CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

JANUARY, 1985

STANDARD PROVISIONS AND REPORTING REQUIREMENTS for NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS

A. General Permit Conditions:

Prohibitions:

1. Introduction of "incompatible wastes" to the treatment system is prohibited.

2. Discharge of high-level radiological waste and of radiological, chemical, and biological warfare agents is prohibited.

3. Discharge of "toxic pollutants" in violation of effluent standards and prohibitions established under Section 307(a) of the Clean Water Act is prohibited.

4. "Bypass" and "overflow" of untreated and partially treated waste is prohibited.

5. Discharge of sludge, sludge digester or thickener supernatant, and sludge drying bed leachate to drainageways, surface waters, or the ocean is prohibited.

6. Introduction of pollutants into the collection, treatment, or disposal system by an "indirect discharger" that:

   a) inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge; or,

   b) flow through the system to the receiving water untreated; and,

   c) cause or "significantly contribute" to a violation of any requirement of this Order, is prohibited.

7. Introduction of "pollutant free" wastewater to the collection, treatment, and disposal system in

amounts that threaten compliance with this order is prohibited.

Provisions:

8. Collection, treatment, and discharge of waste shall not create a nuisance or pollution, as defined by Section 13050 of the California Water Code.

9. Facilities and systems for collection, treatment, and control of wastewater shall be properly operated and maintained in order to perform effectively. Proper operation includes adequate laboratory controls and appropriate quality assurance procedures. However, back-up or auxiliary facilities need only be operated if necessary to maintain compliance with this permit.

10. All facilities used for transport or treatment of wastes shall be adequately protected from inundation and washout as the result of a 100-year frequency flood.

11. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.

12. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner approved by the Executive Officer.

13. Publicly owned wastewater treatment plants shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23 of the California Administrative Code.

14. The Regional Board and the Environmental Protection Agency shall be allowed:

    a) entry upon premises where an effluent source is located or where records must be kept under the conditions of this permit;

    b) access to copy any records that must be 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 showing permit compliance.

15. After notice and opportunity for a hearing, this order may be terminated for cause, including, but not limited to:

    a) violation of any term or condition contained in this order;

    b) obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts;

    c) a change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge; and,

    d) a substantial change in character, location, or volume of the discharge.

16. This permit does not authorize commission of any act causing injury to the property of another, does not convey any property rights of any sort, does not remove liability under Federal, State, or local laws, and does not guarantee a capacity right in receiving waters.

17. The "permittee" shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adverse impact on human health or the environment.

18. Provisions of this permit are severable. If any provision of the permit is found invalid, the remainder of the permit shall not be affected.

19. After notice and opportunity for hearing, this order may be modified or revoked and reissued for cause, including:

    a) Promulgation of a new or revised effluent standard or limitation;

    b) A material change in character, location, or volume of the discharge;

c) Access to new information that affects the terms of the permit, including applicable schedules;

d) Correction of technical mistakes or mistaken interpretations of law; and,

e) Other causes set forth under Sub-part D of 40CFR Part 122.

20. The "permittee" shall furnish, within a reasonable time, any information the Regional Board may request to determine compliance with this permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit.

21. Safeguards shall be provided to assure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the affect of accidental discharges shall:

    a) identify possible situations that could cause "upset", "overflow" or "bypass", or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.)

    b) evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.

22. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

23. Physical Facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet weather season.

24. Production and use of reclaimed water is subject to the approval of the Board. Production and use of reclaimed water shall be in conformance with reclamation criteria established in Chapter 3, Title 22, of the California Administrative Code and Chapter 7, Division 7, of the California Water Code. An engineering report pursuant to section 60323, Title 22, of the California Administrative Code is required and a waiver or water reclamation requirements from the Board is required before reclaimed water is supplied for any use, or to any user, not specifically identified and approved either in this Order or another order issued by this Board.

B. General Monitoring Requirements:

1. Monitoring location, minimum sampling frequency, and sampling method for each parameter shall comply with the Monitoring and Reporting Program of this Order. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, entitled "Guidelines Establishing Test Procedures for Analysis of Pollutants," unless other test procedures have been specified in this permit.

2. If results of monitoring a pollutant appear to violate effluent limitations based on a weekly, monthly, 30-day, or six-month period, but compliance or non-compliance cannot be validated because sampling is too infrequent, the frequency of sampling shall be increased to validate the test within the next monitoring period. The increased frequency shall be maintained until the Executive Officer agrees the original monitoring frequency may be resumed.

   For example, if copper is monitored annually and results exceed the six-month median numerical effluent limitation in the permit, monitoring of copper must be increased to a frequency of at least once every two months (ref. paragraph G.14.). If suspended solids are monitored weekly and results exceed the weekly average numerical limit in the permit, monitoring of suspended solids must be increased to at least four (4) samples every week (ref. paragraph G.15.).

3. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services for the constituent(s) being analyzed. Bioassay(s) performed in order to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Resources Control Board and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the California Department of Health Services or, where appropriate, the Department of Fish and Game due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided:

   a) Data results remain consistent with results of samples analyzed by the Regional Board;

   b) A quality assurance program is used at the laboratory, including a manual containing steps followed in this program that is available for inspections by the staff of the Regional Board; and,

   c) Certification is pursued in good faith and obtained as soon as possible after the program is reinstated.

4. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Samples shall be taken during periods of peak loading conditions. Influent samples shall be samples collected from the combined flows of all incoming wastes, excluding recycled wastes. Effluent samples shall be samples collected downstream of the last treatment unit and tributary flow and upstream of any mixing with receiving waters.

5. If any pollutant is monitored at locations specified in the permit more frequently than required by the permit, and using approved test procedures, the results shall be included in calculations and reports.

6. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

7. The "permittee" shall maintain records of all monitoring information, including all calibration and maintenance records; all original strip chart recordings for continuous monitoring instrumentation;

the date, exact place, and time of sampling; the individual who performed the sampling; the date analysis was performed; the laboratory and individual who performed the analysis; the analytical techniques used; and results. Records shall be maintained for a minimum of three years. This period may be extended during the course of any unresolved litigation or when requested by the Board.

C. General Reporting Requirements:

1. Monitoring results shall be reported at intervals and in a manner specified in the Monitoring and Reporting Program of this permit.

2. Monitoring reports shall be submitted on State Water Resource Control Board Form Q2, which will be supplied by the Regional Board upon request, or on an alternative form either specified or approved by the Executive Officer.

3. Reports of marine monitoring surveys conducted to meet receiving water monitoring requirements of the Monitoring and Reporting Program shall include at least the following information:

   a) A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).

   b) A description of sampling stations, including differences unique to each station (e.g., station location, grain size, rocks, shell litter, calcareous worm tubes, evident life, etc.).

   c) A description of the sampling procedures and preservation sequence used in the survey.

   d) A description of the exact method used for laboratory analysis. In general, analysis shall be conducted according to paragraph B.1. However, variations in procedure are acceptable to accommodate the special requirements of sediment analysis. All such variations must be reported with the test results.

   e) A brief discussion of the results of the survey. The discussion shall compare data from the control

station with data from the outfall stations. All tabulations and computations shall be explained.

4. Any noncompliance that may endanger health or the environment shall be reported orally within 24 hours from the time the "permittee" becomes aware of the circumstances (telephone: 805-549-3147). Unless waived by the Executive Officer of the Regional Board, a written report shall be submitted within five (5) days of awareness and shall contain a description of the noncompliance and its cause; the period of noncompliance (including exact dates, times) or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. This provision includes, but is not limited to:

   a) violation of a discharge prohibition;

   b) any "upset", "overflow", or unanticipated "bypass" that exceeds an effluent limitation; and,

   c) violation of a maximum daily discharge limitation for any "toxic pollutant" or "hazardous substance".

5. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted within 14 days following each scheduled date unless otherwise specified within the permit. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of full compliance.

6. All instances of noncompliance not reported under paragraph numbers C.2 and C.4., above, shall be submitted along with monitoring reports. The report shall contain the information listed in paragraph C.4.

7. Reports shall be submitted in advance of any planned physical changes in the permitted facility or activity that may result in noncompliance with permit requirements or significantly change the nature or increase the quantity of pollutants not controlled by effluent limitations.

8. The "permittee" shall file a report of waste discharge or secure a waiver from the Executive Officer at least

180 days before making any material change or proposed change in the character, location, or plume of the discharge.

9. Within 120 days after the discharger discovers, or is notified by the Regional Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four (4) years, the discharger shall file a written report with the Regional Board. The report shall include:

   a) the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity; and,

   b) a schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

   In addition to complying with paragraphs C.14.c and C.15, the required technical report shall be prepared with public participation and reviewed, approved and jointly submitted by all planning and building departments having jurisdiction in the area served by the waste collection, treatment, or disposal facilities.

10. All "permittees" shall submit reports to the:

    California Regional Water Quality Control Board
    Central Coast Region
    895 Aerovista Place, Suite 101
    San Luis Obispo, CA 93401-5411

    In addition, "permittees" with designated major discharges shall submit a copy of each document to:

    Regional Administrator
    Environmental Protection Agency, Region IX
    75 Hawthorne Street
    San Francisco, California 94105
    Attention: Water Div., Ca. Br.

11. Transfer of control or ownership of a waste discharge facility must be preceded by a notice to the Regional Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing "permittee" and proposed "permittee" containing specific date for transfer of

responsibility, coverage, and liability between them. Whether a permit may be transferred without modification or revocation and reissuance is at the discretion of the Board. If permit modification or revocation and reissuance is necessary, transfer may be delayed 180 days after the Regional Board's receipt of a complete permit application.

12. Except for data determined to be confidential under Section 308 of the Clean Water Act (excludes effluent data and permit applications), all reports prepared in accordance with this permit shall be available for public inspection at the office of the Regional Board or Regional Administrator of EPA.

13. Should the "permittee" discover that it failed to submit any relevant facts or that it submitted incorrect information in a report, it shall promptly submit the missing or correct information.

14. All reports shall be signed as follows:

    a) For a corporation; by a responsible corporate officer (i.e., president, secretary, or treasurer, or vice president of appropriate business function) as defined in 40CFR Part 122;

    b) For a partnership or sole proprietorship; by a general partner or the proprietor, respectively;

    c) For a "municipality", state, federal, or other public agency; by either a principal executive officer or ranking elected official; or,

    d) Their "duly authorized representative."

15. Any person signing a report 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 for knowing violations."

16. By January 30 of each year, the discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. The discharger shall discuss the compliance record and corrective actions taken, or which may be needed, to bring the discharge into full compliance. The report shall address operator certification and provide a list of current operating personnel and their grade of certification. The report shall inform the Board of the date of the Facility's Operation and Maintenance Manual (including contingency plans as described in Provision A.21.), of the date the manual was last reviewed, and whether the manual is complete and valid for the current facility. The report shall restate, for the record, the laboratories used by the discharger to monitor compliance with effluent limits and provide a summary of performance relative to section B, General Monitoring Requirements.

    If the facility treats industrial or domestic wastewater and there is no provision for periodic sludge monitoring in the Monitoring and Reporting Program, the report shall include a summary of sludge quantities, analyses of its chemical and moisture content, and its ultimate destination.

    If applicable, the report shall also evaluate the effectiveness of the local source control or pretreatment program using the State Water Resources Control Board's "Guidelines for Determining the Effectiveness of Local Pretreatment Programs."

17. The "permittee" must notify the Regional Board whenever:

    a) there is a new introduction of pollutants into the sewage system from an "indirect discharger" which would be subject to Section 301 or 306 under Clean Water Act if it were directly discharging these pollutants, and

    b) there is a substantial change in the volume or character of pollutants being introduced into the sewage system by a source introducing pollutants at the time of permit issuance.

Notice shall include information on the quality and quantity of waste being introduced to the system and the anticipated impact of the waste upon the quantity and quality of the aggregate discharge.

18. The "permittee" must notify the Regional Board as soon as it knows or has reason to believe:

    a) That a routine or frequent discharge of a "toxic pollutant" not limited by the permit has occurred, or will occur, in concentrations that exceed the highest of the following:

        (1) 100 ug/1;

        (2) if acrolein or acrylonitrile, 200 ug/1; if 2,4-dinitrophenol or 2-methyl-4,6-dinitrophenol, 500 ug/1; and if antimony, 1 mg/l; and,

        (3) Five times the maximum concentration value reported for that "toxic pollutant" in the permit application.

    b) That a non-routine or infrequent discharge of a "toxic pollutant" not limited by the permit has occurred, or will occur, in concentrations that exceed the highest of the following:

        (1) 500 ug/1;

        (2) if antimony, 1 ng/1;

        (3) Ten times the maximum concentration value reported for that "toxic pollutant" in the permit application.

D. General Pretreatment Provisions

1. Discharge of pollutants by "indirect dischargers" in specific industrial sub-categories (appendix C, 40CFR Part 403), where categorical pretreatment standards have been established, or are to be established, (according to 40CFR Chapter 1, Subchapter N), shall comply with the appropriate pretreatment standards:

    a) By the date specified therein;

b) Within three (3) years of the effective date specified therein, but in no case later than July 1, 1984; or,

c) If a new indirect discharger, upon commencement of discharge.

E. Bypasses or Upsets

1. Bypass

a) A "bypass" is allowable if the discharge does not exceed effluent limitations.

b) If the "permittee" knows in advance of the need for a "bypass", it shall submit notice to the Regional Board at least 10 days before the "bypass".

c) Enforcement action will be taken against the "permittee" for "bypass" unless:

(1) "Bypass" was unavoidable to prevent loss of life, personal injury, or "severe property damage";

(2) There was no feasible alternative to the "bypass", such as use of auxiliary treatment facilities, retention of untreated wastes, 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 judgment to prevent a "bypass" which occurred during normal periods of equipment downtime or preventive maintenance); and,

(3) The permittee submitted notice to the Executive Officer of the Regional Board as specified in paragraphs C.4. and E.1.b., above.

2. Upset

A "permittee" seeking to establish the occurrence of an "upset" has the burden of proof. A "permittee" who wishes to establish the affirmative defense of "upset" shall demonstrate,

through properly signed, contemporaneous operating logs or other relative evidence that:

a) an "upset" occurred and that the permittee can identify the cause(s) of the "upset"; and,

b) the permitted facility was at the time of "upset" being properly operated; the "permittee" submitted notice of "upset" within 24 hours; and the "permittee" took all reasonable steps to minimize or correct any adverse impact on the environment.

F. Enforcement:

1. The "permittee" must comply with all conditions of this permit. Permit noncompliance violates state and federal law and is grounds for enforcement action, for permit revocation, reissuance, or modification, or for denial of a permit renewal application.

2. Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit may, 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 both.

3. Any person failing to file a report of waste discharge or other report as required by this permit shall be subject to a civil penalty not to exceed $5,000 per day.

4. Any person who knowingly makes any false statement, representation, or certification of any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, may, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment of not more than six months per violation, or by both.

5. Any person causing violation of this permit shall be subject to a civil penalty not to exceed $15,000 per day of violation. Any person who willfully or negligently causes violation of this permit is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, and by imprisonment for not more than one year.

6. Upon reduction, loss, or failure of the treatment facility, the "permittee" shall, to the extent necessary to maintain compliance with this permit, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. Should enforcement action be brought against the "permittee", the necessity to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit shall not be a defense.

G. Definitions:

1. "Bypass" means the diversion of waste streams from any portion of a treatment facility.

2. A "composite sample" is a combination of no fewer than eight (8) individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at the time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer.

3. "Daily Discharge" means the discharge of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.

4. "Daily Maximum" limit means the maximum acceptable concentration or mass emission rate of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling. Its normally compared with results based on "composite samples" except for ammonia, total chlorine, phenolic compounds, and toxicity concentration. For all exceptions, comparisons will be made with results from a "grab sample".

5. "Duly Authorized Representative" is one where:

   a) the authorization is made in writing by a person described in the signatory paragraph (C.14:a,b, or c) of this document;

   b) the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or

overall responsibility for environmental matters of the company; and,

c) the written authorization was submitted to the Regional Board.

6. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the daily maximum limits identified in paragraph G.4. and instantaneous maximum limits.

7. "Hazardous substance" means any substance designated under 40CFR Part 116 pursuant to Section 311 of the Clean Water Act.

8. "Incompatible wastes" are:

a) Wastes which create a fire or explosion hazard in the treatment works;

b) Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes;

c) Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of treatment works;

d) Any waste, including oxygen demanding pollutants (BOD, etc), released in such volume or strength as to cause inhibition or disruption in the treatment works and subsequent treatment process upset and loss of treatment efficiency; and,

e) Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40°C (104°F) unless the treatment works is designed to accommodate such heat.

9. "Indirect Discharger" means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.

10. "Log Mean" is the geometric mean. Used for determining compliance of fecal or total coliform populations, it is calculated with the following equation:

$$\text{Log Mean} = (C_1 \times C_2 \times \ldots \times C_n)^{1/n}$$

in which "n" is the number of days samples were analyzed during the period and any "C" is the concentration of bacteria (MPN/100 ml) found on each day of sampling. "N" should be five or more.

11. "Mass emission rate" is a daily rate defined by the following equations:

mass emission rate (lbs/day) = 8.34 x Q x C; and,

mass emission rate (kg/day) = 3.79 x Q x C,

where "C" (in mg/l) is the measured daily constituent concentration or the average of measured daily constituent concentrations and "Q" (in mgd) is the measured daily flow rate or the average of measured daily flow rates over the period of interest.

12. The "Maximum Allowable Mass Emission Rate," whether for a month, week, day, or six-month period, is a daily rate determined with the formulas in paragraph G.11, above, using the effluent concentration limit specified in the permit for the period and the average of measured daily flows (up to the allowable flow) over the period.

13. "Maximum Allowable Six-Month Median Mass Emission Rate" is a daily rate determined with the formulas in paragraph G.11, above, using the "six-month Median" effluent limit specified in the permit, and the average of measured daily flows (up to the allowable flow) over a 180-day period.

14. "Median" is the value below which half the samples (ranked progressively by increasing value) fall. It may be considered the middle value, or the average of two middle values.

15. "Monthly Average" (or "Weekly Average", as the case may be) is the arithmetic mean of daily concentrations or of daily mass emission rates over the specified 30-day (or 7-day) period

$$\text{Average} = (X1 + X2 + \ldots + X_n)/n$$

in which "n" is the number of days samples were analyzed during the period and "X" is either the constituent concentration (mg/l) or mass emission rate (kg/day or lbs/day) for each sampled day. "N" should be four or greater.

16. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under state law and having jurisdiction over disposal of sewage, industrial waste, or other waste.

17. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.

18. "Permittee", as used herein, means, as appropriate: (1) the Discharger, (2) the local sewering entity (when the collection system is not owned and operated by the Discharger), or (3) "indirect discharger" (where "permittee" appears in the same paragraph as "indirect discharger", it refers to the discharger.)

19. "Pollutant-free wastewater" means inflow and infiltration, storm waters, and cooling waters and condensates which are essentially free of pollutants.

20. "Primary Industry Category" means any industry category listed in 40 CFR Part 122, Appendix A.

21. "Removal Efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using "Monthly averages" of pollutant concentrations (C, in mg/l) of influent and effluent samples collected about the same time and the following equation (or its equivalent):

$$\text{Removal Efficiency } (\%) = 100 \times (1 - C_{effluent}/C_{influent})$$

22. "Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass". It does not mean economic loss caused by delays in production.

23. "Sludge" means the solids, residues, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system.

24. To "significantly contribute" to a permit violation means an "indirect discharger" must:

    a) Discharge a daily pollutant loading in excess of that allowed by contract with the "Permittee" or by Federal, State, or Local law;

    b) Discharge wastewater which substantially differs in nature or constituents from its average discharge;

    c) Discharge pollutants, either alone or in conjunction with discharges from other sources, which results in a permit violation or prevents sewage sludge use or disposal; or

    d) Discharge pollutants, either alone or in conjunction with pollutants from other sources, that increase the magnitude or duration of permit violations.

25. "Six-Month Median" means a "median" of results from samples taken over any period of 180 consecutive days.

26. "Toxic Pollutant" means any pollutant listed as toxic under Section 307 (a) (1) of the Clean Water Act or under 40 CFR Part 122, Appendix D. Violation of maximum daily discharge limitations are subject to 24-hour reporting (Paragraph C.4.).

27. "Upset" means an exceptional incident causing noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. It does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

28. "Zone of Initial Dilution" means the region surrounding or adjacent to the end of an outfall pipe or diffuser ports whose boundaries are defined through calculation of a plume model verified by the State Water Resources Control Board.