

California Regional Water Quality Control Board
Los Angeles Region

**MONITORING AND REPORTING PROGRAM NO. CI-7466
FOR
AIR PRODUCTS AND CHEMICALS, INC.
(Wilmington Hydrogen Facility)
NPDES NO. CA0063363**

I. Reporting Requirements

- A. Air Products and Chemicals, Inc. (hereinafter Air Products or Discharger) shall implement this monitoring program on the effective date of this Order. All monitoring reports shall be submitted quarterly and must be received by the Regional Board by the dates in the following schedule. All monitoring reports should be addressed to the Regional Board, Attention: Information Technology Unit. Reference the reports to Compliance File No. CI-7466 to facilitate routing to the appropriate staff and file.

<u>Reporting Period</u>	<u>Report Due</u>
January – March	April 15
April – June	July 15
July – September	October 15
October – December	January 15
Annual Summary Report	March 1

- B. If there is no discharge during any reporting period, the report shall so state.
- C. The Discharger shall submit an annual summary report, containing a discussion of the previous year's effluent monitoring data, as well as graphical and tabular summaries of the data. The data shall be submitted to the Regional Board on hard copy and on a 3 ½ " computer diskette. Submitted data must be IBM compatible, preferably using EXCEL software. 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 waste discharge requirements. This annual report is to be received by the Regional by March 1 of each year following the calendar year of data collection.
- D. The Discharger shall inform the Regional Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
- E. All samples shall be representative of the waste discharge. Semi-annual monitoring shall be performed during the months of February (or March) and August (or September). Annual effluent monitoring shall be performed during the months of December or January. Analytical results of quarterly, semiannual, and annual monitoring shall be submitted with the monitoring report covering the month the samples were collected.

October 18, 2002

- F. Any violations of the limitations shall be reported to the Regional Board by telephone within 24 hours from the time the Discharger becomes aware of the violation. A written report shall also be submitted within 5 working days from the time the Discharger becomes aware of the violation. The written report shall contain a description of the noncompliance and its cause(s); the period of noncompliance, including exact dates and times; the volume of discharge during the period of noncompliance; corrective measures implemented; and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to prevent recurrence of the noncompliance.

II. Effluent Monitoring Requirements

- A. A sampling station shall be established for each point of discharge and shall be located where representative samples of that effluent can be obtained. In the event that waste streams from sources are combined for treatment or discharge, representative sampling stations shall be so located to ensure that the quantity of each pollutant or pollutant property attributable to each waste source regulated by effluent limitations can be determined.
- B. This Regional Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- C. Pollutants shall be analyzed using the analytical methods described in 40 CFR 136; or, where no methods are specified for a given pollutant, by methods approved by this Regional Board or the State Board. All chemical, bacteriological, and toxicity analyses shall be completed by a laboratory certified by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Regional Board for that particular parameter. A copy of the laboratory certification shall be submitted with the annual summary report.

The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:

1. An actual numerical value for sample results greater than or equal to the ML; or
2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or
3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

The MLs (Attachment A) are those published by the State Water Resources Control Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, March 2, 2000*.

- D. The MLs (Attachment A) employed for effluent analyses shall be lower than the permit limits established for a given parameter. If no ML value is below the effluent limitation, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.

The Regional Board, in consultation with the State Board Quality Assurance Program, shall establish an ML that is not contained in Attachment A to be included in the Discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Attachment A;
 2. When the Discharger and Regional Board agree to include in the permit a test method that is more sensitive than that specified in 40 CFR 136 (revised May 14, 1999);
 3. When the Discharger agrees to use an ML that is lower than that listed in Attachment A;
 4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment A, and proposes an appropriate ML for their matrix; or,
 5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Regional Board, and the State Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.
- E. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136.3. All QA/QC items must be run on the same dates when samples were actually analyzed, and the results shall be reported in the Regional Board format when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed and a copy of the chain of custody shall be submitted with the report.
- F. For parameters where monthly average limits are specified but where the monitoring frequency is on a monthly, quarterly, semi-annual, or annual basis, the following procedure shall apply. If an analytical result is greater than the monthly average limit, the sampling frequency shall be increased (within one week of receiving the laboratory results) to a minimum of once weekly at equal intervals until at least four consecutive weekly samples have been obtained and compliance with the monthly 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 monthly average limit.

III. Effluent Monitoring Program

- A. The following shall constitute the effluent monitoring program for the final effluent from Discharge Serial Numbers 001 and 002:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>
Total flow	gal/day	----	daily
pH	pH units	grab	weekly
Temperature	°F	grab	monthly
Conductivity,25°C	µmhos/cm	grab	monthly
Hardness (as CaCO ₃)	mg/L	grab	monthly
Total organic carbon	mg/L	grab	monthly
BOD ₅ 20°C	mg/L	grab	monthly
Suspended solids	mg/L	grab	monthly
Settleable solids	ml/L	grab	monthly
Oil and grease	mg/L	grab	monthly
Chlorine residual ^{1/}	mg/L	grab	monthly
Phenolic compounds	µg/L	grab	monthly
Ammonia (as N)	mg/L	grab	monthly
Copper	µg/L	grab	monthly
Cyanide	µg/L	grab	monthly
Diclorobromomethane	µg/L	grab	monthly
Hexavalent Chromium	µg/l	grab	monthly
Mercury	µg/L	grab	monthly
Silver	µg/L	grab	monthly
Fecal coliform	MPN/100 mL	grab	quarterly
Total chromium	µg/L	grab	quarterly
Arsenic	µg/L	grab	quarterly
Cadmium	µg/L	grab	quarterly
Nickel	µg/L	grab	quarterly
Selenium	µg/L	grab	quarterly
Lead	µg/L	grab	quarterly
Zinc	µg/L	grab	quarterly
Aldrin	µg/L	grab	quarterly
Dieldrin	µg/L	grab	quarterly
Endrin	µg/L	grab	quarterly
Heptachlor	µg/L	grab	quarterly
Chlordane	µg/L	grab	quarterly
DDT ^{2/}	ng/l	grab	quarterly
PAHs ^{3/}	ng/l	grab	quarterly
PCBs ^{4/}	ng/l	grab	quarterly
Tributyltin	µg/L	grab	quarterly
Toxicity – acute ^{7/}	% survival	grab	quarterly ^{8/}
Chronic ^{5/, 7/}	TU _c ^{6/}	grab	semi-annually
Methyl tertiary-butyl ether	µg/L	grab	semi-annually

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>
Remaining priority pollutants (See page T-14)	µg/L	grab	semi-annually
<u>1/</u>	Sampling shall consist of three discrete samples taken at 30-minute intervals and bracketing the times of peak concentrations.		
<u>2/</u>	Sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD and 2,4'-DDD.		
<u>3/</u>	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.		
<u>4/</u>	Sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1242, Aroclor-1248, and Aroclor-1254.		
<u>5/</u>	Initial screening shall be conducted using a minimum of three test species with approved test protocols to determine the most sensitive test organism for chronic toxicity testing. The initial screening process shall be conducted for a minimum of three discharge events to account for potential variability of the effluent. If possible the test species used during the screening process should include a vertebrate, an invertebrate, and an aquatic plant. After the initial screening period, chronic toxicity testing may be limited to the most sensitive test species. Dilution and control waters should be obtained from an unaffected area of the receiving waters. Standard dilution waters may be used if the above source exhibits toxicity greater than 1.0 TUc. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.		
<u>6/</u>	TUc = 100/NOEL, where NOEL (No Observed Effect Level) is expressed as the maximum percent effluent that causes no observable effect on an organism.		
<u>7/</u>	Refer to Item IV.		
<u>8/</u>	Monitoring will be on a quarterly basis for Discharge Serial Number 001 and once per storm event for Discharge Serial Number 002.		

IV. Toxicity Monitoring Requirements

A. Acute Toxicity Monitoring Program

1. The Discharger shall conduct acute toxicity tests on effluent grab samples by methods specified in 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms*, August, 1991 (EPA/600/4-90/027) or a more recent edition to ensure compliance in 100 % effluent.
2. The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish effluent. The method for topsmelt is found in USEPA's *Short-term Methods for Estimating the Chronic Toxicity of Effluents*

and Receiving Waters to West Coast Marine and Estuarine to Freshwater Organisms, First Edition, August, 1995 (EPA/600/4-95/136).

3. In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 48 hours of the chronic toxicity test as the results of the acute toxicity test.

B. Chronic Toxicity Effluent Monitoring Program:

1. The Discharger shall conduct critical life stage chronic toxicity tests on effluent samples (24-hour composite) or receiving water samples in accordance with EPA's Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Third Edition, July 1994 (EPA/600/4-91/002) or EPA's Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, August 1995, (EPA/600/R-95/136).
2. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.
3. Test Species and Methods:
 - a. The Discharger shall conduct tests as follows: with a vertebrate, an invertebrate, and an alga for the first three suites of tests. After the screening period, monitoring shall be conducted using the most sensitive species.
 - b. Re-screening is required every 15 months. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive than the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.
 - c. The presence of chronic toxicity shall be estimated as specified using West Coast marine organisms according to EPA's Short-Term Methods for Estimating Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, August, 1995 (EPA/600/R-95/136).

C. Quality Assurance

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent Toxicity tests (e.g., same test duration, etc).

2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002, EPA/600/R-95/136, or EPA/600/4-90/027F), then the Discharger must re-sample and re-test within 14 days of notification by the laboratory of an invalid test.
3. Control and dilution water shall be receiving water or laboratory water as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

D. Ammonia Removal

Except with prior approval from the Executive Officer of this Regional Board, ammonia shall not be removed from the bioassay samples. The Discharger must demonstrate that effluent toxicity is caused by ammonia, such as increasing test pH when conducting the toxicity test. The Discharger must also distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide.

The following are steps that the Discharger may perform to demonstrate that toxicity is caused by ammonia and not other toxicants:

1. There is consistent toxicity in the effluent/receiving water when the maximum pH in the toxicity test is in the range to cause toxicity due to unionized ammonia.
2. Chronic ammonia concentrations in the effluent/receiving water are greater than 4 mg/L total ammonia. Acute ammonia LC50 values are 3 mg/L and 1 mg/L for *Ceriodaphnia dubia* and fathead minnows, respectively, at pH 8.0.
3. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6 [EPA 1989a, 1989b, 1989c, 1991a, 1991b].
4. Pass the effluent through a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then, add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

The Discharger to submit a written request to the Regional Board with documentation that toxicity is caused by ammonia. After receiving written approval from the Executive Officer, the Discharger may proceed to control the pH using appropriate procedures that do not significantly alter the nature of the effluent.

E. Accelerated Monitoring

1. If toxicity exceeds the limitations (as defined in Order No. R4-2002-0186, Section I.B.5.a.i.), then the Discharger shall immediately implement accelerated testing, as specified at Section IB.5.a.ii. The Discharger shall

ensure that they receive results of a failing toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 3 business days of receipt of the results. If the accelerated testing shows consistent toxicity, the Discharger shall immediately implement the Initial Investigation of the Toxicity Reduction Evaluation (TRE) Workplan.

2. If implementation of the initial investigation TRE workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger may discontinue the toxicity identification evaluation (TIE).
3. The first step in the initial Investigation TRE Workplan for downstream receiving water toxicity can be a toxicity test protocol designed to determine if the effluent from Discharge Serial Number 001 and/or Discharge Serial Number 002 causes or contributes to the measured downstream chronic toxicity. If this first step TRE testing shows that the Discharge Serial Number 001 and/or Discharge Serial Number 002 effluent does not cause or contribute to downstream chronic toxicity, using EPA's Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, August 1995,(EPA/600/R-95/136). Then a report on this testing shall be submitted to the Board and the TRE will be considered to be completed. Routine testing in accordance with MRP No. 7466 shall be continued thereafter.

F. Steps in TRE and TIE

1. Following a TRE trigger, the Discharger shall initiate a TRE in accordance with the facility's initial investigation TRE workplan. At a minimum, the Discharger shall use EPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. The Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of the trigger, which will include, but not be limited to:
 - a. Further actions to investigate and identify the cause of toxicity;
 - b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;
 - c. Standards the Discharger will apply to consider the TRE complete and to return to normal sampling frequency; and,
 - d. A schedule for these actions
2. The following is a stepwise approach in conducting the TRE:
 - a. Step 1 - Basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE;
 - b. Step 2 - Evaluates optimization of the treatment system operation, facility housekeeping, and the selection and use of in-plant process chemicals;

- c. If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts and using currently available TIE methodologies. The objective of the TIE is to identify the substance or combination of substances causing the observed toxicity;
- d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;
- e. Step 5 evaluates in-plant treatment options; and,
- f. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of implementation of these control measures may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there is no longer toxicity (or six consecutive chronic toxicity results are less than or equal to 1.0 TU_c).

3. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the EPA acute and chronic manuals, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) as guidance.
4. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required by Part I.B.4.a.2 and Part I.B.4.b.2 of this permit, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.
5. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance, if appropriate.
6. The Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

F. Reporting

1. The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this permit. Test results shall be reported in Toxicity Units (percent survival or TU_c) with the discharge monitoring reports (DMR) for the month in which the test is conducted.

If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to Section IV.E.2., those results shall also be submitted with the DMR for the period in which the Investigation occurred.

2. The full report shall be submitted on or before the end of the month in which the DMR is submitted.
3. The full report shall consist of (1) the results; (2) the dates of sample collection, initiation, and completion of each toxicity tests; (3) the acute toxicity limit or chronic toxicity limit or trigger as described in IV.A.1 and IV.B.1.
4. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the DMR. Routine reporting shall include, at a minimum, as applicable, for each test:
 5. sample date(s);
 6. test initiation date;
 7. test species;
 8. end point values for each dilution (e.g., number of young, growth rate, percent survival);
 9. NOEC value(s) in percent effluent;
 10. IC_{15} , IC_{25} , IC_{40} and IC_{50} values in percent effluent;
 11. TU_c values $\left(TU_c = \frac{100}{NOEC} \right)$;
 12. Mean percent mortality (\pm standard deviation) after 96 hours in 100% effluent (if applicable);
 13. NOEC and LOEC values for reference toxicant test(s);
 14. IC_{25} value for reference toxicant test(s);
 15. Any applicable control charts; and

16. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
17. The Discharger shall provide a compliance summary, which includes a summary table of toxicity data from at least eleven of the most recent samples.

The Discharger shall notify, by telephone or electronically, this Regional Board of any toxicity exceedance of the limit or trigger within 24 hours of receipt of the results followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Discharger will pursue. The written report shall describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

V. Receiving Water Monitoring Requirements

- A. Receiving water stations shall be established at the following locations:

<u>Station Number</u>	<u>Description</u>
R-A	50 feet upstream of Outfalls 001 and 002, Dominguez Channel
R-B	50 feet downstream of Outfalls 001 and 002, Dominguez Channel

- B. Receiving water samples shall be collected at mid-depth. The following analyses, which constitute the receiving water monitoring program, shall be performed on grab samples obtained at receiving water stations R-A and R-B:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency^{1/}</u>
PH	standard Units	grab	semi-annually
Hardness (as CaCO ₃)	mg/L	grab	semi-annually
Hexavalent Chromium	µg/L	grab	semi-annually
4,4'-DDT	µg/L	grab	semi-annually
2,4'-DDT	µg/L	grab	semi-annually
4,4'-DDE	µg/L	grab	semi-annually
2,4'-DDE	µg/L	grab	semi-annually

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u> ^{1/}
4,4'-DDD	µg/L	grab	Semi-annually
2,4'-DDD	µg/L	grab	semi-annually
Acenaphthene	µg/L	grab	semi-annually
Anthracene	µg/L	grab	semi-annually
Benzo (a) Anthracene	µg/L	grab	semi-annually
Benzo (a) Pyrene	µg/L	grab	semi-annually
Benzo (b) Fluoranthene	µg/L	grab	semi-annually
Benzo (k) Flouranthene	µg/L	grab	semi-annually
Chrysene	µg/L	grab	semi-annually
Dibenzo (a,h) Anthracene	µg/L	grab	semi-annually
Fluoranthene	µg/L	grab	semi-annually
Fluorene	µg/L	grab	semi-annually
Indeno (1,2,3-cd) Pyrene	µg/L	grab	semi-annually
Pyrene	µg/L	grab	semi-annually
Arochlor 1242	µg/L	grab	semi-annually
Arochlor 1254	µg/L	grab	semi-annually
Arochlor 1221	µg/L	grab	semi-annually
Arochlor 1232	µg/L	grab	semi-annually
Arochlor 1248	µg/L	grab	semi-annually
Arochlor 1260	µg/L	grab	semi-annually
Arochlor 1016	µg/L	grab	semi-annually
Remaining priority pollutants (See page T-14)	µg/L	grab	semi-annually

^{1/} Receiving water monitoring shall be conducted at the same time as effluent monitoring. Receiving water samples shall be taken within an hour of 001 and 002 outfall effluent samples.

VI. Interim Monitoring Program

A. Monitoring for TCDD Equivalents

The Discharger shall conduct effluent (for both Outfall Discharge Serial Numbers 001 and 002) and receiving water monitoring for the presence of the 2,3,7,8-

tetrachlorodibenzo-p-dioxin (TCDD or Dioxin) congeners. The monitoring shall be a grab sample with a minimum frequency of once during dry weather and once during wet weather. The Discharger shall calculate Toxic Equivalence (TEQ) for each congener by multiplying its analytical concentration by the appropriate Toxicity Equivalence Factors (TEF). Compliance with the dioxin limitation shall be determined by the summation of the 17 individual TEQs.

<u>Congeners</u>	<u>TEF</u>
2,3,7,8-tetra CDD	1.0
1,2,3,7,8-penta CDD	1.0
1,2,3,4,7,8-hexa CDD	0.1
1,2,3,6,7,8-hexa CDD	0.1
1,2,3,7,8,9-hexa CDD	0.1
1,2,3,4,6,7,8-hepta CDD	0.01
Octa CDD	0.0001
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
1,2,3,4,7,8-hexa CDF	0.1
1,2,3,6,7,8-hexa CDF	0.1
1,2,3,7,8,9-hexa CDF	0.1
2,3,4,6,7,8-hexa CDF	0.1
1,2,3,4,6,7,8-hepta CDF	0.01
1,2,3,4,7,8,9-hepta	0.01
Octa CDF	0.0001

VII. Storm Water Monitoring Requirements

A. Rainfall

The Discharger shall measure and record the rainfall on each day of the month.

B. Visual observations

The Discharger shall make visual observations of all storm water discharge locations on at least one storm event per month that produces a significant storm water discharge to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor. "Significant storm water discharge" is a continuous discharge of storm water for a minimum of one hour, or the intermittent discharge of storm water for a minimum of three hours in a 12-hour period.

Ordered by: _____
 Dennis A. Dickerson
 Executive Officer

Date: December 12, 2002