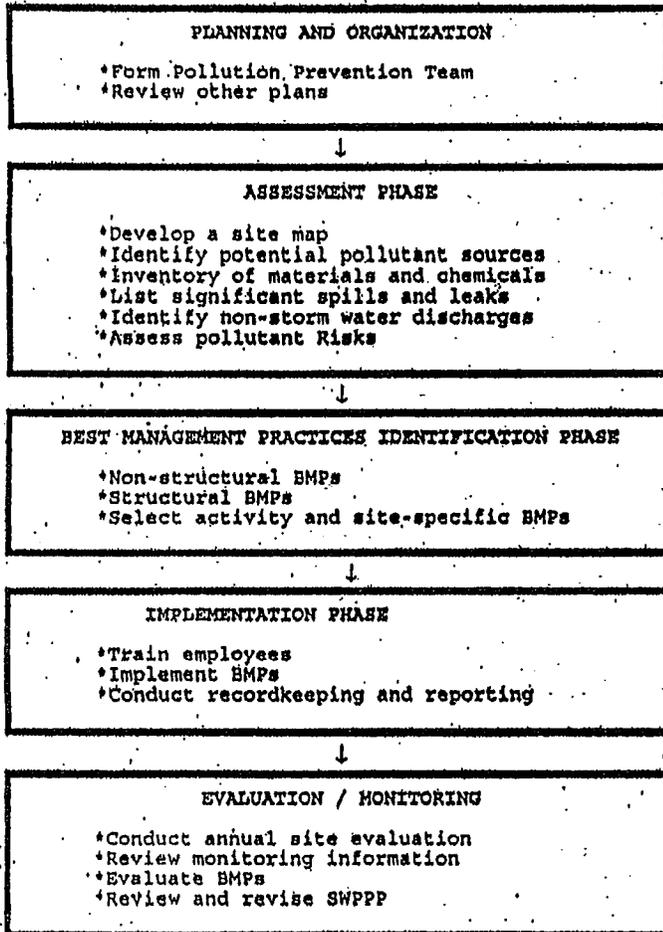


TABLE A

FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL STORM WATER POLLUTION PREVENTION PLANS



The following information shall be included on the site map:

- The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.
  - The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.
  - An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
  - Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section A.6.a.iv. below have occurred.
  - Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.
5. List of Significant Materials

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

6. Description of Potential Pollutant Sources

- a. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section A.4.e above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

i. Industrial Processes

Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process; and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

ii. Material Handling and Storage Areas

Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

iii. Dust and Particulate Generating Activities

Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

iv. Significant Spills and Leaks

Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 CFR, Part 302)

that have been discharged to storm water as reported on U.S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 Code of Federal Regulations (CFR), Parts 110, 117, and 302).

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spill or leaks do not reoccur. Such list shall be updated as appropriate during the term of this General Permit.

v. Non-Storm Water Discharges

Facility operators shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions provided in Special Conditions D. are prohibited by this General Permit (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, boiler blowdown, rinse water, wash water, etc.). Non-storm water discharges that meet the conditions provided in Special Condition D. are authorized by this General Permit. The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

vi. Soil Erosion

Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

- b. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and

potential pollutants. This information should be summarized similar to Table B. The last column of Table B, "Control Practices", should be completed in accordance with Section A.8, below.

**7. Assessment of Potential Pollutant Sources**

a. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in A.6, above to determine:

- i. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
- ii. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. Facility operators shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.

b. Facility operators shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

Facility operators are required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section 8 below.

**8. Storm Water Best Management Practices**

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections A.6. and 7. above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

TABLE B

EXAMPLE

ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND  
CORRESPONDING BEST MANAGEMENT PRACTICES  
SUMMARY

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Vehicle & Equipment Fueling	Fueling	Spills and leaks during delivery	fuel oil	Use spill and overflow protection
		Spills caused by topping off fuel tanks	fuel oil	Minimize run-on of storm water into the fueling area
		Hosing or washing down fuel area	fuel oil	Cover fueling area
		Leaking storage tanks	fuel oil	Use dry cleanup methods rather than hosing down area
		Rainfall running off fueling area, and rainfall running onto and off fueling area	Fuel oil	Implement proper spill prevention control program
				Implement adequate preventative maintenance program to preventive tank and line leaks
				Inspect fueling areas regularly to detect problems before they occur
				Train employees on proper fueling, cleanup, and spill response techniques.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

Facility operators shall consider the following BMPs for implementation at the facility:

a. Non-Structural BMPs

Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. Facility operators should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section A.8.b. below). Below is a list of non-structural BMPs that should be considered:

i. Good Housekeeping

Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.

ii. Preventive Maintenance

Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.

iii. Spill Response

This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.

iv. Material Handling and Storage

This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.

v. Employee Training

This includes training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.

vi. Waste Handling/Recycling

This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

vii. Recordkeeping and Internal Reporting

This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.

viii. Erosion Control and Site Stabilization

This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.

ix. Inspections

This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.

x. Quality Assurance

This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

b. Structural BMPs

Where non-structural BMPs as identified in Section A.8.a. above are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

i. Overhead Coverage

This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

ii. Retention Ponds

This includes basins, ponds, surface impoundments, bermed areas, etc., that do not allow storm water to discharge from the facility.

iii. Control Devices

This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

iv. Secondary Containment Structures

This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

v. Treatment

This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc., that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

Annual Comprehensive Site Compliance Evaluation

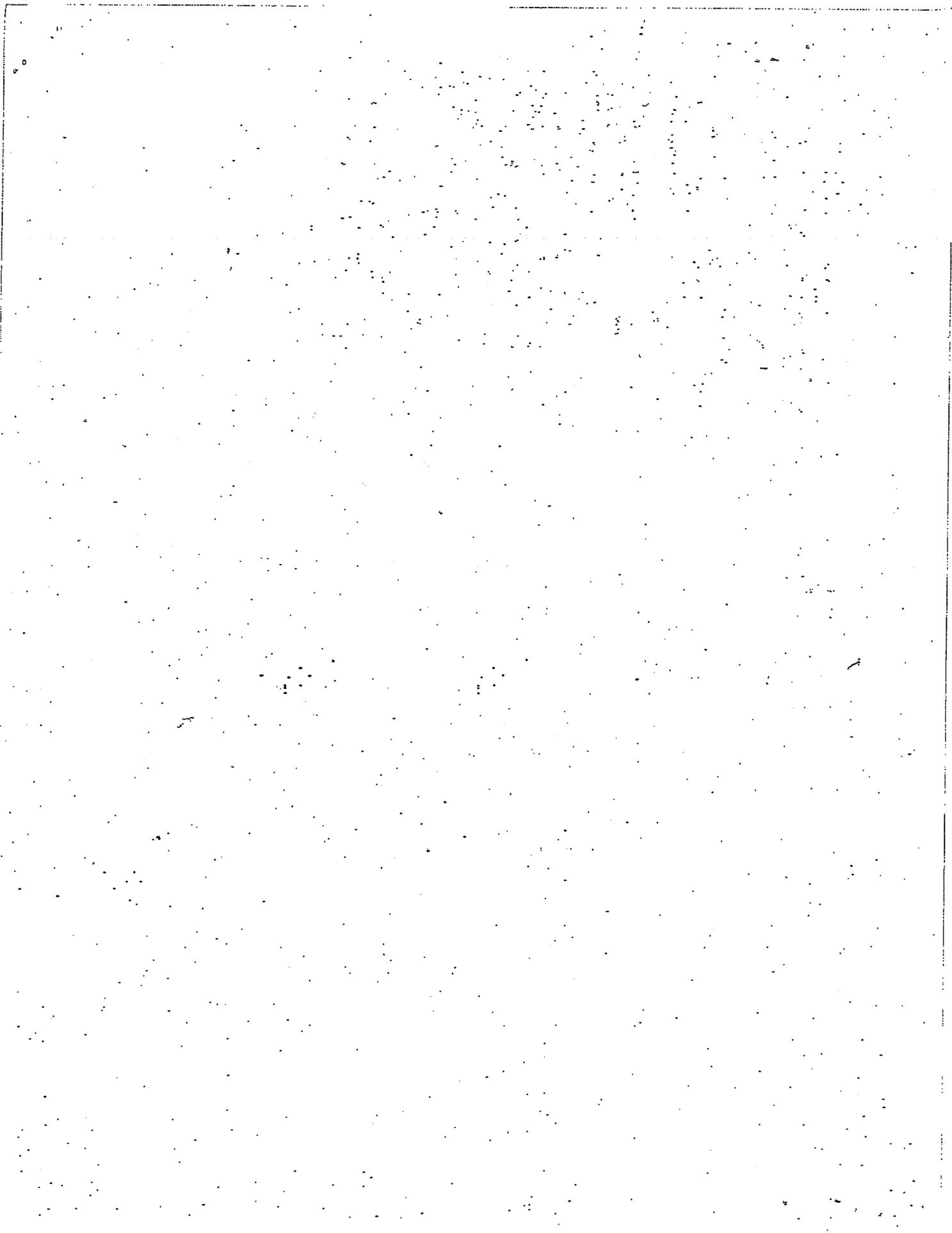
The facility operator shall conduct one comprehensive site compliance evaluation (evaluation) in each reporting site period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

- a. A review of all visual observation records, inspection records, and sampling and analysis results.
- b. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- c. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
- d. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in Section A.10.e, for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this General Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions 9. and 10. of Section C. of this General Permit.

10. SWPPP General Requirements

- a. The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.
- b. The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.

- c. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- d. Other than as provided in Provisions B.11, B.12, and E.2 of the General Permit, the SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirement(s) of this General Permit.
- e. When any part of the SWPPP is infeasible to implement by the deadlines specified in Provision E.2 or Sections A.1, A.9, A.10.c, and A.10.d of this General Permit due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.
- f. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.



## Attachment C

### GENERIC TOXICITY REDUCTION EVALUATION WORKPLAN (TRE) INDUSTRIAL

1. Information and Data Acquisition
  - a. Regulatory information
    - i. NPDES permit limits
    - ii. Trigger
  - b. Facility monitoring data
    - i. NPDES monitoring data
    - ii. In-house monitoring data
    - iii. State agency monitoring data
  - c. Plant and Process Description
    - i. Process and treatment plant description
      - (1) numbers and types of streams
      - (2) their size
      - (3) scheduled changes or events in process-stream operation
      - (4) types and configurations of equipment
      - (5) flow equalization facilities
      - (6) records of treatment plant upsets
    - ii. Physical/chemical monitoring data
      - (1) chemical analyses of process streams
      - (2) physical/chemical analyses of treatment streams
2. Housekeeping
  - a. Initiation of housekeeping study
    - i. Identify areas which may contribute to toxicity
    - ii. Reduce these contributions through best management practices (BMPs), administrative, and procedural controls
  - b. Evaluation of housekeeping practices
    - i. Review of plant policies
    - ii. "Walk-through" inspection
  - c. Identification of potential problem areas
    - i. Probability of release of toxic material
    - ii. Type and frequency of release which may occur
    - iii. Quantity of toxic substances involved
    - iv. Toxicity of substances released
    - v. Potential downstream impact of the substances released
    - vi. Effect of release on final effluent
  - d. Identification of corrective measures
    - i. Area cleanup
    - ii. Process or operational changes
    - iii. Material loss collection and recovery
    - iv. Chemical and biological testing of contained waters prior to release from diked storage areas
    - v. Increased storage capacity for contained waters
    - vi. Equipment modifications or changes
  - e. Selection of corrective measures
  - f. Implementation of corrective measures
3. Treatment Plant Optimization
  - a. Evaluation of influent wastestreams
    - i. Raw chemicals or materials used in the process
    - ii. Byproducts or reaction products produced during the process
    - iii. Reaction vessels, valves, piping systems, overflow points, and other mechanical aspects of the system
    - iv. Wastestreams produced, volumes, and routing paths

- v. Non-point sources
- b. Description and evaluation of the treatment system
  - i. Design basis for each constituent, including variability in flow conditions and concentrations
  - ii. Treatment sequence
  - iii. Performance projections by constituents
  - iv. Operational flexibility of each process
  - v. Treatment objectives and projected effluent standards
- c. Analysis of treatment system operation
  - i. Flow loading
  - ii. Mass loading
  - iii. Frequency and impact of shock loadings
    - (1) normal cleaning and maintenance
    - (2) spills and upsets
  - iv. Changes in operating procedures
- 4. Chemical optimization
  - a. Information gathering
    - i. Examination of wastestreams produced by specific production processes
    - ii. Chemicals and raw materials and their contaminants and by-products used in the process
    - iii. Chemicals used in treatment
    - iv. Chemicals and material use rates
    - v. Percentage of chemical in final product
    - vi. Chemical reuse and waste recycling activities
  - b. Process chemical review
    - i. List all chemicals used
    - ii. List all quantities
    - iii. Determine pounds per product
    - iv. Determine pounds per gallon of wastewater discharged
  - c. MSDS information review
    - i. Obtain MSDS for all process chemicals discharged
    - ii. Highlight MSDS sections on aquatic toxicity
    - iii. Examine Hazardous Ingredient section and note "hazardous substances" listed
    - iv. Categorize all chemicals by hazard and irritation potential and use standard references to obtain aquatic toxicity information, if possible
  - d. Chemical composition screen of incoming raw materials
  - e. Outcome of chemical optimization phase
    - i. List of all chemicals used in processing and manufacturing the product
    - ii. MSDS and literature reviews will be on file when needed
    - iii. List of all chemicals and raw material purchased on a monthly basis and a record of production volumes during the same time period

## REVISED ATTACHMENT H

**Table 3-1. One-hour Average Objective for Ammonia-N for Freshwaters (mg N/L)**

pH	<u>Waters Designated COLD and/or MIGR</u>	<u>Waters Not Designated COLD and/or MIGR</u>
6.5	32.6	48.8
6.6	31.3	46.8
6.7	29.8	44.6
6.8	28.1	42.0
6.9	26.2	39.1
7.0	24.1	36.1
7.1	22.0	32.8
7.2	19.7	29.5
7.3	17.5	26.2
7.4	15.4	23.0
7.5	13.3	19.9
7.6	11.4	17.0
7.7	9.65	14.4
7.8	8.11	12.1
7.9	6.77	10.1
8.0	5.62	8.40
8.1	4.64	6.95
8.2	3.83	5.72
8.3	3.15	4.71
8.4	2.59	3.88
8.5	2.14	3.20
8.6	1.77	2.65
8.7	1.47	2.20
8.8	1.23	1.84
8.9	1.04	1.56
9.0	0.885	1.32

Reference: U.S. EPA 1999 Update of Ambient Water Quality Criteria for Ammonia<sup>1</sup>

<sup>1</sup> For freshwaters, the one-hour average concentration (Criteria Maximum Concentration or CMC) of total ammonia as nitrogen (in mg N/L) shall not exceed the values described by the following equations.

For waters designated COLD and/or MIGR:

$$\text{CMC or One-hour Average Concentration} = \frac{0.275}{1+10^{7.204-pH}} + \frac{39.0}{1+10^{pH-7.204}}$$

Or for waters not designated COLD and/or MIGR:

$$\text{CMC or One-hour Average Concentration} = \frac{0.411}{1+10^{7.204-pH}} + \frac{58.4}{1+10^{pH-7.204}}$$

Table 3-2. 30-day Average Objective for Ammonia-N for Freshwaters Designated SPWN (mg N/L)

pH	Temperature, °C																
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	6.67	6.46	6.06	5.68	5.33	4.99	4.68	4.39	4.12	3.86	3.62	3.39	3.18	2.98	2.80	2.62	2.46
6.6	6.57	6.36	5.97	5.59	5.25	4.92	4.61	4.32	4.05	3.80	3.56	3.34	3.13	2.94	2.75	2.58	2.42
6.7	6.44	6.25	5.86	5.49	5.15	4.83	4.52	4.24	3.98	3.73	3.50	3.28	3.07	2.88	2.70	2.53	2.37
6.8	6.29	6.10	5.72	5.36	5.03	4.72	4.42	4.14	3.89	3.64	3.42	3.20	3.00	2.82	2.64	2.47	2.32
6.9	6.12	5.93	5.56	5.21	4.89	4.58	4.30	4.03	3.78	3.54	3.32	3.11	2.92	2.74	2.57	2.41	2.25
7.0	5.91	5.73	5.37	5.04	4.72	4.43	4.15	3.89	3.65	3.42	3.21	3.01	2.82	2.64	2.48	2.32	2.18
7.1	5.67	5.49	5.15	4.83	4.53	4.25	3.98	3.73	3.50	3.28	3.08	2.88	2.70	2.53	2.38	2.23	2.09
7.2	5.39	5.22	4.90	4.59	4.31	4.04	3.78	3.55	3.33	3.12	2.92	2.74	2.57	2.41	2.26	2.12	1.99
7.3	5.08	4.92	4.61	4.33	4.06	3.80	3.57	3.34	3.13	2.94	2.76	2.58	2.42	2.27	2.13	2.00	1.87
7.4	4.73	4.59	4.30	4.03	3.78	3.55	3.32	3.12	2.92	2.74	2.57	2.41	2.26	2.12	1.98	1.86	1.74
7.5	4.36	4.23	3.97	3.72	3.49	3.27	3.06	2.87	2.69	2.53	2.37	2.22	2.08	1.95	1.83	1.72	1.61
7.6	3.98	3.85	3.61	3.39	3.18	2.98	2.79	2.62	2.45	2.30	2.16	2.02	1.90	1.78	1.67	1.56	1.47
7.7	3.58	3.47	3.25	3.05	2.86	2.68	2.51	2.36	2.21	2.07	1.94	1.82	1.71	1.60	1.50	1.41	1.32
7.8	3.18	3.09	2.89	2.71	2.54	2.38	2.23	2.10	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25	1.17
7.9	2.80	2.71	2.54	2.38	2.24	2.10	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25	1.17	1.10	1.03
8.0	2.43	2.36	2.21	2.07	1.94	1.82	1.71	1.60	1.50	1.41	1.32	1.24	1.16	1.09	1.02	0.957	0.897
8.1	2.10	2.03	1.91	1.79	1.68	1.57	1.47	1.38	1.29	1.21	1.14	1.07	1.00	0.938	0.879	0.824	0.773
8.2	1.79	1.74	1.63	1.53	1.43	1.34	1.26	1.18	1.11	1.04	0.973	0.912	0.855	0.802	0.752	0.705	0.661
8.3	1.52	1.48	1.39	1.30	1.22	1.14	1.07	1.00	0.941	0.882	0.827	0.775	0.727	0.682	0.639	0.599	0.562
8.4	1.29	1.25	1.17	1.10	1.03	0.966	0.906	0.849	0.796	0.747	0.700	0.656	0.615	0.577	0.541	0.507	0.475
8.5	1.09	1.06	0.990	0.928	0.870	0.816	0.765	0.717	0.672	0.630	0.591	0.554	0.520	0.487	0.457	0.428	0.401
8.6	0.920	0.892	0.836	0.784	0.735	0.689	0.646	0.606	0.568	0.532	0.499	0.468	0.439	0.411	0.386	0.362	0.339
8.7	0.778	0.754	0.707	0.663	0.622	0.583	0.547	0.512	0.480	0.450	0.422	0.396	0.371	0.348	0.326	0.306	0.287
8.8	0.661	0.641	0.601	0.563	0.528	0.495	0.464	0.435	0.408	0.383	0.359	0.336	0.315	0.296	0.277	0.260	0.244
8.9	0.565	0.548	0.513	0.481	0.451	0.423	0.397	0.372	0.349	0.327	0.306	0.287	0.269	0.253	0.237	0.222	0.208
9.0	0.486	0.471	0.442	0.414	0.389	0.364	0.342	0.320	0.300	0.281	0.264	0.247	0.232	0.217	0.204	0.191	0.179

\* At temperatures below 14 °C, the objective is the same as that shown for 14 °C.

Reference: U.S. EPA 1999 Update of Ambient Water Quality Criteria for Ammonia<sup>2</sup>

<sup>2</sup> For freshwaters designated SPWN, the thirty-day average concentration (Criteria Continuous Concentration or CCC) of total ammonia as nitrogen (in mg N/L) shall not exceed the values described by the following equation.

$$\text{CCC or 30-day Average Concentration} = \left( \frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}} \right) * \text{MIN} \left( 2.85, 1.45 * 10^{0.028*(25-T)} \right)$$

Where T = temperature expressed in °C.

In addition, for freshwaters, the highest four-day average within the 30-day period shall not exceed 2.5 times the 30-day average objective as calculated above.

**Table 3-3. 30-day Average Objective for Ammonia-N for Freshwaters Not Designated SPWN (mg N/L)**

pH	Temperature, °C								
	0-7	8	9	10	11	12	13	14	15*
6.5	10.8	10.1	9.51	8.92	8.36	7.84	7.35	6.89	6.46
6.6	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79	6.36
6.7	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66	6.25
6.8	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51	6.10
6.9	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33	5.93
7.0	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11	5.73
7.1	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86	5.49
7.2	8.75	8.20	7.69	7.21	6.76	6.34	5.94	5.57	5.22
7.3	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25	4.92
7.4	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89	4.59
7.5	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51	4.23
7.6	6.46	6.05	5.67	5.32	4.99	4.68	4.38	4.11	3.85
7.7	5.81	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47
7.8	5.17	4.84	4.54	4.26	3.99	3.74	3.51	3.29	3.09
7.9	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	2.71
8.0	3.95	3.70	3.47	3.26	3.05	2.86	2.68	2.52	2.36
8.1	3.41	3.19	2.99	2.81	2.63	2.47	2.31	2.17	2.03
8.2	2.91	2.73	2.56	2.40	2.25	2.11	1.98	1.85	1.74
8.3	2.47	2.32	2.18	2.04	1.91	1.79	1.68	1.58	1.48
8.4	2.09	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25
8.5	1.77	1.66	1.55	1.46	1.37	1.28	1.20	1.13	1.06
8.6	1.49	1.40	1.31	1.23	1.15	1.08	1.01	0.951	0.892
8.7	1.26	1.18	1.11	1.04	0.976	0.915	0.858	0.805	0.754
8.8	1.07	1.01	0.944	0.885	0.829	0.778	0.729	0.684	0.641
8.9	0.917	0.86	0.806	0.756	0.709	0.664	0.623	0.584	0.548
9.0	0.790	0.740	0.694	0.651	0.610	0.572	0.536	0.503	0.471

\* At 15 °C and above, the 30-day average objective for waters not designated SPWN is the same as that for waters designated SPWN. Reference: U.S. EPA 1999 Update of Ambient Water Quality Criteria for Ammonia<sup>3</sup>

<sup>3</sup> For freshwaters not designated SPWN, the thirty-day average concentration (Criteria Continuous Concentration or CCC) of total ammonia as nitrogen (in mg N/L) shall not exceed the values described by the following equation.

$$\text{CCC or 30-day Average Concentration} = \left( \frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}} \right) * 1.45 * 10^{0.028 * (25-MAX(T,7))}$$

Where T = temperature expressed in °C.

In addition, for freshwaters, the highest four-day average within the 30-day period shall not exceed 2.5 times the 30-day average objective as calculated above.

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

STANDARD PROVISIONS, GENERAL MONITORING AND  
REPORTING REQUIREMENTS

"ATTACHMENT N"

A. General Requirements

1. Neither the disposal nor any handling of wastes shall cause pollution or nuisance.
2. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
3. This discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Clean Water Act, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.
4. Wastes discharged shall not contain visible color, oil or grease, and shall not cause the appearance of color, grease, oil or oily slick, or persistent foam in the receiving waters or on channel banks, walls, inverts or other structures.
5. Wastes discharged shall not increase the natural turbidity of the receiving waters at the time of discharge.
6. Wastes discharged shall not cause the formation of sludge deposits.
7. Wastes discharged shall not damage flood control structures or facilities.
8. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any spill of such materials shall be contained and removed immediately.
9. The pH of wastes discharged shall at all times be within the range 6.0 to 9.0.
10. The temperature of wastes discharged shall not exceed 100° F.
11. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

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12. Effluent limitations, national standards of performance and toxic and pretreatment effluent standards established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, 318 and 405 of the Federal Clean Water Act and amendments thereto are applicable to the discharge.

B. 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. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
3. The discharger must comply with all of the terms, requirements, and conditions of this order. Any violation of this order constitutes a violation of the Clean Water Act, its regulations and the California Water Code, and is grounds for enforcement action, Order termination, Order revocation and reissuance, denial of an application for reissuance, or a combination thereof.
4. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
5. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.
6. The Regional Board, EPA, and other authorized representatives shall be allowed:
  - a) Entry upon premises where a regulated facility is located or conducted, or where records are kept under conditions of this Order;
  - b) Access to copy any records that are kept under the conditions of this Order;
  - c) To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

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- (d) To photograph, sample, and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the Clean Water Act and the California Water Code.
7. If the discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the discharger must apply for and obtain a new Order.
8. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. If a toxic effluent standard or prohibition is established for 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.
9. 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;
  - (b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
  - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
10. In the event the discharger is unable to comply with any of the conditions of this Order due to:
- (a) breakdown of waste treatment equipment;
  - (b) accidents caused by human error or negligence; or
  - (c) other causes such as acts of nature,

the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

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11. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
12. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
13. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control including sludge use and disposal facilities (and related appurtenances) that are installed or used by the discharger to achieve compliance with this Order. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar system that are installed by a discharger only when necessary to achieve compliance with the conditions of this Order.
14. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
15. This Order does not convey any property rights of any sort, or any exclusive privilege.
16. The discharger shall furnish, within a reasonable time, any information the Regional Board or EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
17. All applications, reports, or information submitted to the Regional Board shall be signed:
  - (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 discharge originates;
  - (b) In the case of a partnership, by a general partner;
  - (c) In the case of a sole proprietorship, by the proprietor;

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- (d) In the case of municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

18. The discharger shall notify the Board of:

- (a) new introduction into such works of pollutants from a source which could be a new source as defined in section 306 of the Federal Clean Water Act, or amendments thereto, if such source were discharging pollutants to the waters of the United States,
- (b) new introductions of pollutants into such works from a source which would be subject to Section 301 of the Federal Clean Water Act, or amendments thereto, if substantial change in the volume or character of pollutants being introduced into such works by a source introducing pollutants into such works at the time the waste discharge requirements were adopted.

Notice shall include a description of the quantity and quality of pollutants and the impact of such change on the quantity and quality of effluent from such publicly owned treatment works. A substantial change in volume is considered an increase of ten percent in the mean dry-weather flow rate. The discharger shall forward a copy of such notice directly to the Regional Administrator.

19. The discharger shall notify the Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.

20. The discharger shall give advance notice to the Regional Board as soon as possible of any planned physical alterations or additions to the facility or of any planned changes in the facility or activity that may result in noncompliance with requirements.

21. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

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

- (a) that any activity has occurred or will occur that would result in the

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discharge of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels:"

- (i) One hundred micrograms per liter (100 µg/l);
  - (ii) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
  - (iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
  - (iv) The level established by the Regional Board in accordance with 40 CFR 122.44(f).
- (b) that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.

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

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

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The discharger may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable. The discharger shall submit notice of an unanticipated bypass as required in E-16.

24. A discharger that wishes to establish the affirmative defense of an upset in an action brought for non-compliance shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (a) an upset occurred and that the discharger can identify the cause(s) of the upset;
  - (b) the permitted facility was being properly operated by the time of the upset;
  - (c) the discharger submitted notice of the upset as required in E-16; and
  - (d) the discharger complied with any remedial measures required.

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

In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof.

25. This Order is not transferable to any person except after notice to the Regional Board. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Board. The Regional Board may require modification or revocation and reissuance of the Order to change the name of the discharger and incorporate such other requirements as may be necessary under the Clean Water Act.

C. Enforcement

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

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

2. The Federal Clean Water Act (CWA) provides that any person who violates a permit condition or any requirement imposed in a pretreatment program implementing sections 301, 302, 306, 307, 308, 318 or 405 of the CWA is subject to a civil penalty not to exceed \$25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing these sections of the CWA is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both. Any person who knowingly violates permit conditions implementing these sections of the CWA is subject to a fine of not less than \$5,000, or more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or by both.
3. It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order.
4. The Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document submitted or required to be maintained under this Order, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this act, shall upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 2 years per violation, or by both.

D. Monitoring Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. The discharger shall retain records of all monitoring information, including all calibration and maintenance monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the Report of Waste Discharge and application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Board or EPA at any time and shall be extended during the course of any unresolved litigation regarding this discharge.

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3. Records of monitoring information shall include:
  - (a) The date, exact place, and time of sampling or measurements;
  - (b) The individual(s) who performed the sampling or measurements;
  - (c) The date(s) analyses were performed;
  - (d) The individual(s) who performed the analyses;
  - (e) The analytical techniques or methods used; and
  - (f) The results of such analyses.
4. All sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this Order.
5. All chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by an appropriate governmental regulatory agency.
6. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.
7. The discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. The annual monitoring report required in E-8 shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per sampling period, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.

When requested by the Board or EPA, the discharger will participate in the NPDES discharge monitoring report QA performance study. The discharger must have a success rate equal to or greater than 80%.
8. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
9. For parameters where both 30-day average and maximum limits are specified but where the monitoring frequency is less than four times a month, the following procedure shall apply:

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- (a) Initially, not later than the first week of the second month after the adoption of this permit, a representative sample shall be obtained of each waste discharge at least once per week for at least four consecutive weeks and until compliance with the 30-day average limit has been demonstrated. Once compliance has been demonstrated, sampling and analyses shall revert to the frequency specified.
- (b) If future analyses of two successive samples yield results greater than 90% of the maximum limit for a parameter, the sampling frequency for that parameter shall be increased (within one week of receiving the laboratory result on the second sample) to a minimum of once weekly until at least four consecutive weekly samples have been obtained and compliance with the 30-day average limit has been demonstrated again and the discharger has set forth for the approval of the Executive Officer a program which ensures future compliance with the 30-day average limit.

E. Reporting Requirements

1. The discharger shall file with the Board technical reports on self monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Programs as directed by the Executive Officer.
2. In reporting the monitoring data, the discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernable. The data shall be summarized to demonstrate compliance with waste discharge requirements and, where applicable, shall include results of receiving water observations.
3. For every item 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 submit a timetable for correction.
4. The discharger shall submit to the Board, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.
5. The discharger shall file a technical report with this Board not later than 30 days after receipt of this Order, relative to the operation and maintenance program for this waste disposal facility. The information to be contained in that report shall include as a minimum, the following:
  - (a) The name and address of the person or company responsible for operation

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and maintenance of the facility.

- (b) Type of maintenance (preventive or corrective).
- (c) Frequency of maintenance, if preventive.

If an operation and maintenance report has been supplied to the Board previously and there have been no changes, a second report need not be provided.

6. Monitoring results shall be reported at the intervals specified in the monitoring and Reporting Program.

- (a) Monitoring results must be reported on a Discharge Monitoring Report (DMR).
- (b) If the discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- (c) Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order.

7. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this Order shall be submitted no later than 14 days following, each schedule date.

8. By March 1 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.

9. The discharger shall include in the annual report, an annual summary of the quantities of all chemicals, listed by both trade and chemical names, which are used for cooling and/or boiler water treatment and which are discharged.

10. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current EPA guideline procedures or as specified in this Monitoring Program".

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11. Each report shall contain the following completed declaration:

"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 a fine and imprisonment for knowing violations.

Executed on the \_\_\_\_ day of \_\_\_\_\_, 19\_\_

at \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)"

12. If no flow occurred during the reporting period, the monitoring report shall so state.

13. For any analyses performed for which no procedure is specified in the EPA guidelines or in the monitoring and Reporting Program, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.

14. This Board requires the discharger to file with the Board, within 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 become operational.
- (c) Describe facilities and procedures needed for effective preventive and contingency plans.

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- (d) Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

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.

- 15. In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:

- (a) Types of wastes and quantity of each type;
- (b) Name and address for each hauler of wastes (or method of transport if other than by hauling); and
- (c) Location of the final point(s) of disposal for each type of waste.

If no wastes are transported offsite during the reporting period, a statement to that effect shall be submitted.

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

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

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

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

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17. Should the discharger 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.
18. The discharger shall report all instances of non-compliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain all information listed in E-16.
19. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.
20. Analytical data reported as "less than" for the purpose of reporting compliance with permit limitations shall be the same or lower than the permit limit(s) established for the given parameter.
21. The discharger shall mail a copy of each monitoring report to:

TECHNICAL SUPPORT UNIT  
CALIFORNIA REGIONAL WATER QUALITY  
CONTROL BOARD - LOS ANGELES REGION  
101 Centre Plaza Drive  
Monterey Park, CA 91754-2156

A copy of such monitoring report for those discharges designated as a major discharge shall also be mailed to:

REGIONAL ADMINISTRATOR  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 9  
75 Hawthorne Street  
San Francisco, CA 94105

F. Publicly Owned Wastewater Treatment Plant Requirements  
(Does not apply to any other type or class of discharger)

1. Publicly owned treatment works (POTWs) must provide adequate notice to the Regional Board of:
  - (a) Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants.

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- (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the Order.

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

- 2. The discharger shall file a written report with the Board within 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 administration officer shall sign a letter which transmits that report and certifies 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 that 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.

- 3. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.

- 4. The discharger shall require any industrial user of the treatment works to comply with applicable service charges and toxic pretreatment standards promulgated in accordance with Sections 204(b), 307, and 308 of the Federal Clean Water Act or amendments thereto. The discharger shall require each individual user to submit periodic notice (over intervals not to exceed nine months) of progress toward compliance with applicable toxic and pretreatment standards developed pursuant to the Federal Clean Water Act or amendments thereto. The discharger shall forward a copy of such notice to the Board and the Regional Administrator.

- 5. Collected screening, biosolids (sludges), and other solids removed from liquid wastes shall be disposed of at a legal point of disposal and in accordance with the provisions of Section 405(d) of the Federal Clean Water Act and Division 7 of the California Water Code. For the purpose of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been

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prescribed by a Regional Water Quality Control Board and which is in full compliance therewith.

6. Supervisors and operators of publicly owned wastewater treatment plants shall possess a certificate of appropriate grade in accordance with regulations adopted by the State Water Resources Control Board.

The annual report required by E-8 shall address operator certification and provide a list of current operating personnel and their grade of certification. The report shall include the date of each facility's Operation and Maintenance Manual, the date the manual was last reviewed, and whether the manual is complete and valid for the current facilities. The report shall restate, for the record, the laboratories used by the discharger to monitor compliance with this order and permit and provide a summary of performance.

G. Definitions

1. "Biosolids" (sludge) means the solids, semi-liquid suspensions of solids, residues, screenings, grit, scum, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system. It also includes, but is not limited to, all supernatant, filtrate, centrate, decantate, and thickener overflow/underflow in the solids handling parts of the wastewater treatment system.
2. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility whose operation is necessary to maintain compliance with the terms and conditions of this Order.
3. "Chlordane" means the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonchlor-alpha, nonchlor-gamma and chlordane.
4. "Composite sample" means: for flow rate measurements, the arithmetic mean of no fewer than eight individual measurements taken at equal intervals for 24 hours or for the duration of discharge, whichever is shorter.  
"Composite sample" means, for other than flow rate measurement,
  - (a) A combination of at least eight individual portions obtained at equal time intervals for 24 hours, or the duration of the discharge, whichever is shorter. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling;

OR

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- (b) A combination of at least eight individual portions of equal volume obtained over a 24-hour period. The time interval will vary such that the volume of wastewater discharged between samplings remains constant.

The compositing period shall equal the specified sampling period, or 24 hours, if no period is specified.

5. "Daily discharge" means:

- (a) For flow rate measurements, the average flow rate measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.
- (b) For pollutant measurements, the concentration or mass emission rate measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.

6. The "daily discharge rate" shall be obtained from the following calculation for any calendar day:

$$\text{Daily discharge rate} = \frac{8.34 \cdot N}{N} \sum_{i=1}^N (Q_i)(C_i)$$

in which N is the number of samples analyzed in any calendar day,  $Q_i$  and  $C_i$  are the 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,  $C_i$  is the concentration measured in the composite sample and  $Q_i$  is the average flow rate occurring during the period over which samples are composited.

7. "Daily maximum" limit means the maximum acceptable "daily discharge" for pollutant measurements. Unless otherwise specified, the results to be compared to the "daily maximum" limit are based on composite samples.
8. "DDT" means the sum of the 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD and 2,4'-DDD. DDT is dichloro diphenyl trichloroethane.
9. "Degrade" means to impair. Determination of whether degradation has occurred and of the extent to which it has occurred shall be made by analysis of species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species.
10. "Dichlorobenzenes" mean the sum of 1,2- and 1,3-dichlorobenzene.

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11. "Duly authorized representative" is one whose:
  - (a) Authorization is made in writing by a principal executive officer or ranking elected official;
  - (b) Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
  - (c) Written authorization is submitted to the Regional Board and EPA Region 9. If an authorization becomes no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements above must be submitted to the Regional Board and EPA Region 9 prior to or together with any reports, information, or applications to be signed by an authorized representative.
12. "Grab sample" is defined as any individual sample collected in a short period of time not exceeding 15 minutes. "Grab samples" shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with "daily maximum" limits and the "instantaneous maximum" limits.
13. "Halomethanes" means the sum of bromoform, bromomethane (methylbromide), chloromethane (methylchloride), chlorodibromomethane and dichlorobromomethane.
14. "Hazardous substance" means any substance designated under 40 CFR 116 pursuant to Section 311 of the Clean Water Act.
15. "HCH" shall mean the sum of the alpha, beta, gamma (Lindane), and delta isomers of hexachlorocyclohexane.
16. "Heavy metals" are for purposes of this Order, arsenic, cadmium, chromium, copper, lead, mercury, silver, nickel, and zinc.
17. "Heptachlor" means the sum of heptachlor and heptachlor epoxide.
18. "Indirect discharger" means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.

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19. "Initial dilution" is the process which results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

Numerically, initial dilution is expressed as the ratio of the volume of discharged effluent plus ambient water entrained during the process of initial dilution to the volume of discharged effluent.

20. "Instantaneous maximum" concentration is defined as the maximum value measured from any single "grab sample."

21. "Interference" discharge which, alone or in conjunction with discharges from other sources, inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use, or disposal and is a cause of a violation of the POTW's NPDES permit or prevents lawful sludge use or disposal.

22. "Kelp beds" are, for purposes of the bacteriological standards of this order and permit, significant aggregations of marine algae of the genus Macrocystis. Kelp beds include the total foliage canopy of Macrocystis plants throughout the water column. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacteriological standards.

23. Land application is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

24. "Log mean" is the geometric mean. Used for determining compliance with bacteriological standards, it is calculated with the following equation:

$$\text{Log Mean} = (C_1 \times C_2 \times \dots \times C_N)^{1/N}$$

in which 'N' is the number of days samples that were analyzed during the period and 'C' is the concentration of bacteria (MPN/100mL) found on each day of sampling.

25. "Mass emission rate" is obtained from the following calculation for any calendar day:

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$$\text{Mass emission rate (lb/day)} = \frac{8.435}{N} \sum_{i=1}^N Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.785}{N} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of samples analyzed in any calendar day. 'Q<sub>i</sub>' and 'C<sub>i</sub>' 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<sub>i</sub>' is the concentration measured in the composite sample and 'Q<sub>i</sub>' is the average flow rate occurring during the period over which samples are composited.

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$\text{Daily concentration} = \frac{1}{Q_i} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of component waste streams. 'Q<sub>i</sub>' and 'C<sub>i</sub>' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Q<sub>i</sub>' is the total flow rate of the combined waste streams.

26. "Maximum allowable mass emission rate," whether for a 24-hour, 7-day, 30-day (monthly), or 6-month period, is a limitation expressed as a daily rate determined with the formulas in paragraph A.20., above, using the effluent concentration limit specified in this order and permit for the period and the specified allowable flow.
27. MDL (Method Detection Limit) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136 Appendix B.
28. "Median" of an ordered set of values is the value which the values above and below is an equal number of values, or which is the arithmetic mean of the two middle values, if there is no one middle value.
29. "Monthly average" is the arithmetic mean of daily concentrations, or of daily "mass emission rates", over the specified monthly period:

N

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$$\text{Average} = \frac{1}{N} \sum_{i=1} X_i$$

in which 'N' is the number of days samples were analyzed during the period and 'X<sub>i</sub>' is either the constituent concentration (mg/L) or mass emission rate (kg/day or lb/day) for each sampled day.

30. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.
31. "PAHs" (polynuclear aromatic hydrocarbons) mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.
32. "Pass through" defines as the discharge through the POTW to navigable waters which, alone or in conjunction with discharges from other sources, is a cause of a violation of POTW's NPDES permit.
33. "PCBs" (polychlorinated biphenyls) mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.
34. "PQL" (Practical Quantitation Level) is the lowest concentration of a substance which can be consistently determined within +/-20% of the true concentration by 75% of the labs tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL\* for carcinogens is the MDL\*x.5, and for noncarcinogens is the MDL\*x.10.
35. "Priority pollutants" are those constituents referred to in 40 CFR §401.15 and listed in the EPA NPDES Application Form 2C, pp. V-3 thru V-9.
36. "Removal efficiency" is the ratio of pollutants removed by the treatment facilities to pollutants entering the treatment facilities. Removal efficiencies of a treatment plant shall be determined using "30-day averages" of pollutant concentrations ('C' in mg/L) of influent and effluent samples collected at about the same time and using the following equation (or its equivalent):

$$\text{Removal Efficiency (\%)} = 100 \times [1 - (C_{\text{Effluent}}/C_{\text{Influent}})]$$

When preferred, the discharger may substitute mass loadings and mass emissions for the concentrations.

37. "Shellfish" are organisms identified by the California Department of Health Services

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as shellfish for public health purposes (i.e., mussels, clams, and oysters).

38. "Sludge" see biosolids.

39. "6-month median" means a moving "median" of daily values for any 180-day period in which daily values represent flow-weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.

40. "7-day" and "30-day average" shall be the arithmetic average of the values of daily discharge calculated using the results of analyses of all samples collected during any 7 and 30 consecutive calendar day periods, respectively.

41. TCDD equivalents mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below:

<u>Isomer Group</u>	<u>Toxicity Equivalence Factor</u>
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8-tetra CDF	0.1
1,2,3,7,8-penta CDF	0.05
2,3,4,7,8-penta CDF	0.5
2,3,7,8-hexa CDFs	0.1
2,3,7,8-hepta CDFs	0.01
octa CDF	0.001

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

43. "Toxicity" means:

Acute toxicity: measures effects of relatively short-term exposures on a selected organism, with mortality the generally designated endpoint.

Chronic toxicity: measures effects of exposure on selected organisms, with either

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mortality or various sublethal effects generally the designated endpoints. The chronic tests are usually longer-term than acute tests or test a very critical life stage of the organism.

44. "Toxicity concentration" shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

- a. The acute toxicity concentration ( $TC_a$ ) expressed in toxicity units ( $tu_a$ ) is calculated as:

$$Tc_a (tu_a) = 100 / [96\text{-hr } LC_{50}]$$

Where:  $LC_{50}$  is the Lethal Concentration (the percent waste giving 50 percent survival of test organisms)

The  $LC_{50}$  shall be determined by static or continuous flow bioassay techniques specified in "Methods for Measuring the Acute Toxicity of Effluent to Freshwater and Marine Organisms" (March 1985, EPA/600/4-85/013). Submission of bioassay results should include the information noted on pp. 45-49 of the Methods. The fathead minnow (*Pimephales promelas*) shall be used as the test species. In addition, the Regional Board and/or EPA may specify test methods which are more sensitive than those specified above. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the  $LC_{50}$  may be determined after the test samples are adjusted to remove the influence of those substances, subject to Executive Officer notification and authorization.

When it is not possible to measure the 96-hour  $LC_{50}$  due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$Tc_a (tu_a) = \text{Log} (100 - S) / 1.7$$

where: S = percent survival in 100 percent waste. If  $S > 99$ ,  $Tc$  shall be reported as zero.

- b. The chronic toxicity concentration ( $TC_c$ ) expressed in chronic toxicity units ( $tu_c$ ) is calculated as:

$$TC_c (tu_c) = 100/\text{NOEC}$$

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where: NOEC is the No Observable Effect Concentration which is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism as determined by the result of a critical life stage toxicity test conducted according to the protocols listed in Appendix II of the California Ocean Plan adopted on March 22, 1990.

NOEC shall be determined based on toxicity tests having chronic endpoints.

45. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with effluent limitations in the order and permit because of factors beyond the reasonable control of the discharger. It does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation, or those problems the discharger should have foreseen.
46. "Waste", "waste discharge", "discharge of waste", and "discharge" are used interchangeably in this order and permit. The requirements of this order and permit are applicable to the entire volume of water, and the material therein, which is disposed of to ocean waters.
47. Water Reclamation: The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.
48. "Weekly average" is the arithmetic mean of daily concentrations, or of daily mass emission rates, over the specified weekly period:

$$\text{Average} = \frac{1}{N} \sum_{i=1}^N X_i$$

in which "N" is the number of days samples were analyzed during the period and "X<sub>i</sub>" is either the constituent concentration (mg/L) or mass emission rate (kg/day or lb/day) for each sampled day.

49. "Zone of initial dilution" (ZID) means, for purposes of designating monitoring stations, the region within a horizontal distance equal to a specified water depth (usually depth of outfall or average depth of diffuser) from any point of the diffuser or end of the outfall and the water column above and below that region, including the underlying seabed.

State of California  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION  
320 West 4th Street, Suite 200, Los Angeles

**FACT SHEET  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
FOR  
THE BOEING COMPANY  
(Santa Susana Field Laboratory)**

NPDES PERMIT NO.: CA0001309  
Public Notice No.: 09-077

**FACILITY MAILING ADDRESS**

The Boeing Company  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148

**FACILITY LOCATION**

The Boeing Company  
Santa Susana Field Laboratory  
Top of Woolsey Canyon  
Simi Hills, CA 91311  
Contact: Tom Gallacher  
(818) 466-8161

**I. Public Participation**

The California Regional Water Quality Control Board, Los Angeles Region, (Regional Board) will consider, during its May 7 and 8, 2009, meeting, the tentative amendment to the waste discharge requirements (WDRs), which serve as a National Pollutant Discharge Elimination System (NPDES) permit to the Boeing Company for the Santa Susana Field Laboratory. Stakeholders are invited to contact Cassandra Owens at [cowens@waterboards.ca.gov](mailto:cowens@waterboards.ca.gov) or via phone at (213) 576-6750 as the date of the board meeting approaches to obtain a more precise estimate of when the item will be called. Modifications to the NPDES permit are being considered to incorporate new information presented in the most recent Report of Waste Discharge, the most recent reasonable potential analysis and the requirements of the Section 13304 Order issued by the Regional Board on December 3, 2008. As an initial step in the process, the Regional Board staff has developed tentative WDRs. The Regional Board encourages public participation in the WDR adoption process.

**A. Written Comments**

Interested persons are invited to submit written comments concerning the tentative WDRs. Comments should be submitted either in person, or by mail to:

California Regional Water Quality Control Board  
Los Angeles Region  
320 West 4th Street, Suite 200  
Los Angeles, CA 90013

March 11, 2009  
Revised: April 6, 2009  
Revised: April 22, 2009  
Revised: May 8, 2009

Written comments regarding the tentative Order must be received at the Regional Board office by 5:00 p.m. on April 15, 2009, in order to be evaluated by staff and included in the Board's agenda folder.

**B. Public Hearing**

The proposed WDRs will be considered by the Regional Board at a public hearing. The hearing is scheduled to be held during the Regional Board meeting, which is scheduled as follows:

Date: May 7 and 8, 2009  
Time: 10:00 A.M.  
Location: Ventura County Government Center  
Board of Supervisors Hearing Room  
800 South Victoria Avenue  
Ventura, California

Interested persons are invited to contact Board staff prior to the Board Meeting for a more specific estimate as to when the hearing on this matter will commence. Please check the website address (<http://www.waterboards.ca.gov/losangeles/>) for the most up to date public hearing location as it is subject to change. Interested persons are invited to attend. At the public hearing the Regional Board will hear testimony, if any, pertinent to the discharge, WDRs and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

**C. Waste Discharge Requirements Appeals**

Any person may petition the State Water Resources Control Board to review the decision of the Regional Board regarding the final Waste Discharge Requirements. The petition must be filed within 30 days of the Regional Board's action to the following address:

State Water Resources Control Board, Office of the Chief Counsel  
Attn: Elizabeth Miller Jennings, Senior Staff Counsel  
1001 I Street, 22<sup>nd</sup> Floor  
Sacramento, CA 95812

**D. Additional Information and Copies**

The proposed language and other information and documents relied upon are available for inspection and copying between the hours of 8:00 a.m. and 4:30 p.m. by appointment at the following address:

Los Angeles Regional Water Quality Control Board  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

Arrangements for file review and/or obtaining copies of the documents may be made by calling the Los Angeles Regional Board at (213) 576-6600.

**E. Register of Interested Persons**

Persons wishing to comment on, or object to, the tentative waste discharge requirements (WDRs) and the tentative Cease and Desist Order (CDO), or submit evidence for the Board to consider, are invited to submit them in writing to Cassandra Owens at the above address, or send them electronically to: [cowens@waterboards.ca.gov](mailto:cowens@waterboards.ca.gov). To be evaluated and responded to by Regional Board staff, included in the Board's agenda folder, and fully considered by the Board, written comments or testimony regarding the tentative revisions must be received at the Regional Board office no later than close of business on **April 15, 2009**. Failure to comply with these requirements is grounds for the Regional Water Board to refuse to admit the proposed written comment or exhibit into evidence pursuant to section 648.4, title 23 of the California Code of Regulations.

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Board, reference this facility, and provide a name, address, and phone number.

**F. Staff Contacts**

If you have any question regarding this proposed action, please contact Cassandra Owens at (213) 5760-6750 or via email at [cowens@waterboards.ca.gov](mailto:cowens@waterboards.ca.gov).

**II. Introduction**

The Boeing Company (hereinafter Boeing or Discharger) discharged waste from its Santa Susana Field Laboratory under waste discharge requirements, which served as an NPDES permit, contained in Order No. 98-051 adopted by this Regional Board on June 29, 1998 (NPDES Permit No. CA0001309).

Boeing filed a report of waste discharge (ROWD) and applied for renewal of its WDRs and NPDES permit for discharge of wastes to surface waters. Order No. R4-2004-0111 was adopted on July 1, 2004. It incorporated effluent limitations based on the California Toxics Rule (CTR) where appropriate and added nine new compliance points.

Order R4-2006-0008 (adopted January 19, 2006), an amendment to Order No R4-2004-0111 (adopted July 1, 2004) was the result of new information incorporated into the Order after one year of compliance and routine monitoring based on Monitoring and Reporting Program (MRP) No. 6027. On March 9, 2006 Order R4-2006-0036 was adopted which incorporated total maximum daily loads (TMDLs) based effluent limitations for discharges to the Los Angeles River and to Calleguas Creek.

Subsequent to the adoption of Order R4-2004-0111, the Discharger filed a petition challenging the permit with the State Water Resources Control Board. The discharger immediately put the petition in abeyance. After the adoption of Order R4-2006-0008 in January 2006 the discharger petitioned that order, activated the previous petition and ultimately petitioned the subsequent amendment, Order R4-2006-0036. The discharger also requested that the permit be stayed pending a decision on the permit on the basis of merit.

After considering the evidence, the State Board adopted Order WQ 2006-0007 on June 21, 2006, which vacated a previous stay order issued by one of its members, and denied Boeing's request for a stay.

On December 13, 2006, the State Board held a public hearing to consider the various petitions that the discharger had filed with respect to its permit, and thereafter adopted Order WQ 2006-0012. The Order:

- Remanded the permit to the Regional Board to revise the provisions concerning Outfalls 001, 002, 011, and 018,
- Stayed the effluent limitations at Outfalls 011 and 018 pending a determination by the Regional Board to delete either Outfalls 011 and 018 or Outfalls 001 and 002 as compliance points,
- Directed the Regional Board to issue a Cease and Desist Order with the shortest possible compliance schedule and interim effluent limitations. The effective date of the CDO was to be January 19, 2006,
- Review the permit to ensure that numeric effluent limitations for different outfalls do not count the same violation twice in such a manner as to treat a single violation as multiple violations.
- In all other respects, the petitions were denied.

Order R4-2007-0055 included the updates required by the State Board Order, updates associated with a revised ROWD submitted by the Discharger, and any new effluent limitations that are a result of the reasonable potential analysis completed on the data obtained through May 22, 2006.

On December 3, 2008, Tracy Egoscue, Executive Officer of the Regional Board, issued a California Water Code Section 13304 Order to perform interim/source removal action of soil in the areas of Outfalls 008 and 009 Drainage Areas to the Boeing Company, Santa Susana Field Laboratory. The Order directed the Discharger to cleanup and abate the wastes that are discharging to waters of the State, minimize impacts to the streambed adjacent habitat during the cleanup, protect the water quality during and after the cleanup, and restore the streambed and surrounding habitat following the cleanup.

On December 11, 2008, the Discharger submitted a new ROWD. Supplemental information was submitted on February 2, 2009, to complete the ROWD. This Order includes updates required as a result of the new ROWD, the California Water Code Section 13304 Order, and the new RPA conducted on data collected from August 2004 through December 2008.

### **III. Facility and Waste Discharge Description**

The Santa Susana Field Laboratory (SSFL) is located at the top of Woolsey Canyon, in the Simi Hills, CA (Figure 1). The developed portion of the site comprises approximately 1,500 acres. There are 1,200-acres of undeveloped property located to the south. In 1998, undeveloped land was purchased to the north of the site. SSFL is owned by both Boeing and the National Aeronautics and Space Administration (NASA). The United States Department of Energy (DOE) also owns several buildings located in Area IV, with the land being under the ownership of Boeing.