CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER 90-058
NPDES PERMIT NO. CA0006246

REISSUANCE OF
WASTE DISCHARGE REQUIREMENTS FOR

GENERAL ELECTRIC COMPANY
VALLECITOS NUCLEAR CENTER
PLEASANTON, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. General Electric Company, Vallecitos Center (GE-VNC), hereinafter called the discharger, has submitted an application dated March 14, 1989, for reissuance of waste discharge requirements under the National Pollutant Discharge Elimination System (NPDES) Permit No. CA0006246 for its plant located in Pleasanton, California, in Alameda County.

2. GE-VNC is located in Vallecitos Valley about five miles southeasterly from the City of Pleasanton. The primary functions of GE-VNC are nuclear fuel research and production of radio-isotopes for medical and other uses. Facilities on site (see Attachment 1) include a test reactor known as GETR, which has been shut down since October 27, 1977; a small graphite moderated nuclear test reactor known as NTR; laboratories for studies in radiochemistry, metallurgy, and nuclear fuels; machine shops; and administrative facilities. There are also two other nuclear reactors on site, which have been shut down since the mid 1960's. GE has no plans for reactivating these two reactors or the GETR.

3. The discharger generates both sanitary and industrial wastewaters which are separately collected, treated and discharged.

   a. Waste 001 consists of sanitary waste averaging about 2000 gallons per day which is treated in an Imhoff tank, filtered through sand beds, disinfected, and held briefly in one of four retention basins where it is tested for compliance with discharge limits before it is disposed of on GE property by sprinkler irrigation on land.

   b. Waste 002 is industrial wastewater comprised of primarily once-through, non-contact cooling water from NTR, the waste evaporator, machine shop, and laboratory equipment. Cooling water use has been once through, but installation of evaporative cooling towers on some loops is planned in the near future as a water conservation measure.

      Approximately 35,000 gallons per day of pH adjusted industrial wastewater flows to three 60,000-gallon retention basins where it is

tested for compliance with permit limits and the Nuclear Regulatory Commission's (NRC) radioactivity discharge limits before it is discharged to an unnamed drainage ditch tributary to Vallecitos Creek which joins Arroyo de la Laguna and Alameda Creek about two miles further down-stream. Vallecitos Creek, Arroyo de la Laguna, and Alameda Creek are all nontidal waters of the United States.

4. Uncontaminated stormwater runoff from the site parking lots, roadways, building roofs and general yard areas and air condition condensate may be collected in ditches for discharge off the site.

5. For aesthetic enjoyment, GE maintains on the plant property, a spring-fed lake formerly used as a stock watering pond when the property was a farmland. GE placed some fish in the lake. The industrial permitted effluent consisting of non-contact, primarily once-through cooling water is used to replenish the lake water to keep the fish alive. Department of Fish and Game finds this practice acceptable. In addition, this water may be employed for other non-potable uses.

6. The discharger voluntarily ceased discharge of industrial wastewaters containing site generated radioactive substances to surface waters in May 1980. The discharger also voluntarily ceased discharge of all industrial or process related wastewater with the exception of once-through cooling water from a potable water source as of March 1990.

7. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986.

8. The beneficial uses of Vallecitos Creek and contiguous bodies are:

   a. Contact and noncontact water recreation
   b. Wildlife habitat
   c. Warm and cold fresh water habitat
   d. Fish migration and spawning
   e. Preservation of rare and endangered species
   f. Industrial service and process supply
   g. Agicultural Supply
   h. Groundwater supply
   i. Municipal and dosmestic supply
   j. Fresh water replenishment

9. The Basin Plan states that it shall be prohibited to discharge any wastewater which has particular characteristics of concern to beneficial uses into nontidal waters or at any point at which it does not receive an initial dilution of at least 10:1 or into any nontidal water or dead-end slough or similar confined waters, or its immediate tributaries.

   The Basin Plan further states with respect to Alameda Creek watershed discharges, that it shall be prohibited to discharge any wastewater which has particular characteristics of concern to beneficial uses to Alameda Creek above Niles when no natural flow occurs. The threat of a buildup of dissolved solids, stable organics and other pollutants in the ground-water of the Niles Cone area, recharged with waters of Alameda Creek, is most critical in the dry weather period when wastewater could account for much of the water percolating to the basin.

10. The Basin Plan provides that exceptions to the discharge prohibitions

will be considered for discharges where:

a. an inordinate burden would be placed on the discharger relative to beneficial uses protected and an equivalent level of environmental protection can be achieved by alternate means, such as an alternative discharge site, a higher level of treatment, and/or improved treatment reliability; or

b. a discharger is approved as a part of a reclamation project; or

c. it can be demonstrated that net environmental benefits will be derived as a result of the discharge.

11. The discharge is presently governed by Order No. 84-76. In this Order, the Board granted an exemption from the 1982 Basin Plan dry weather discharge prohibition to the Alameda Creek watershed above Niles, and permitted a year-round discharge to Vallecitos Creek, based on discharger's documentation that the discharge has consistently met Board effluent limits for certain pollutants and other characteristics of concern and Basin Plan surface water quality objectives for the Alameda Creek watershed. The discharger also documented environmental benefits from its dry weather discharge.

California Department of Fish and Game maintain their concurrence that there are positive net environmental benefits to dry weather discharge which meet strict effluent limits.

12. The self-monitoring reports for the past five years document the increasing quality of the discharge and its consistent compliance with effluent limits and Basin Plan objectives. These reports further confirm that the discharge, consisting of Hetch-Hetchy cooling water, is generally of better quality than the neighboring well water and surface streams, including the South Bay Aqueduct water which is used to recharge the Alameda Creek watershed.

13. The same water quality objectives in the 1982 Basin Plan for the Alameda Creek watershed above Niles are contained in the 1986 Basin Plan. The Board finds the discharge continues to satisfy these objectives.

14. Based on Findings 10, 11, 12, and 13, the Board finds that the discharge of noncontact cooling water as permitted in these requirements, does not contain particular characteristics of concern to beneficial uses of the Alameda Creek watershed above Niles when no natural flow occurs and net environmental benefits are present from the discharge. Therefore, the Board grants an exception to the Basin Plan noted in Finding 9. above, on the condition that the discharger provide documentation of plant improvements which ensures:

a. elimination of all industrial wastewater discharges, except for the noncontact cooling water discharge;

b. that a Best Management Practice Plan is provided by October 1, 1990 which prevents the potential for the release of pollutants to State waters from ancilliary activities, including material storage areas, plant site runoff, in-plant transfer, process and material handling areas, loading and unloading operations, and waste treatment/containment areas.

15. Effluent radiological release limits are prescribed by the NRC for regulation of such constituents in wastewater discharges pursuant to the Code of Federal Regulations-Energy, Title 10, Chapter 1, Part 20 (Table B, Column II).

Several years of self-monitoring data submitted by GE-VNC on a quarterly basis show that radioactive substances measured in the industrial discharges have been significantly below the NRC release limits, but also considerably below the California Code of Regulation, Title 22 limits for natural and man-made radioactivity in drinking water supplies for those constituents measured by GE-VNC.

16. Specific radiological effluent and receiving water limits are not included in this NPDES permit because the NRC and DOHS have primary responsibility for regulation of such constituents in wastewater discharges pursuant to the Code of Federal Regulations-Energy, Title 10, Chapter 1, Part 20 et seq. and in the California Code of Regulation Titles 17 and 22 (Regulations for Radiation Control and for Domestic Water Quality and Monitoring, respectively).

17. The Basin Plan provides that ground and surface waters designated for domestic or municipal drinking water supply, such as the Alameda Creek watershed, shall not contain concentrations of radionuclides in excess of the following objectives: 5 pCi/1 (pico-curies per liter) of Combined Radium-226 and Radium-228, 15 pCi/1 of Gross Alpha Particle Activity, 20,000 pCi/l of Tritium, 8 pCi/l of Strontium-90, and 50 pCi/l of Gross Beta Particle Activity. These objectives conform with the Maximum Contaminant Levels contained in Title 22 of the California Administrative Code administered by DOHS and with the Primary Drinking Water Limits specified by the Environmental Protection Agency.

18. The discharger voluntarily ceased discharge of industrial wastewaters containing site generated radioactive substances to surface waters in May 1980. Due to the shut down of the three reactors, the plutonium fuel facility was eliminated in 1980, and the production of strontium sources ceased prior to 1980.

GE-VNC no longer discharges waste evaporator distillate to the industrial wastewater system, such that the potential source of tritium and other radioactive substances have been eliminated from the industrial wastewater stream. NRC's 1988 inspection report confirms that radioactive liquid wastes are not released from GE's facility as these wastes are routed to the waste evaporation plant for evaporation, and the resultant sludge is hauled off to a licensed radioactive waste disposal site.

19. All four of GE's reactors have an NRC license. Although the three inactive reactors, namely the GETR, EVESR, and VBWR will not be restarted, the reactors are licensed for possession. The NTR, GE's only active nuclear test reactor was relicensed on December 28, 1984 and its expira-tion date was extended to October 31, 1997. As a part of the licensing requirement, the NRC approved GE's environmental surveillance program, radio-active waste management, and facility operations. The NRC provided reports and information to the Board that GE's effluent monitoring results and environmental surveillance programs of 1987 and 1988 were in compliance with NRC regulations. Under the environmental surveillance program, GE is

voluntarily implementing most, but not all of the Board's proposed radiological monitoring program recommended in 1981.

20. Staff will continue to pursue the provisions contained in Resolution No. 80-3 with NRC and DOHS staff to assure that the Board's concerns are addressed.

21. The discharger requested in its letter of March 8, 1989 to delete from their self-monitoring program, sampling of the off-site wells for total dissolved solids (tds) and chlorides based on their five years of test results showing the effluent to be significantly lower than the well waters, and that it had not affected the area groundwaters. Discharger's request is justified. However, monitoring of the effluent should continue to show compliance with Basin Plan TDS and chlorides limits.

22. The discharger also requested to delete sampling the creek (Station C-6) for unnionized ammonia during periods when their flow is not present in the creek as the water in the creek, exclusive of their flow consists of intermittent spring water and run-off from the grazing area. The discharger's request is justified since sampling the flow in the receiving water which is not their discharge is not relevant to the effects of their discharge. Also, staff review finds that since the industrial wastewater is entirely noncontact cooling water and distinctly segregated from the sanitary waste stream, monitoring for unnionized ammonia, ammonia nitrogen, and nitrate nitrogen in the industrial waste stream is not justifiable.

    The discharger also requested deletion of the effluent sampling for certain heavy metals which five years of data show to be lower than the current Basin Plan limits. This sampling requirement is necessary to monitor the discharge's compliance with Basin Plan heavy metal limits. Staff finds, however, that reduction of the sampling frequency is justified given their history of consistent compliance with the heavy metal limits.

23. Effluent limitation and toxic effluent standards established pursuant to Sections 301, 304, and 307 of the Clean Water Act and amendments thereto are applicable to the discharge.

24. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) for this point source category have not been promulgated by the U. S. Environmental Protection Agency. Effluent limitations of this Order are based on the Basin Plan, State Plans and Policies, current plant performance, and best profession-al judgment. The limitations are considered to be those attainable by BAT, in the judgment of the Board.

25. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 133889 of the California Water Code.

26. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

27. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

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

A. Discharge Prohibitions

1. Sanitary Wastewater

a. No sanitary wastewater shall be allowed to escape the designated disposal area, either by surface flow or airborne spray.

b. No sanitary wastewater shall be discharged to any area other than the designated disposal area, as shown in Attachment 2.

c. The discharge of sanitary wastewater to spray areas shall cease immediately when any of the specifications or prohibitions are violated.

d. There shall be no bypass or overflow of waste to waters of the State from the wastewater collection, treatment, or disposal system.

2. Industrial Wastewater

a. No industrial wastewater shall be discharged to the sanitary wastewater, spray disposal area.

b. The discharge of all process wastes, washdown water, solvents, oils, other products of petroleum origin, organic and inorganic chemicals to state waters is prohibited.

c. The discharge of all conservative toxic and deleterious substances above those levels which can be achieved by a program acceptable to the Board is prohibited.

B. Discharge Limitations

1. Sanitary Wastewater

a. The wastewater shall not cause degradation of groundwater suitable for domestic use or cause an increase in any quality parameter that would make groundwater unsuitable for irrigation use.

b. The wastewater discharged shall at all times be a disinfected, primary treated wastewater and shall meet the following quality limits at all times:

Coliform Organisms	The median MPN shall not exceed 23 coliform organisms per 100

milliliters of sample, as determined from the bacteriological results of the last seven (7) days for which analyses have been completed, and the number of coliform organisms shall not exceed 240 per 100 milliliters in any two (2) consecutive samples.

c. pH — 6.0 minimum, 9.0 maximum

d. The public shall be effectively excluded from the effluent disposal area. This area shall be clearly identified with posted notices to the public.

2. Industrial Wastewater Effluent Limits

a. The discharge of an effluent shall not contain constituents in excess of the following limits:

Constituents	Units	Average Monthly	Average Weekly	Maximum Daily
Settleable Solids	ml/l/hr	0.1		0.2
Suspended Solids	mg/l	30	45	
Oil and Grease	mg/l	10		20
pH	pH units			6.5 - 8.5
Temperature	F			90
Arsenic	ug/l			20
Cadmium	ug/l			10
Total Chromium	ug/l			11
Copper	ug/l			20
Lead	ug/l			5.6
Mercury	ug/l			1
Nickel	ug/l			7.1
Silver	ug/l			2.3
Zinc	ug/l			58
Total Dissolved Solids:	250 mg/l, 90-day arithmetic mean 360 mg/l, 90-day, 90th percentile 500 mg/l, daily maximum			

Chlorides:	60 mg/l, 90-day arithmetic mean 100 mg/l, 90-day, 90th percentile 250 mg/l, daily maximum

2. The discharge shall meet the following limits of toxicity:

   The survival of three-spine stickleback and fathead minnow in a 96-hour static-renewal bioassay of the effluent as discharged shall achieve a median of 90% survival for three consecutive samples.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place.

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Bottom deposits or aquatic growths;

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible, floating, suspended, or deposited oil or other products or petroleum origin;

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the surface:

a.	Dissolved Oxygen	7.0 mg/l minimum - median for any three consecutive months shall not be less than 80% saturation. When natural factors cause less concentration(s) than specified above, then discharge shall not cause further reduction in the concentration of dissolved oxygen.
b.	Dissolved Sulfide	0.1 mg/l maximum.
c.	pH	Variation from natural ambient pH by more than 0.5 pH units.
d.	Un-ionized Ammonia	0.025 mg/l as N, annual median.

0.4 mg/l as N, maximum.

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments hereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. PROVISIONS

1. Neither the treatment nor the discharge of pollutants shall create a nuisance as defined in the California Water Code.

2. The requirements prescribed by this Order supersede the requirements of Order No. 84-76. Order No. 84-76 is hereby rescinded.

3. The discharger shall comply with all sections of this Order immediately upon its adoption by the Board, except as provided below.

4. The discharger shall comply with the effluent limitations and prohibitions of this Order immediately upon adoption.

5. The discharger shall review and update annually its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be a basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

6. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Board pursuant to EPA regulations 40 CFR 122.62, 12263, and 124.5. Upon review of the data submitted as part of this program, the Board may at any time, revise the Order to include effluent limits for those constituents determined to be of concern.

7. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions", dated December 1986.

8. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency regulations (40 CFR 122.41K).

9. Pursuant to Environmental Protection Agency regulations (40 CFR 122.42(a), the discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin the use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of toxic pollutants not limited by this permit has occurred, or will occur, in concentrations that exceed the specified limits.

10. The discharger may at their discretion discharge all or any part of the flow of Waste 002, which is comprised solely of primarily

once through non-contact cooling water from the Hetch Hetchy San Francisco Water District source to the "stock pond" on site. In addition, this water may be used for other non-potable water uses. In the event that this water reclamation occurs, the self-monitoring program shall be continued as it would for the normal effluent discharge.

11. This permit shall be modified or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (c), and (d), 303, 304(b) (2) and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

    a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

    b. Controls any pollutant not limited in the permit.

    The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

12. This Order expires May 16, 1995. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

13. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective ten days after the date of its adoption, provided the Regional Administrator for the Environmental Protection Agency has no objection.

I, Steven R. Ritchie, 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, San Francisco Bay Region on May 18, 1990.

for
STEVEN R. RITCHIE
Executive Officer

Attachments:
Standard Provisions &
Reporting Requirements, December 1986
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

GENERAL ELECTRIC COMPANY

VALLECITOS NUCLEAR CENTER

NPDES NO. CA0006246

ORDER NO. 90-058

CONSISTS OF

PART A (DATED 12/86)

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. Effluent

Station	Description
B	At any point in the outfall from the retention basins for the industrial non-contact wastewater, between the point of discharge and the point at which all waste tributary to that outfall is present.
S	At any point in the disinfection facility for the sanitary waste, at which point adequate contact with the disinfection is assured prior to disposal onthe designated spray area of General Electric.
E	At any point in the discharge from storage facilities for the industrial non-contact cooling wastewater which may under any circumstances reach State waters. This storage is separate from the retention basins and is used to facilitate non-potable reclamation use of the wastewater.

B. Receiving Waters

Station	Description
C-4	Located in the intermittent unnamed stream crossing the southern boundary of the site above the point where effluent enters the stream.

C. Miscellaneous reporting

The discharger shall submit the following quarterly: The location and quantity of the disposal of all sewage sludge removed from the site during the previous quarter.

II. SCHEDULE OF SAMPLING AND ANALYSES

The schedule of sampling and analyses shall be that given as Table I.

III. MODIFICATION OF PART "A" DATED DECEMBER 1986

A. Exclusions: Paragraphs C.2.,E.1, E.3, E.4.d. F.2.b, and G.4.e.

B. Modifications:

1. Paragraph G.4: "Written reports shall be filed quarterly by the 30th day of the month following the end of the calendar quarter."

2. Paragraph G.4.h. shall be added to read: "A copy of any

routine or special self-monitoring reports done for the State Department of Health Services or Nuclear Regulatory Commission of the effects of radioactive substances on the discharger's effluent, receiving waters, and groundwaters, on-site or off-site, shall be sent to this Regional Board.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 90-058

2. Has been ordered by the Executive Officer on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

Lawrence P. Kolb
for STEVEN R. RITCHIE
Executive Officer

5/25/90
DATE

Attachment: Table I

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

NPDES NO. CA000624

Sampling Station	B (2)		All C	E (2)									
TYPE OF SAMPLE	C-G	G	G	C-G	G								
Flow (mgd) Volume		E (1)			E (3)								
Total Dissolved Solids (mg/l & kg/day)	M		M	M									
Chloride (mg/l & kg/day)	M		M	M									
Settleable Matter (ml/1-hr. & cu. ft./day)													
Total Suspended Matter (mg/l & kg/day)		W			W								
Oil & Grease (mg/l & kg/day)		M			M								
Coliform (Total or Fecal) (MPN/100 ml) per req't													
Fish Toxicity, 96-hr. TL_{50} % Survival in undiluted waste		M			M								
Ammonia Nitrogen (mg/l & kg/day)													
Nitrate Nitrogen (mg/l & kg/day)													
Nitrite Nitrogen (mg/l & kg/day)													
Total Organic Nitrogen (mg/l & kg/day)													
Total Phosphate (mg/l & kg/day)													
Turbidity (Jackson Turbidity Units)		M	M		M								
pH (units)		M	M		M								
Dissolved Oxygen (mg/l and % Saturation)		M	M		M								
Temperature (°C)		W	M		M								
Apparent Color (color units)													
Secchi Disc (inches)													
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)													
Arsenic (mg/l & kg/day)													
Cadmium (mg/l & kg/day)													
Chromium, Total (mg/l & kg/day)	M			M									
Copper, Dissolved (mg/l & kg/day)		M	M		M								
Cyanide (mg/l & kg/day)													
Silver (mg/l & kg/day	3M			3M									
Lead (mg/l & kg/day)	M			M									

TABLE I (continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

NPDES NO. CA000624

Sampling Station	B (2)		All C	E(2)									
TYPE OF SAMPLE	C-G	G	G	C-G	G								
Mercury (mg/l & kg/day)	M			M									
Nickel (mg/l & kg/day)	M			M									
Zinc (mg/l & kg/day)	M			M									
PHENOLIC COMPOUNDS (mg/l & kg/day)													
All Applicable Standard Observations		W	M										
Unionized Ammonia as N (mg/l & Kg/day)													
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)													

NOTES

(1) - The volume of each basin discharge shall be recorded. Total volume discharged and the minimum, maximum, and average daily volumes discharged shall be reported.

(2) - The B and E station samples may be composited on a flow proportioned basis prior to analysis.

(3) The volume of each retention tank discharge for on site applications shall be recorded. Total volume discharged and the average daily volumes discharged shall be reported.

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
C-G = composite sample of all grabs collected for the month; one grab per each basin discharge
Cont = continuous sampling
DI = depth-integrated sample
BS = bottom sediment sample
O = observation

TYPES OF STATIONS

I = intake and/or water supply stations
A = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
L = basin and/or pond levee stations
B = waste effluent station
G = groundwater stations

FREQUENCY OF SAMPLING

E = each batch discharge
H = once each hour
D = once each day
W = once each week
M = once each month
Y = once each year

2/H = twice per hour
2/W = 2 days per week
5/W = 5 days per week
2/M = 2 days per month
2/Y = once in March and once in September
Q = quarterly, once in March, June, Sept. and December

2H = every 2 hours
2D = every 2 days
2W = every 2 weeks
3M = every 3 months
Cont = continuous