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

### ORDER NO. 80-53

## WASTE DISCHARGE REQUIREMENTS FOR BORREGO WATER DISTRICT Borrego Springs - San Diego County

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

- Borrego Water District (hereinafter also referred to as the discharger), P.O. Box A, Borrego Springs, California, 92004, submitted a Report of Waste Discharge dated March 15, 1979.
- 2. The discharger proposes to construct in two phases an activated sludge treatment plant to serve the proposed Ram's Hill Country Club development. Phase I would have sufficient capacity to process an average daily flow of 250,000 gallons to be generated by approximately 730 single family homes, a resort hotel, a golf course and tennis facility. To complete the development the discharger in Phase II would increase the capacity of the plant facilities to a design flow of 500,000 gallons-per-day. Final disposal of the treated effluent would be by either of the following methods:
  - 1. Discharge into earthen basins for infiltration and evaporation, which would be located in the NE4 of Section 23, T11S, R6E, SBB&M.
  - 2. Discharge into ponds and mixed with pumped groundwater, for use as golf course irrigation water.
  - 3. There are no domestic wells within 500 feet of the discharge facilities described in Finding No.2, (above).
  - 4. The Water Quality Control Plan for the West Colorado River Basin was adopted by the Board on April 10, 1975. The Basin Plan contains water quality objectives for the Anza-Borrego Hydrologic Unit.

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- 5. The beneficial uses of the groundwaters of the Anza-Borrego Hydrologic Unit are:
  - a. Municipal supply
  - b. Industrial supply
  - c. Agricultural supply
- The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge.
- 7. The Board in a public meeting heard and considered all comments pertaining to the proposed discharge.
- 8. The San Diego County Board of Supervisors has certified Environmental Impact Report EAD 79-11-0 on May 7, 1980 for the proposed residential development and sewage treatment plant. This report indicates that this project would not have any significant adverse effects on water quality.
- IT IS HEREBY ORDERED, the discharger shall comply with the following:
- A. Discharge Specifications
  - Representative samples of wastewater discharged to any holding and/or infiltration basins shall not contain constituents in excess of the following limits:

		30-Day Arithmetic	<b>7-</b> Day Arithmetic
Constitutent	Unit	Mean Dis- charge Rate	Mean Dis- charge Rate
20°C BOD	mg/1	30	45
Suspended Solids	mg/1	30	45

2.

The increase in concentration of chemical constituents in the discharged wastewater over that contained in the water supply to the community shall not exceed the following increments:

Constituents	38	1 <b>4</b> 141		Increments	(mg/1)
Total Dissolved Solids				300	
Chloride (C1)			ja -	50	
Sulfate (SO <sub>4</sub> )	*			40	ж,
Fluoride (F)				0.5	

- 3. Sewage sludge shall not be discharged to any natural or artificial channel.
- A minimum freeboard depth of at least two (2) feet shall be maintained at all times in all holding and infiltration basins.
- 5. Facilities shall be available to keep the treatment plant in operation in the event of commercial power failure.
- 6. Facilities shall be available for measurement of wastewater flow.
- 7. Infiltration basins shall be maintained and operated so as to minimize the increase in total dissolved solids content of the infiltrating wastewater.

8. Borrego Water District shall not deliver reclaimed wastewater for reuse to those users who, by reason of their operating practices, cause nuisances associated with wastewater or otherwise contribute to the violation of the requirements of this Order. Wastewaters directly reused shall conform to the following:

# Golf Course Irrigation and Landscape Impoundments

Reclaimed water used for the irrigation of golf courses or landscape impoundments where the public has access or exposure shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater or a wastewater treated by a sequence of unit processes that will assure an equivalent degree of treatment and reliability. The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of coliform organisms does not exceed 23 per 100 milliliters in any sample.

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- 9. There shall be no discharge of non-domestic wastes into the sewerage system.
- 10. There shall be no surface flow of sewage away from the designated disposal areas.
- B. Provisions
  - Neither the treatment nor the discharge of wastes shall cause a pollution or a nuisance, as defined in Division 7 of the California Water Code.
  - 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.
  - 3. 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.
  - 4. In the event of any change 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. Notify the succeeding owner or operator by letter of the existence of this Order, a copy of which shall be filed with this Board.
  - 5. This Order includes the attached "Standard Provisions and Reporting Requirements for Publicly Owned Sewage Treatment Facilities."
  - 6. This Order includes the attached "Monitoring and Reporting Program No. 80-53," and future revisions thereto, as specified by the Executive Officer.

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- 7. Prior to using the effluent for irrigation, the discharger shall submit to the Regional Board the following information:
  - a. Location of the area to be irrigated.
  - b. Person, Company or Agency responsible for the irrigating.
  - c. After initiation of the irrigation operation, the discharger shall notify the Regional Board prior to any change in (a) or (b), above.
- 8. The discharger's wastewater treatment plant shall be supervised and operated by persons possessing certification of appropriate grade pursuant to Chapter 3, Subchapter 14, Title 23, California Administrative Code.

I. Arthur Swajian, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on <u>May 21, 1980</u>.

Executive Officer

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

## MONITORING AND REPORTING PROGRAM NO. 80-53 FOR BORREGO WATER DISTRICT Borrego Springs - San Diego County

# Location of Discharge: NE 1/4, Section 23, TllS, R6E, SBB&M

#### EFFLUENT MONITORING

Wastewater discharged from the treatment facilities shall be monitored for the following:

Constituent	Unit	Type of <u>Sample</u>	Sampling Frequency
20°C BOD5	mg/l	8-Hr. Composite	Quarterly
Suspended Solids	mg/1	8-Hr. Composite	Quarterly
Flow (Total Plant			

Effluent)	Gallons/day	Flow	Measurement	Daily

Wastewater contained in holding and/or infiltration basins shall be monitored for the following:

Total Dissolved Solid	s mg/1	8-Hr.Composite	Quarterly
Total Nitrogen (N)	mg/l	8-Hr. Composite	· Quarterly
Sulfate (SO <sub>4</sub> )	mg/1	8-Hr.Composite	Quarterly
Chloride (C1)	mg/1	8-Hr.Composite	Quarterly
Fluoride (F)	mg/1	8-Hr.Composite	Quarterly

### WASTEWATER RECLAMATION

Borrego Water District shall report each location of irrigation use of wastewater, at least to the extent of 1/4 section designations. Wastewater directly used for irrigation of golf courses and discharged to landscape impoundments shall be monitored for the following:

\*For each day with average monthly flow calculated

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Item	Unit	Type of Sample	Sampling Frequency
Coliform Organisms	MPN/100 ml	Grab	Daily*
Chlorine Residual in Discharge	mg/1	Grab	Daily*
Wastewater Directly			

Gallons/Day

Reused

Flow Measurement

Daily\*\*

# WATER SUPPLY TO THE COMMUNITY

The water supply shall be monitored for the following constituents. The sample analyzed shall be a weighted average of all sources.

<u>Constituent</u>	<u>Unit</u>	Type of <u>Sample</u>	Sampling Frequency
Total Dissolved Solids	mg/l	Grab	Annually
Chloride (C1)	mg/1	Grab	Annually
Nitrate Nitrogen (N)	mg/l	Grab	Annually
Sulfate (SO <sub>4</sub> )	mg/1	Grab	Annually
Fluoride (F)	mg/1	Grab	Annually

### SEWAGE SLUDGE

The discharger shall report quarterly on the quantity, method, and location of sewage sludge discharged.

### REPORTING

Monitoring reports shall be submitted to the Regional Board as follows:

Annual - by January 15 of the following year.

Quarterly - by January 15, April 15, July 15, and October 15 of each year.

Daily - by the 15th day of the following month.

\*To be taken when wastewater flow and characteristics are most demanding on the treatment and disinfection facilities and on each day that wastewater is being discharged to landscape impoundments or reused for golf course irrigation.

\*\*For each day with average monthly flow calculated

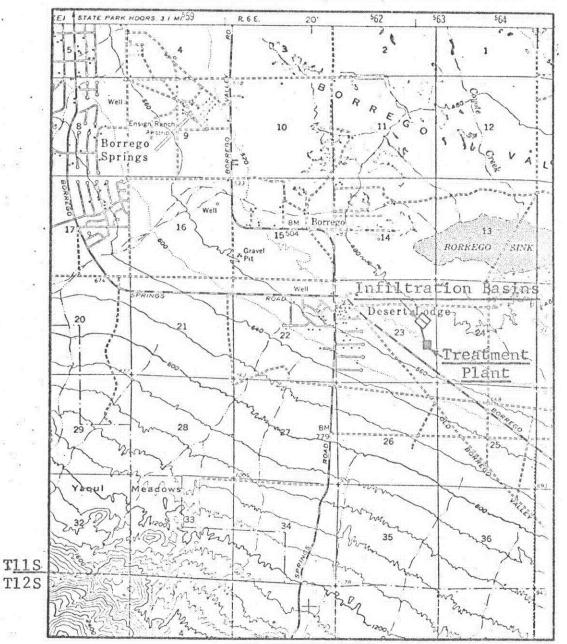
The discharger shall implement the above monitoring program within 30 days of the effective date of this Order.

Forward monitoring reports to:

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

Ordered by( Executive Offi

May 21, 1980 Date



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Scale: 1" = 1 mile

SITE MAP BORREGO WATER DISTRICT Borrego Springs - San Diego County Location of Discharge: NE<sup>1</sup> of Section 23, T11S, R6E, SBB&M USGS Borrego 15 min. Topographic Map

**Order** No. 80-53

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

## STANDARD PROVISIONS AND REPORTING REQUIREMENTS FOR PUBLICLY OWNED SEWAGE TREATMENT FACILITIES

#### A. General Provisions

- .1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.
  - 2. The discharger shall permit the Regional Board: and the Environmental Protection Agency:
    - a. Entry upon premises in which an effluent source is located or in which any required records are kept;
    - b. Access to copy any records required to be kept under terms and conditions of this Order;
    - c. Inspection of monitoring equipment or records; and
    - d. Sampling of any discharge.
  - 3. All discharges authorized by this Order shall be consistent with the terms and conditions of this Order. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this Order shall constitute a violation of the terms and conditions of this Order.
- 4. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.
- 5. Collected screening, sludges, and other solids removed from liquid wastes shall be disposed of in the manner approved by the Executive Officer of the Regional Board.
- 6. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
  - a. Violation of any term or condition contained in this Order;
  - Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;

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- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- 7. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Water Pollution Control Act, or amendments thereto, for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition and so notify the discharger.
- 8. If more stringent applicable water quality standards are approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this order in accordance with such more stringent standarfs.
- 9. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.
- 10. Safeguard to electric power failure:
  - a. The discharger shall, within ninety (90) days of the effective date of this permit, submit to the Regional Board and the Regional Administrator a description of the existing safeguards provided to assure that, should there be reduction, loss, or failure of electric power, the discharger shall comply with the terms and conditions of this Order. Such safeguards may include alternate power sources standby generators, retention capacity, operating procedures or other means. A description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past five years on effluent quality and on the capability of the discharger to comply with the terms and conditions of the Order. The adequacy of the safeguards is subject to the approval of the Regional Board.
  - b. Should the treatment works not include safeguards against reduction, loss, or failure of electric power, or should the Regional Board not approve the existing safeguards, the discharger shall, within ninety (90) days of the effective date of this Order or within ninety (90) days of having been advised by the Regional Board that the existing safeguards are inadequate, provide to the Regional Board and the Regional Administrator a schedule of compliance for providing, safeguards such that in the event of reduction, loss or failure of electric power, the permittee shall comply with the terms and conditions of this permit. The schedule of compliance shall, upon approval of the Regional Board become a condition of this Order.

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- 11. Any diversion from or bypass of facilities necessary to maintain compliance with the terms and conditions of this Order is prohibited, except (a) where unavoidable to prevent loss of life or severe property damage, or (b) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this Order. The discharger shall promptly notify the Board and the Regional Administrator of EPA in writing of each such diversion or bypass.
- 12. Except for data determined to be confidential under Section 308 of the Federal Water Pollution Control Act, all reports prepared in accordance with terms of this Order shall be available for public inspection at the offices of the Regional Water Quality Control Board, and the Regional Administrator of EPA. As required by the Federal Water Pollution Control Act, effluent data shall not be considered confidential. Knowingly making any false statements; on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act.
- 13. The discharger shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any effluent limitations specified in this Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.
- 14. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this Board.
- 15. The discharger shall ensure compliance with any existing or future pretreatment standard promulgated by EPA under Sections 307 of the Federal Water Pollution Control Act or amendment thereto, for any discharge to the municipal system.
- 16. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

## B. Provisions for Monitoring

1. Water quality analysis shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

Chemical, bacteriological, and bioassy analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health.

2. The laboratory which performs the sample analyses must be identified in all monitoring reports submitted to the Regional Board Executive Officer and the Regional Administrator (EPA).

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- 3. Effluent samples shall be taken downstream of the last addition of waste to the treatment or discharge works where a representative sample may be obtained prior to mixing with the receiving waters.
- 4. 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.

## C. General Reporting Requirements

1. The discharger shall submit to the Board on or before each compliance report date, a report detailing his compliance or noncompliance with the specific schedule date and task.

If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the discharger will be in compliance. The discharger shall notify the Board by letter when he has returned to compliance with the time schedule.

- 2. In the event the dishcarger does not comply or will be unable to comply with any prohibition, daily maximum effluent limitation, or receiving water limitation of this Order for any reason, the discharger shall notify the Executive Officer by telephone (714-346-7491) as soon as he or his agents have knowledge of such noncompliance, and shall confirm this notification in writing within two weeks. The written notification shall state the nature, time, and cause of noncompliance, and shall describe the measures being taken to prevent recurrences.
- 3. This Board requires the discharger to file with the Board, within ninety (90) days after the effective date of this Order, a technical report on his preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:
  - a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. 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 state when they became operational.
  - c. Describe facilities and procedures needed for effective preventive and contingency plans.
  - d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational. (Reference: Sections 13267(b) and 13268, California Water Code.

This Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the discharger.

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- 4. Monitoring reports shall be submitted on forms to be supplied by the Board to the extent that the information reported may be entered on the forms. The results of all monitoring required by this Order shall be reported to the Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order. Unless otherwise specified, discharge flows shall be reported in terms of the 30-day average and the daily maximum discharge flows.
- 5. The discharger shall file with the Board a report on waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.
- 6. The results of any analysis of samples taken more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Board.
- 7. The discharger shall file a written report with the Board within ninety (90) days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the design capacity of his waste treatment and/ or disposal facilities. The discharger's senior administrative officer shall sign a letter which transmits that report and certified that the policy-making body is adequately informed about it. The report shall include:
  - a. Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for the day.
  - b. The discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of his facilities.
  - c. The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for his waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units. (Reference: Sections 13260, 13267(b) and 13268, California Water Code).

## D. <u>Reporting Requirements for Monitoring</u>

- 1. For every item of monitoring data where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for such corrective actions. The discharger shall submit such information, in writing, within two weeks of becoming aware of noncompliance.
- 2. By January 30 of each year, the discharger shall submit an annual report to the Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.

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- 3. The discharger shall maintain records of all sampling and analytical results, including strip charts; the date, exact place and time of sampling; the analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Monitoring results shall be submitted on forms provided by the Board.
- 4. The discharger shall file with the Board technical reports on selfmonitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program as directed by the Executive Officer.
- ; 5. All reports shall be signed by:
  - a. In the case of corporations, by a principal executive officer at least of the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
  - b. In the case of a partnership, by a general partner;
  - c. In the case of a sole proprietorship, by the proprietor;
  - d. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- 6. The discharger shall mail a copy of each monitoring report on the appropriate form to be supplied by the Board and any other reports required by this Order to:
  - a. California Regional Water Quality Control Board Colorado River Basin Region 73-271 Highway 111, Suite 21 Palm Desert, CA 92260
  - b. A copy of such monitoring reports for those discharges designated as major discharge shall be mailed to:

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Regional Administrator Environmental Protection Agency Region 9, E-5-1 215 Fremont Street San Francisco, CA 94105

#### E. Definitions

1. The daily discharge rate is obtained from the following calculation for any calendar day:

Daily discharge rate (lbs/day) =  $\frac{8.34}{N}$   $\stackrel{N}{\underset{1}{\Sigma}}$  Q<sub>i</sub> C<sub>i</sub> Daily discharge rate (kg/day) =  $\frac{3.78}{N}$   $\stackrel{N}{\underset{1}{\Sigma}}$  Q<sub>i</sub> C<sub>i</sub>

in which N is the number of samples analyzed in any calendar day. Q<sub>1</sub> and C are the flow rate (MGD) and the constituent concentration (mg/l) respectively, which are associated with each of the N grab samples which may be taken in any calendar day. If a composite sample is taken, C is the concentration measured in the composite sample and Q is the average flow rate occurring during the period over which samples are composited.

2. The "30-day, or 7-day, average" discharge is the total discharge by weight during a 30, or 7, consecutive calendar day period, respectively, divided by the number of days in the period that the facility was discharging. Where less than daily sampling is required by this permit, the 30-day, or 7-day, average discharge shall be determined by the summation of all the measured discharges by weight divided by the number of days during the 30, or 7, consecutive calendar day period when the measurements were made.

If fewer than four measurements are made during a 30, or 7-day, consecutive calendar day period, then compliance or noncompliance with the 30, or 7, day average discharge limitation shall not be determined.

For other than 7-day or 30-day periods, compliance shall be based upon the average of all measurements made during the specified period. If fewer than four measurements are made during the period, compliance shall be based upon the last four consecutive samples.

- 3. The "daily maximum" discharge means the total discharge by weight during any calendar day.
- 4. The "30-day, or 7-day, average" concentration is the arithmetic mean of measurements made during a 30, or 7, consecutive calendar day period, respectively. If fewer than four measurements are made during a 30, or 7, consecutive calendar day period, then compliance or noncompliance with the 30, or 7, day average concentration limitation shall not be determined.
- 5. The "daily maximum" concentration is defined as the measurement made on any single discrete sample or composite sample.
- 6. A "grab" sample is defined as any individual sample collected in less than 15 minutes.

- 7. A composite sample is a combination of no fewer than eight (8) individual samples obtained at equal time intervals over the specified sampling period. The volume of each individual sample is proportional to the discharge flow rate at the time of sampling. The sampling period shall be specified in the monitoring and reporting program ordered by the Executive Officer.
- 8. An "industry" is defined as any facility identified in the Standard Industrial Classification Manual, 1972, Office of Management and Budget, as amended and supplemented, under the following divisions:
  - a. Division A Agriculture, Forestry, and Fishing;

b. Division B - Mining;

c. Division D - Manufacturing;

d. Division I - Services.

A facility in the Divisions listed may be excluded if it is determined by the Board that it introduces primarily domestic wastes or wastes from sanitary conveniences.

- 9. "Prohibited wastes" is any of the following wastes, which shall not be introduced into the treatment works:
  - 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 work is designed to accomodate such wastes;
  - c. Solid or viscous wastes in emounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the treatment works; or
  - d. Wastes at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

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