geothermal fluids or cooling tower waters may be used on access roads, well pads, or other development project locations for dust control.
 5. The permittee shall comply with the attached "Standard Provisions for National Pollutant Discharge Elimination System Permit" dated October, 1990.
 6. The permittee 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 not later than 90-days after the adoption of this Permit.
 7. 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 drain systems or other courses under their jurisdiction.
 8. Storm water discharges from the facility shall not cause or threaten to cause pollution, contamination, or nuisance.
 9. 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.
 10. 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 treatments, shall be reported to the Regional Board.
 11. The permittee shall maintain a copy of this Permit at the site so as to be available at all times to site-operating personnel. The permittee shall ensure that all site-operating personnel are familiar with the content of this Permit.
 12. This Permit may be modified by the Regional Board prior to the expiration date to include effluent or receiving water limitations for toxic constituents determined to be present in significant amounts in discharges regulated by this Permit.
 13. Upon adoption of this Permit, the permittee shall comply with all conditions and limitations of this Permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the California Water Code and is grounds for enforcement action, permit termination, or denial of a renewal application.
 14. Prior to any change in ownership or management of this operation, the permittee shall transmit a copy of this Permit to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.
 15. This Permit does not authorize violation of any federal, state, or local laws or regulations.

16. The collection, preservation and holding times of all samples shall be in accordance with EPA-approved procedures. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.
17. Compliance with the discharge limitations shall be determined at the end of the discharge pipe.
18. The permittee shall allow the Regional Board's Executive Officer, or his/her authorized representative, upon the presentation of credentials and other documents are may be required by law to:
 - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or facilities where records must be kept under the conditions of this Permit.
 - b. Have access to an copy, at reasonable times, any records that must be kept under the conditions of this Permit. Inspect and sample or monitor, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit.
19. The permittee shall allow the Regional Board's Executive Officer, or his/her authorized representative, to sample or monitor effluent for the purposes of determining compliance with this Permit.
20. This Permit may be modified, revoked and 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. Causes for modification include the promulgation of new regulations or adoption of new regulations by the State Board or the Regional Board, including revisions to the Basin Plan.
21. The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil or criminal penalty.
22. This Permit expires five years from date of adoption, and the permittee shall file a complete 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 a new NPDES Permit and new waste discharge requirements.
23. This Permit shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Federal Clean Water Act, as amended, and shall become effective at the end of ten (10) days from the date of the hearing at which this Permit was adopted by the Regional Board, provided the Regional Administrator, U. S. Environmental Protection Agency, has no objections.
24. Wastewater discharged to the Beech Drain shall be monitored for toxicity using bioassays as specified in "Monitoring and Reporting Program No. 93-007 (attached), or future revisions thereto, as specified by the Regional Board's Executive Officer.
25. If the discharge consistently exceeds the applicable chronic or acute toxicity limitation, a toxicity reduction evaluation (TRE) is required. The TRE shall include all reasonable steps to identify the source(s) of toxicity. Once the source(s) of toxicity is identified, the permittee shall take all reasonable steps necessary to reduce toxicity to the required level.

I, Philip A. Gruenberg, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Permit adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on March 31, 1993.

Philip A. Gruenberg

Executive Officer

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

**MONITORING AND REPORTING PROGRAM NO. 93-007
FOR
SECOND IMPERIAL GEOTHERMAL COMPANY (SIGC), A CALIFORNIA LIMITED PARTNERSHIP
DISCHARGE OF COOLING TOWER WASTEWATER
South of Heber - Imperial County**

Location of Discharge: Beech Drain, in the NE 1/4 of Section 4, T17S, R14E, SBB&M

MONITORING

Wastewater effluent discharged to Beech Drain shall be monitored for constituents indicated below. If the facility is not in operation, a letter should be sent each month to the Regional Board indicating that the facility is not in operation.

A sampling station shall be established where representative samples of the effluent can be obtained. All samples shall be taken at the end of the outfall. Effluent monitoring is required during any day operation occurs, including short cycle operations and regular maintenance where discharge occurs.

<u>Constituent</u>	<u>Unit</u>	<u>Type Samples</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
Total Phosphate	mg/L	Grab	Weekly
Total Chlorine Residual	mg/L	Grab	Daily ¹
pH	pH Units	Grab	Daily
Temperature	°F	Grab	Daily
Flow	GPD ²	Daily	Reported Monthly with average daily flow (calculated)

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

¹In accordance with Effluent Limitation A.2.

²GPD = Gallons Per Day

*Add. chg. of ownership
Bd. Ord. 93-147
11/17/93*

The permittee shall maintain a daily record of the following:

- a. The chlorine residual in the effluent during peak flow.
- b. The amount of chlorine used and flow treated.

RECEIVING WATER MONITORING (BEECH DRAIN)

<u>Constituent</u>	<u>Unit</u>	<u>Type Samples</u>	<u>Sampling Frequency</u>
Temperature (upstream and downstream of discharge)	°F	Grab	Daily
Hardness	mg/L	Grab	Monthly
pH	Measurement	Grab	Monthly

EFFLUENT CHRONIC TOXICITY TESTING

The permittee shall conduct chronic toxicity testing on this facility's effluent as follows:

<u>Test</u>	<u>Units</u>	<u>Type of Samples</u>	<u>Minimum Frequency of Test</u>
Chronic Toxicity	tu _c	Composite	Quarterly

Both test species given below shall be used to measure chronic toxicity:

Critical Life Stage Toxicity Tests

<u>Species</u>	<u>Effect</u>	<u>Test Duration (Days)</u>	<u>Reference</u>
fathead minnow (Pimephales promelas)	larval survival and growth rate	7	Horning & Weber, 1989
water flea (Ceriodaphnia dubia)	survival; number of young	7	Horning & Weber, 1989

Toxicity Test Reference: Horning W.B. and C.I. Weber (eds). 1989. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organism. Second edition. U.S. EPA Environmental Monitoring Systems Laboratory, Cincinnati, Ohio. EPA/600/4-89/001.

Dilution and control waters should be obtained from an unaffected area of the receiving waters. Standard dilution water should be used if the above sources exhibit toxicity greater than 1.0 tu_c.

The sensitivity of the test organism to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.

Chronic toxicity shall be expressed and reported as toxic units (tu_c) where:

$$tu_c = 100/NOEL$$

and the No Observed Effect Level (NOEL) is expressed as the maximum percent effluent of test water that causes no observed effect on a test organism, as determined in a critical life stage toxicity test (indicated above).

Acute toxicity shall be calculated from the results of the chronic toxicity test described above and shall be reported along with the results of each chronic test. Acute toxicity shall be expressed as percent survival of test organism over a ninety-six hour period.

REPORTING

1. All monitoring data collected as required above will be reported monthly to the Regional Board. Monthly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month. Quarterly reports shall be submitted by January 15, April 15, July 15, and October 15 of each year.
2. The permittee shall arrange the data in tabular form so that the specified information is readily discernable. The data should be summarized in such a manner as to clearly illustrate whether the treatment system is operating in compliance with the discharge limitations.
3. Each report shall contain the following statement:

"I declare under the penalty of law that this document and all the attachments are 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."

Submit monitoring reports to:

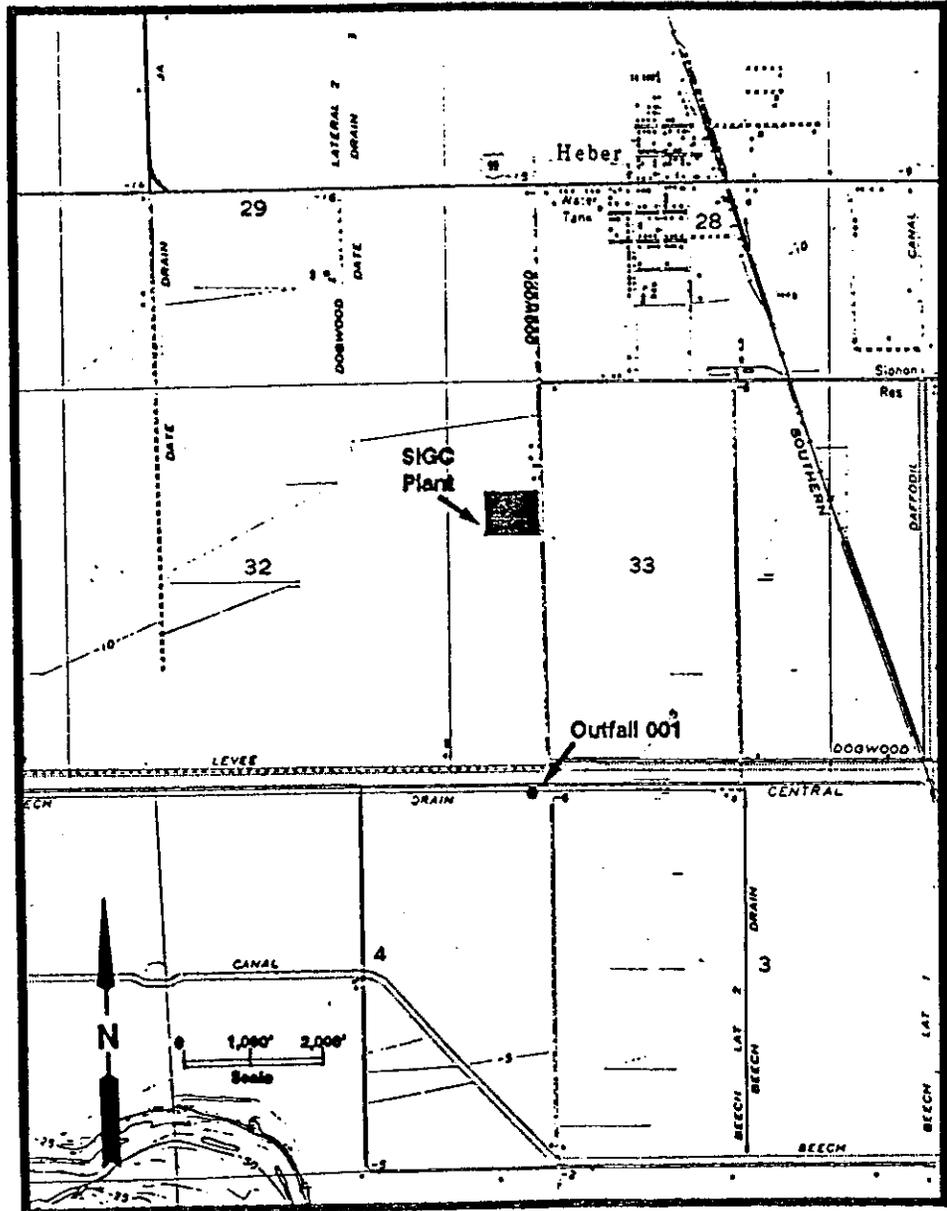
California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

ORDERED BY: Philip A. Greenberg

Executive Officer

March 31, 1993

Date



ATTACHMENT "A"

SITE MAP

SECOND IMPERIAL GEOTHERMAL COMPANY (SIGC), A CALIFORNIA LIMITED PARTNERSHIP
DISCHARGE OF COOLING TOWER WASTEWATER

South of Heber - Imperial County

Discharge Location: NE 1/4 of Section 4, T17S, R14E, SBB&M

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

STANDARD PROVISIONS
FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
OCTOBER 1990

FOR ALL PERMIT HOLDERS

1. Duty to Comply

- a. The discharger must comply with all of the conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [40 CFR Part 122.41(a)]
- b. The discharger 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 been modified to incorporate the requirement. [40 CFR Part 122.41(a)(1)]

2. Duty to Reapply:

If the discharger wishes to continue an activity regulated by this permit after the expiration date of this permit, the discharger must apply for and obtain a new permit. [40 CFR Part 122.41(b)]

- a. Any publicly owned treatment works (POTW) with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Regional Board. (The Regional Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) [40 CFR Part 122.41(d)(1)]
- b. All other dischargers with currently effective permits shall submit a new application 180 days before the existing permit expires except that:
 1. The Regional Administrator of the Environmental Protection Agency may grant permission to submit an application later than the deadline for submission otherwise applicable, but no later than the permit expiration date; and
 2. The Regional Administrator of the Environmental Protection Agency may grant permission to submit the information after the permit expiration date required by paragraphs (g)(7), (9), and (10) of 40 CFR Part 122.21.

3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a discharger 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 part 122.41(c)]

4. Duty to Mitigate

The discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. [40 CFR Part 122.41(d)]

5. Proper Operation and Maintenance

The discharger 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 discharger to achieve compliance with this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a discharger only when necessary to achieve compliance with the conditions of this permit. [40 CFR Part 122.41(e)]

6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit; or
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. A change in any condition that requires either a temporary or a permanent reduction or elimination of the authorized discharge; or
- d. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

The Regional Board may also review and revise this permit at any time upon application of any person, or on the Regional Board's own motion [CWC 13263(e)]

If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant to this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the discharger so notified [40 CFR Part 122.41(f)]

The filing of a request by the discharger for a permit modification, revocation, and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit conditions. [40 CFR Part 122.41(f)]

7. Property Rights

This permit 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. [40 CFR Part 122.41(g)]

8. Duty to Provide Information

The discharger shall furnish the Regional Board, State Board, or EPA, within a reasonable time, any information which the Regional Board, State Board, or EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating a permit or to determine compliance with a permit. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this permit. [40 CFR Part 122.41(h)]

The discharger shall conduct analysis on any sample provided by EPA as part of the Discharge Monitoring Quality Assurance (DMQA) program. The results of any such analysis shall be submitted to EPA's DMQA manager.

9. Inspection and Entry

The discharger shall allow the Regional Board, State Board, EPA, and/or other authorized representatives upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location. [40 CFR Part 122.41(i)]

10. Monitoring and Records

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

- b. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous 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 5 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Board, State Board, or EPA at any time.
- c. Records of monitoring information shall include:
 1. The date, exact place, and time of sampling or measurements;
 2. The individual(s) who performed the sampling or measurements;
 3. The date(s) analyses were performed;
 4. The individual(s) who performed the analyses;
 5. The analytical techniques or methods used; and
 6. 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.

11. Signatory Requirements

- a. All permit applications, reports, or information submitted to the Regional Board, State Board, and/or EPA shall be signed as follows:
 1. For a corporation: by a responsible corporate officer. For the purpose of this provision, a responsible corporate officer means: a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 3. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a Federal agency includes: the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA). [40 CFR Part 122.22(a)]

b. All reports required by this permit, other information requested by the Regional Board, State Board, or EPA, and all permit applications submitted for Group II stormwater discharges under 40 CFR Part 122.26(b)(3) shall be signed by a person described in paragraph a. of this provision, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described in paragraph a. of this provision;
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
3. The written authorization is submitted to the Regional Board. [40 CFR Part 122.22(b)]

c. Changes to authorization. If an authorization under paragraph b. of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. of this provision must be submitted to the Regional Board prior to or together with any reports, information, or applications to be signed by an authorized representative. [40 CFR Part 122.22(c)]

d. Certification. Any person signing a document under paragraph a. or b. of this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations." [40 CFR Part 122.22(d)]

e. The Clean Water Act 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 2 years per violation, or by both.

12. Reporting Requirements

- a. Planned changes. The discharger shall give notice to the Regional Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when:
 1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or
 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged.
- b. Anticipated noncompliance. The discharger will give advance notice to the Regional Board of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- c. Transfers
 1. 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 discharger and incorporate such other requirements as may be necessary under the Clean Water Act and the Porter-Cologne Water Quality Control Act.
 2. Transfer by modification. Except as provided in paragraph (3) below, a permit may be transferred by the discharger to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made to identify the new discharger and incorporate such other requirements as may be necessary under the Clean water Act (CWA).
 3. Automatic transfers. As an alternative to transfers under paragraph (2) of this provision, any NPDES may be automatically transferred to a new discharger if:
 - a. The current discharger notifies the Regional Board at least 30 days in advance of the proposed transfer date in paragraph (3)(b) of this provision.
 - b. The notice includes a written agreement between the existing and new dischargers containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Regional Board does not notify the existing discharger and the proposed new discharger of its intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40 CFR Part 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (3)(b) of this provision.

- d. Definitions. The following definitions shall apply unless specified in this permit;
1. "Daily Discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day. "Daily discharge" shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during the sampling day.
 2. "Daily Average" discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
 3. "Daily Maximum" discharge limitations means the highest allowable "daily discharge" during the calendar month.
- e. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
1. Monitoring results must be reported on a Discharge Monitoring Report (DMR).
 2. If the discharger 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.
 3. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
 4. As required by 40 CFR Parts 122.45(b)(2), if a non-POTW discharger has production-based limitation, then the discharger shall submit with the DMR the level of production that actually occurred during each month and the limitations, standards, or prohibitions applicable to that level of production.
- f. Compliance schedules. 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 no later than 14 days following each schedule date.

- g. Twenty-four hour reporting. The discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

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

1. Any unanticipated bypass that exceeds any effluent limitation in the permit.
2. Any upset that exceeds any effluent limitation in the permit.
3. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Regional Board in this permit to be reported within 24 hours.

The Executive Officer may waive the above-required written report on a case-by-case basis for reports under this provision if the oral report has been received within 24 hours.

- h. Other noncompliance. The discharger shall report all instances of noncompliance not reported under paragraphs a., e., f, and g. of this provision, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph g. of this provision.
- i. Other information. Where the discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Board, the discharger shall promptly submit such facts or information. [40 CFR Part 122.41(1)]

13. Bypass

a. Definitions

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
2. "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. Bypass not exceeding limitations. The discharger may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is essential maintenance to assure efficient operation. These bypasses are not subject to paragraphs c. and d. of this provision.
- c. Notice
 1. Anticipated bypass. If the discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
 2. Unanticipated bypass. The discharger shall submit notice of an unanticipated bypass as required in paragraph g. of provision 12 above (24-hour notice).
- d. Prohibition of bypass. Bypass is prohibited, and the Regional Board may take enforcement action against the discharger for bypass, unless:
 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 3. The discharger submitted notices as required under paragraph c. of this provision.
- e. Approval of anticipated bypass. The Regional Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Board determines that it will meet the three conditions listed above in paragraph d. of this provision. [40 CFR Part 122.41(m)]

14. Upset

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the discharger. 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 operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph c. of this provision are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administration action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A discharger that wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and that the discharger can identify the cause(s) of the upset;
2. The permitted facility was at the time being properly operated;
3. The discharger submitted notice of the upset as required in paragraph g. of provision 12 (24-hour notice); and
4. The discharger complied with any remedial measures required under provision 4.

d. Burden of proof. In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof. [40 CFR Part 122.41(n)]

15. Enforcement

The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$25,000 per day of violation. Any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment of not more than 1 year, or both. Higher penalties may be imposed for knowing violations and for repeat offenders. The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided under the Clean Water Act.

EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

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

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 $\mu\text{g}/\text{l}$);
 - b. Two hundred microgram per liter (200 $\mu\text{g}/\text{l}$) for acrolein and acrylonitrile; five hundred microgram per liter (500 $\mu\text{g}/\text{l}$) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR Part 122.21(g)(7); or

- d. The level established by the Regional Board in accordance with 40 CFR Part 122.44(f). [40 CFR Part 122.42(a)(1)]
2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. Five hundred microgram per liter (500 µg/l);
 - b. One milligram per liter (1 mg/l) for antimony;
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR Part 122.21(g)(7)
 - d. The level established by the Regional Board in accordance with 40 CFR Part 122.44(f) [40 CFR Part 122.42(a)(2)]

PUBLICLY OWNED TREATMENT WORKS (POTWs)

1. Notice of Changes

All POTWs must provide adequate notice to the Regional Board of the following:

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

For purposes of this provision, adequate notice shall include information on (1) the quality and quantity of effluent introduced into the POTW, and (2) any anticipated impacts on the quantity or quality of effluent to be discharged from the POTW. [40 CFR Part 122.42(b)]

2. Pretreatment

Any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (mgd) and receiving from industrial users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to Pretreatment Standards will be required to establish a POTW Pretreatment Program. The Regional Board may require that a POTW with a design flow of 5 mgd or less develop a POTW Pretreatment Program if it finds that the nature or volume of the industrial influent, treatment process upsets, violations of POTW effluent limitations, contamination of municipal sludge, or other circumstances warrant in order to prevent interference with the POTW or Pass Through. [40 CFR Part 403.8]

3. National Pretreatment Standards: Prohibited Discharges

- a. General Prohibitions. No source may introduce into a POTW any pollutant(s) which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in paragraph b. of this provision apply to all non-domestic sources introducing pollutants into a POTW whether or not the source is subject to other National Pretreatment Standards or any national, state, or local Pretreatment Requirements.
- b. Specific prohibitions. In addition, the following pollutants shall not be introduced into a POTW:
 1. Pollutants which create a fire or explosion hazard in the POTW, including but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR Part 261.21;
 2. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such Discharges;
 3. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;
 4. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW; and
 5. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40°C(104°F) unless the Regional Board, upon request of the POTW, approves alternate temperature limits.
 6. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
 7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
 8. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
- c. When specific limits must be developed by a POTW.
 1. POTWs developing POTW Pretreatment Programs pursuant to 40 CFR Part 403.8 shall develop and enforce specific limits to implement the prohibitions listed in paragraphs a. and b. of this provision.

2. All POTWs shall, in cases where pollutant contributed by user(s) result in interference or pass through, and such violation is likely to recur, develop and enforce specific effluent limits for industrial user(s), and all other users, as appropriate, which, together with appropriate changes in the POTW treatment plant's facilities or operations, are necessary to ensure renewed and continued compliance with the POTW's NPDES permit or sludge use or disposal practices.
3. Specific effluent limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.
- d. Local limits. Where specific prohibitions or limits on pollutants or pollutant parameters are developed by a POTW in accordance with paragraph c. above, such limits shall be deemed Pretreatment Standards for the purposes of Section 307(d) of the Clean Water Act. [40 CFR Parts 403.5 (a) through (d)].