VPDES PERMIT PROGRAM FACT SHEET

This document gives pertinent information concerning the VPDES Permit listed below. This permit is being processed as a **MINOR INDUSTRIAL** permit.

1. **PERMIT NO.**: VA0057142 — **EXPIRATION DATE**: July 20, 1996

2. **FACILITY NAME AND LOCAL MAILING ADDRESS**
Pier IX Terminal Company
P.O. Box 38
Newport News, VA 23607

LOCATION ADDRESS (IF DIFFERENT)
21st & Terminal Avenue
Newport News, VA 23607

CONTACT AT FACILITY:

NAME: Mr. Ed Wolfington
TITLE: Facility engineer
PHONE: 804-928-1529

CONTACT AT LOCATION ADDRESS:

NAME: Mr. Ed Wolfington
TITLE: Facility Engineer
PHONE: 804-928-1529

3. **OWNER CONTACT**: (TO RECEIVE PERMIT)
NAME: Mr. Charles M. Whitten
TITLE: President
ADDRESS: P.O. Box 38
Newport News, VA 23607
PHONE NO.: (804) 928-1529

CONSULTANT CONTACT: NA

4. **PERMIT DRAFTED BY**: DEQ, Water Permits, Tidewater Regional Office
Permit Writer(s): Anhthu Nguyen (AN) Date(s): 3/18, 4/11
Reviewed By: Mark Sauer (MS) Date(s): 3/18, 4/5

5. **PERMIT CHARACTERIZATION**: (Check as many as necessary)

( ) Issuance
(x) Existing Discharge
( ) Proposed Discharge

( ) Municipal
SIC Code
(x) Industrial
SIC Code(s)
5052, 5032

( ) POTW
(x) Private
( ) Federal
( ) State

(x) Reissuance
( ) Revoke & Reissue
( ) Board Modification
( ) Owner Modification
( ) Change of Ownership
( ) Effluent Limited
(x) Water Quality Limited
(x) Toxics Management Program Required
( ) Pretreatment Program Required
(x) Stormwater Management Plan
( ) Possible Interstate Effect
( ) Compliance Schedule Required
( ) Interim Limits in Permit
( ) Interim Limits in Other Document
( ) Chlorine Exception Approved

( ) 304L
( ) WET Limit
( ) TRE

10/31/95

APPLICATION COMPLETE: **3-28-96**

6. **RECEIVING WATERS CLASSIFICATION:**

Outfall No(s).	Receiving Stream
001, 002, 003, 004, 005	James River Basin: Lower James River Subbasin: N/A Section: 1 Class: II Special Standard: a
7-Day/10-Year Low Flow:	NA
1-Day/10-Year Low Flow:	NA
30-Day/5-Year Low Flow:	NA
Harmonic Mean Flow:	NA
Tidal:	YES

7. **COMBINED TOTAL FLOW:** Pier IX Terminal operates as a bulk material handling facility. The facility's activities include storage and transhipment of coal and Portland Cement. Wastewater is the result of stormwater runoff.

FLOW: RAINFALL DEPENDENT 1.584 MGD (Est.)

8. **SITE INSPECTION DATE:** 3/6/96 **REPORT DATE:** 3/7/96
Performed By: Anhthu Nguyen

9. **EXISTING** industrial discharge resulting from stormwater runoff from site whose activities include storage and transshipment of coal and Portland Cement.

10. **STATUTORY OR REGULATORY BASIS FOR SPECIAL CONDITIONS AND EFFLUENT LIMITATIONS:** (Check Appropriate)

x State Water Control Law
x Clean Water Act
x Permit Regulation (SWCB VPDES Regulation)
X EPA NPDES Regulation (Federal Register)
_____ EPA Guidelines
x Water Quality Standards
x Other: Best Engineering Judgement

11. **LICENSED OPERATOR REQUIREMENTS:** (x) No ( ) Yes Class:

12. **RELIABILITY CLASS:** NA

13. **DISCHARGE DESCRIPTION:**

SEE TABLE I - Attachment 1

14. **EFFLUENT LIMITATIONS/MONITORING:**

See TABLE II - ATTACHMENT 2

15. **SPECIAL CONDITIONS:**

SEE ATTACHMENT 3

16. **EFFLUENT LIMITATIONS/MONITORING RATIONALE:**

SEE ATTACHMENT 4

17. **DISCHARGE(S) LOCATION DESCRIPTION:**

Name of Topo: Newport News South Quadrant No.: 35B SEE ATTACHMENT 5

18. **ATTACH A SCHEMATIC OF WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.], AND PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES OF THE FACILITY [MUN. - TREATMENT PROVIDED].**

Wastewater treatment facilities consist of a lined-batch discharge retention pond with pH adjustments.

SEE ATTACHMENT 6

19. **CHANGES TO PERMIT:** USE **TABLE III(a) - ATTACHMENT 7a** to record any changes in the permit during the permit processing period [Use for comments from applicant, VDH, EPA and any other agency where comments resulted in changes to the permit or any other changes associated with the special conditions or reporting requirements and reasons for changes.]; Use **TABLE III(b) - ATTACHMENT 7b** to record any changes from the previous permit.

20. **NPDES INDUSTRIAL PERMIT RATING WORKSHEET: TOTAL SCORE 39**
SEE ATTACHMENT 8

21. **RECEIVING WATERS INFORMATION:** Refer to the State Water Control Board's Water Quality Standards, River Basin Section Tables (VR 680-21-08). Attach any memoranda or other information which helped to develop permit conditions, i.e., PREP complaints, special water quality studies, storet data and other biological and/or chemical data, etc.

N/A

22. **SLUDGE DISPOSAL PLAN:** Provide description of sludge disposal plan elements addressed in permit, if applicable.

N/A

23. **MATERIAL STORED:** [List the type and quantity of wastes, fluids, or pollutants being stored at this facility. Briefly describe the storage facilities and list, if any, measures taken to prevent the stored material from reaching State waters.]

Coal is the only material that is stored outdoor. Portland Cement is handled in enclosed areas. There is a junk yard which stores scrap metals. Stormwater runoff from this location drains into the storm sewer system of the city of Newport News.

24. **ADDITIONAL COMMENTS:**

During a site inspection, the staff noted that stormwater outfalls no. 003 and 004 only discharge stormwater runoff from the administration parking lot and phone booth area respectively. Since these areas are not associated with any type of industrial activities, monitoring at these locations should be removed. However, outfall 003 also discharges stormwater runoff from the pump station area where there is a potential for stormwater to be contaminated. The facility engineer, Mr. Ed Wolfington proposes to redirect the pump station discharge away from outfall 003 and allow it to discharge into the existing sedimentation pond. For this reissuance, the staff intends to eliminate monitoring at outfall 004. Monitoring at outfall 003 will remain until further notice from the facility that the pump house discharge has been redirected into the sedimentation pond.

25. **SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS:**

Attachment 1	TABLE I - Outfall Description
Attachment 2	TABLE II - Effluent Limitations
Attachment 3	Special Conditions/Rationale
Attachment 4	Effluent Limitations/Monitoring Rationale
Attachment 5	Topo Map
Attachment 6	Schematic/Plans & Specs/site map/water balance
Attachment 7	TABLE III(a) and/or TABLE III(b) - Change Sheet
Attachment 8	NPDES Rating Worksheet
Attachment 9	Chronology Sheet
Attachment 10	Inspection Report/Memo
Attachment 11	TMP Justification Memo

Attachment 1

TABLE I

NUMBER AND DESCRIPTION OF OUTFALLS

<TABLE STARTS HERE - WATCH REVEAL CODES -- DELETE THIS LINE -- STOP HERE>

OUTFALL NO.	DISCHARGE SOURCE (1)	TREATMENT (2)	FLOW (3)
001	Stormwater runoff from coal storage area flows to a settling pond for sedimentation.	Sedimentation pH neutralization	1.58 MGD
002	Stormwater runoff from South Harbor Road.	Best Management Practice	0.000773 MGD
003	Stormwater runoff from administration parking lot and from area adjacent to pump house.	Best Management Practice	0.001468 MGD
004	Stormwater runoff from Harbor Road phone booth area. This discharge is not associated with any type of industrial activities.	Best Management Practice	0.000410 MGD
005	Stormwater runoff from North Harbor Road.	Best Management Practice	0.000966 MGD

(1) List operations contributing to flow
(2) Give brief description, unit by unit
(3) Give maximum 30-day average flow for industry and design flow for municipal

Attachment 2

TABLE II - INDUSTRIAL MINOR EFFLUENT LIMITATIONS

OUTFALL # 001
Outfall Description: Sedimentation Pond
SIC CODE:5052, 5032

(x) Final Limits ( ) Interim Limits Effective Dates - From: Issuance To: Expiration

PARAMETER & UNITS	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQ.	SAMPLE TYPE
Flow (MGD)	2	NL	NA	NA	NL	1/M	Estimate*
pH (S.U.)	3	NA	NA	6.0	9.0	1/M	GRAB**
Total Nitrogen (mg/l)	3,4	NL	NA	NA	NA	1/M	GRAB**
Total Nitrogen (lb/d)	3,4	NL	NA	NA	NA	1/M	GRAB**
Total Phosphorous (mg/l)	3,4	2	NA	NA	NA	1/M	GRAB**
Total Phosphorous (lb/d)	3,4	26	NA	NA	NA	1/M	GRAB**
Total Suspended Solids (mg/l)	4	NA	NA	NA	50	1/M	GRAB**
Oil & Grease (mg/l)	4	NA	NA	NA	NL	1/6M	GRAB**
Copper (dissolved) (ug/l) ***	4	NA	NA	NA	NL	1/6M	GRAB**
Nickel (dissolved) (ug/l) ***	4	NA	NA	NA	NL	1/6M	GRAB**
Zinc (dissolved) (ug/l) ***	4	NA	NA	NA	NL	1/6M	GRAB**

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

2. Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with a 10 year, 24 hour rainfall event shall not be subject to the 50 mg/l limitation for total suspended solids.
3. There shall be no discharge of floating solids or visible foam in other than trace amount

* Estimate of the total volume of the discharge during the storm event.
** The grab sample shall be taken within the first three hours of the discharge.
*** Monitoring shall be initiated July 1, 1997.

The basis for the limitations codes are:
1. Federal Effluent Requirements
2. Best Engineering Judgement
3. Water Quality Standards
4. Other (model, WQM Plan, Nutrient Policy, OWRM Guidance no. 93-010A, etc.)
5. Best Professional Judgement

TABLE II - INDUSTRIAL MINOR EFFLUENT LIMITATIONS

OUTFALL # 002, 003, 005
Outfall Description: Stormwater runoff from South Harbor Road, Admin Parking, and North Harbor Road
SIC CODE: 5052, 5032

(x) Final Limits ( ) Interim Limits Effective Dates - From: Issuance To: Expiration

PARAMETER & UNITS	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQ.	SAMPLE TYPE
Flow (MG)	4	NA	NA	NA	NL	1/6M	Estimate*
pH (S.U.)	3	NA	NA	6.0	9.0	1/6M	GRAB**
Oil & Grease (mg/l)	4	NA	NA	NA	NL	1/6M	GRAB**
Total Suspended Solids (mg/l)	4	NA	NA	NA	50	1/6M	GRAB**
Copper (dissolved) (ug/l) ***	4	NA	NA	NA	NL	1/6M	GRAB**
Nickel (dissolved) (ug/l) ***	4	NA	NA	NA	NL	1/6M	GRAB**
Zinc (dissolved) (ug/l) ***	4	NA	NA	NA	NL	1/6M	GRAB**

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30); 2nd half (July 1 - December 31).

2. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously mearsurable (greater than 0.1 inch rainfall) storm event.
3. Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with a 10 year, 24 hour rainfall event shall not be subject to the 50 mg/l limitation for total suspended solids.
4. There shall be no discharge of floating solids or visible foam in other than trace amount.

* Estimate of the total volume of the discharge during the storm event.
** The grab sample shall be taken within the first three hours of the discharge.
*** Monitoring shall be initiated July 1, 1997.

The basis for the limitations codes are:
1. Federal Effluent Requirements
2. Best Engineering Judgement
3. Water Quality Standards
4. Other (model, WQM Plan, Nutrient Policy, OWRM Guidance no. 93-010A, etc.)
5. Best Professional Judgement

TABLE II - INDUSTRIAL MINOR EFFLUENT LIMITATIONS

OUTFALL # 004
Outfall Description: Stormwater runoff from phone booth area.
SIC CODE: 5052, 5032

THIS OUTFALL SHALL CONTAIN STORMWATER RUNOFF NOT ASSOCIATED WITH A REGULATED INDUSTRIAL ACTIVITY. NO PROCESS WATER SHALL BE DISCHARGED FROM THIS OUTFALL.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

Attachment 3

LIST OF SPECIAL CONDITIONS & RATIONALE

Name of Condition:

EPA Reopener

Rationale: Required to implement VR 680-14-01 Sect. 2.5.C. Also, 40 CFR 122.44 requires all permits for primary industrial categories to include the requirements of Section 307(a)(2) of the Clean Water Act.

Water Quality Reopener

Rationale: VR 680-14-01, Sec. 2.5. E. Water Quality Standards and State Requirements dictates that the permit shall include limits to prevent violations of water quality standards. CFR Part 131, WQS, requires the state to adopt water quality criteria to protect designated water uses (subpart 131.11), and review, modify and adopt water quality standards periodically (subpart 131.20). Section 302 of the CWA authorizes effluent limitations to be established which will contribute to the attainment or maintenance of the water quality.

Nutrient Enriched Waters Reopener

Rationale: VR 680-14-02, Policy for Nutrient Enriched Waters, allows reopening of permits if total phosphorus and total nitrogen in a discharge potentially exceed specified concentrations. The policy also anticipates that further nutrient limitations may be needed in the future to control aquatic plant growth.

Materials/Handling and Storage

Rationale: VR 680-14-01:1, Sec. 1.6 prohibits the discharge of any wastes into State waters unless authorized by permit. SWC Law Sec. 62.1-44.18:2 authorizes the Board to prohibit any waste discharge which would threaten public health or safety, interfere with or be incompatible with treatment works or water use. Section 301 of the Clean Water Act prohibits the discharge of any pollutant unless it complies with specific sections of the Act.

O & M Manual **(EXISTING)**

Rationale: The Code of Virginia Sec. 62.1-44.21 allows requests for any information necessary to determine the effect of the discharge on state waters. Section 401 of the Clean Water Act requires the permittee to provide opportunity for the state to review the proposed operations of the facility.

Sampling Methodolodgy

Rationale: The discharges from the site are primarily stormwater runoff from different operating areas, this condition is necessary to assure that samplings are done during appropriate rainfall events in order to obtain samples that are representative of the discharge.

Toxics Management Program (TMP)

Rationale: See attachment 11 for justification memo.

Stormwater Management Plan **(w/o 313)**

Rationale: The Clean Water Act Section 402(p)(2)(B) requires permits for stormwater discharges associated with industrial activity. VPDES permits for stormwater discharges must establish BAT/BCT requirements in accordance with Section 402(p)(3) of the Act. The Stormwater Pollution Prevention Plan is the vehicle proposed by EPA in the final NPDES General Permits for Stormwater Discharges Associated with Industrial Activity (Federal Register Sept. 9, 1992) to meet the requirements of the Act. The Plan is required by the permit for this same purpose.

Water Quality Standards Monitoring

Rationale: SWC Law Section 62.1-44.21 authorizes the Board to request information needed to determine the discharge's impact on State waters. States are required to review data on discharges to identify actual or potential toxicity problems, or the attainment of water quality goals, according to 40 CFR Part 131, Water Quality Standards, subpart 131.11. If modifications to secondary treatment requirements are proposed, 40 CFR Part 125, Criteria and Standards for the NPDES, subpart 125.62 requires the establishment of a monitoring program.

B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. Permit Reopeners

a. EPA Standard Reopener

This permit shall be modified or, alternatively, revoked and reissued to comply with any applicable effluent standard, limitation or prohibition for a pollutant which is promulgated or approved under Section 307(a)(2) of the Clean Water Act, if the effluent standard, limitation or prohibition so promulgated or approved:

(1) Is more stringent than any effluent limitation on the pollutant already in the permit; or

(2) Controls any pollutant not limited in the permit.

b. Water Quality Reopener

Should effluent monitoring indicate the need for any water quality based limitation, this permit may be modified or, alternatively, revoked and reissued to incorporate appropriate limitations.

c. Nutrient Reopener

This permit shall be modified or, alternatively, revoked and reissued to include new or alternative nutrient limitations should the State Water Control Board adopt nutrient standards for the Chesapeake Bay and tributary river basins, or if a future water quality regulation, statute, or water quality management plan requires new or alternative nutrient control.

2. Materials Handling/Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of and/or stored in such a manner so as not to permit a discharge of such product, materials, industrial wastes and/or other wastes to State waters, except as expressly authorized.

3. Operations and Maintenance (O & M) Manual

The permittee shall review the existing O & M Manual and **notify** the Tidewater Regional Office, **in writing, within 90 days from the effective date of the permit** that it is still current. If the O & M Manual is no longer current, a **revised O & M Manual** shall be submitted for approval to the Tidewater Regional Office **within 90 days from the effective date of the permit.** Once approved, this manual shall become an enforceable condition of this permit. Future changes to the facility must be addressed by the submittal of a revised O & M Manual.

4. Sampling Methodology for Specific Outfalls - 002, 003 and 005

Due to the nature of the effluent discharged at these outfalls (contaminated storm water associated with a regulated industrial activity), the following protocol shall be adhered to when obtaining samples required by Part I.A. of this permit:

a. Sampling for all parameters listed in Part I.A. of this permit shall be by a grab sample and obtained within the first hour but not later than three hours of the initiation of a discharge which results from a measurable storm event. A measurable storm event is defined as one which is greater than 0.1 inch of rainfall that occurs at least 72 hours from the previously measured (greater than 0.1 inch rainfall) storm event. The permittee shall preserve each sample in accordance with applicable EPA requirements.

b. All additional information required to be obtained during the storm event monitoring (as required by the Storm Water Management Plan) shall be recorded and reported with the Discharge Monitoring Reports (DMR's). These items include date and duration of the storm event, the rainfall measurement and the duration between the storm event sampled and the end of the previous storm event.

c. At the time of sampling, the permittee shall ensure that the effects of tidal influences are kept to an absolute minimum. This can be achieved by:

(1) Sampling at low tide and/or

(2) Sampling at a representative point which has been demonstrated to be free of tidal influences

d. In the event that sampling of an outfall is not possible due to the absence of effluent flow during a particular testing period, the permittee shall provide **written notification to DEQ with the DMR for the month following the period in which samples were to be collected.**

C. TOXICS MANAGEMENT PROGRAM (TMP)

1. Biological Monitoring

a. In accordance with the schedule in 3. below and commencing within three months of the effective date of this permit, the permittee shall annually conduct an acute toxicity test for the duration of the permit using grab samples of final effluent from outfall 001. The acute tests shall be 48-hour static tests using Mysidopsis bahia conducted in such a manner and at sufficient dilutions for calculation of a valid LC_{50}. The permittee may provide additional samples to address data variability. These data may be included in the evaluation of effluent toxicity. The results of all such additional analyses shall be reported. Technical assistance in developing the procedures for these tests shall be provided by the DEQ staff, if requested by the permittee. Test protocols and the use of alternative species shall be approved by the DEQ staff prior to initiation of testing.

b. If, in the testing according to 1.a. or 1.f., any of the annual acute toxicity tests yields an LC_{50} of less than 100% effluent, the test shall be repeated within one month.

(1) If the retest also indicates an LC_{50} of less than 100% effluent, quarterly toxicity testing as in 1.c. below shall commence within three months. The results of these tests will be included in the evaluation of the need for toxicity reduction.

(2) If the retest does not confirm the results of the first test, then annual testing in accordance with the annual compliance monitoring schedule shall resume.

c. If required as in 1.b.(1) above, the permittee shall conduct quarterly acute toxicity tests for a period of one year using grab samples of final effluent from outfall 001. The acute tests shall be 48-hour static tests using M. bahia and C. variegatus conducted in such a manner and at sufficient dilutions for calculation of a valid LC_{50}. The permittee may provide additional samples to address data variability during the one-year period of initial data generation. These data may be included in the evaluation of effluent toxicity. The results

of all such additional analyses shall be reported. Technical assistance in developing the procedures for these tests shall be provided by the DEQ staff, if requested by the permittee. Test protocols and the use of alternative species shall be approved by the DEQ staff **prior** to initiation of testing.

d. The following criterion shall be used in evaluating the toxicity test data generated in 1.c. above:

(1) LC_{50} greater than or equal to 100% effluent in six of the total of eight acute toxicity tests, or in at least 75% of the tests conducted, if more than eight tests are conducted.

Any effluent failing the above criterion shall be considered to have demonstrated actual or potential toxicity and a Toxicity Reduction Evaluation (TRE) will be required.

e. If, prior to completing the monitoring requirements specified in 1.c. above, it is determined that the effluent fails the decision criterion outlined in 1.d., a TRE may be required. Upon notification by the DEQ staff that a TRE is required, the permittee shall initiate a TRE and may discontinue the toxicity tests of 1.c.

f. Following completion of the testing of outfall 001 as in 1.c. above, the permittee shall continue acute toxicity testing of the outfall annually. The first annual test shall be conducted within three months from the last quarterly tests. The test organism shall be the one identified as the most sensitive species from the quarterly acute or an alternative species approved by DEQ staff. Annual testing of the outfall is not required in cases where the need for a TRE of the outfall has been established.

2. Toxicity Reduction Evaluation

a. If the results of this Toxics Management Program or other available information indicate that the wastewaters are actually or potentially toxic, the permittee shall submit:

(1) a Toxicity Reduction Evaluation (TRE) plan, or

(2) at the permittee's option, an instream impact study plan, and

(3) an accompanying implementation schedule

within 120 days of the notification of such a determination by the DEQ.

b. The requirement of this plan shall be to:

(1) assure the absence of actual or potential toxicity, or

(2) to demonstrate that there is, or would be, no adverse impact from the discharge on all reasonable and beneficial uses of the State's waters.

c. Upon completion of the review of the plan, the permittee shall implement the plan and the permit may be modified or, alternatively, revoked and reissued in order to reflect appropriate permit conditions and a compliance schedule.

3. Monitoring & Reporting Schedule

The permittee shall conduct and report the results of the toxicity tests specified in this Toxics Management Program in accordance with the following schedule (submit two copies of these reports to the Tidewater Regional Office):

a.	**Submit toxicity test protocols for approval**	**Within one month following the effective date of the permit**
b.	**Conduct first annual biological tests on outfall 001**	**Within three months following the effective date of the permit**
c.	**Submit results of all tests conducted during the first annual period on outfall 001**	**With the Discharge Monitoring Report (DMR) for the fourth month following the effective date of the permit**
d.	**Conduct subsequent annual biological tests on outfall 001**	**Within subsequent twelve-month periods from 3.b.**
e.	**Submit results of subsequent biological tests for outfall 001**	**With the DMR submitted every twelve months from 3.c.**

D. STORMWATER MANAGEMENT

1. Recording of Results

For each measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Report the following information:

a. The date and duration (in hours) of the storm event(s) sampled;

b. The rainfall measurements or estimates (in inches) of the storm event which generated the sampled discharge; and

c. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

2. Sampling Waiver

When a discharger is unable to collect samples for the storm event monitoring requirements due to adverse climatic conditions, the discharger must submit with the discharge monitoring report a description of why samples could not be collected, including available documentation of the event. Adverse weather conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.). Dischargers are precluded from exercising this waiver more than twice during the permit term.

3. Stormwater Pollution Prevention Plan

A stormwater pollution prevention plan shall be developed for the facility. The plan shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in stormwater discharges associated with industrial activity at the facility and

to assure compliance with the terms and conditions of this permit. The permittee must implement the provisions of the stormwater pollution prevention plan required under this part as a condition of this permit.

4. Deadlines for Plan Preparation and Compliance

The stormwater pollution prevention plan shall be prepared **within 180 days** after the effective date of this permit and shall provide for implementation and compliance with the terms of the plan **within 365 days** after the effective date of this permit. **Verification of compliance with each of the above deadlines shall be provided, in writing, within 10 days of either the deadline or the actual completion date, if completed earlier.**

5. Plan Review

The plan shall be retained on-site at the facility which generates the stormwater discharge.

The permittee shall make plans available upon request to the Regional Office. The Regional Office may notify the permittee at any time that the plan does not meet one or more of the requirements of the permit. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this Part. Within 30 days of such notification, the permittee shall make the required changes to the plan and shall submit to the Regional Office a written certification that the requested changes have been made.

6. Plan Modifications

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance which has a significant effect on the potential for the discharge of pollutants to surface waters of the State or if the stormwater pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in the plan, or in otherwise achieving the general objectives of controlling pollutants in stormwater discharges associated with industrial activity.

7. Contents of Plan

The plan shall include, at a minimum, the following items:

a. Pollution Prevention Team

The plan shall identify a specific individual or individuals within the facility organization as members of a stormwater Pollution Prevention Team that are responsible for developing the stormwater pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's stormwater pollution prevention plan.

b. Description of Potential Pollutant Sources

The plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to stormwater discharges. The plan shall identify all activities and significant materials which may potentially be significant pollutant sources. The plan shall include, at a minimum:

(1) Drainage

i. A site map indicating an outline of the drainage area, within the facility boundaries, of each outfall that contains stormwater runoff, each existing structural control measure to reduce pollutants in stormwater runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

ii. For each area of the facility that generates stormwater discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in the stormwater discharges. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with stormwater; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(2) Inventory of Exposed Materials

An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to stormwater between the time of three years prior to the effective date of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with stormwater runoff between the time of three years prior to the effective date of this permit and the present; the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff; and a description of any treatment the stormwater receives.

(3) Spills and Leaks

A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a stormwater conveyance at the facility after the date of three years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(4) Sampling Data

A summary of existing discharge sampling data describing pollutants in stormwater discharges from the facility, including a summary of sampling data collected during the term of this permit.

(5) Risk Identification and Summary of Potential Pollutant Sources

A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g. biochemical oxygen demand, etc.) of concern shall be identified.

c. Measures and Controls

A description of stormwater management controls appropriate for the facility and a schedule for implementing these controls shall be developed. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of stormwater management controls shall address the following minimum components:

(1) Good Housekeeping

Good housekeeping requires the maintenance in a clean, orderly manner, of areas which may contribute pollutants to stormwater discharges.

(2) Preventive Maintenance

A preventive maintenance program shall involve timely inspection and maintenance of stormwater management devices (e.g. cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of

pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(3) Spill Prevention and Response Procedures

Areas where potential spills may occur which can contribute pollutants to stormwater discharges, and their accompanying drainage points shall be identified clearly in the stormwater pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to the appropriate personnel.

(4) Inspections

In addition to or as part of the comprehensive site evaluation required under section 7.d. of this Part, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or followup procedures shall be used to ensure that appropriate actions are taken in response to the inspections.

Records of inspections shall be maintained with the pollution prevention plan.

(5) Employee Training

Employee training programs shall be developed to inform personnel, responsible for implementing activities identified in the stormwater pollution prevention plan or otherwise responsible for stormwater management, of the components and goals of the stormwater pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify periodic dates for such training.

(6) Recordkeeping and Internal Reporting Procedures

A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of stormwater discharges shall be included in the pollution prevention plan. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(7) Sediment and Erosion Control

The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(8) Management of Runoff

The plan shall contain a narrative consideration of the appropriateness of traditional stormwater management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage stormwater runoff in a manner that reduces pollutants in stormwater discharges from the site. The plan shall provide for the implementation and maintenance of measures that the permittee determines to be reasonable and appropriate. The potential of various sources at the facility to contribute pollutants to stormwater discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected stormwater (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and detention/retention devices.

d. Comprehensive Site Compliance Evaluation

Qualified facility personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than

once a year during the permit term. Such evaluations shall provide:

(1) Areas contributing to a stormwater discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(2) Based on the results of the inspection, the description of potential pollutant sources identified in the plan and pollution prevention measures and controls identified in the plan shall be revised as appropriate within 14 days of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 90 days after the inspection.

(3) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the stormwater pollution prevention plan, and actions taken in accordance with paragraph (b) (above) shall be made and retained as part of the stormwater pollution prevention plan. The report shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the stormwater pollution prevention plan and this permit. The report shall be signed in accordance with 40 CFR Part 122.22 (1992).

8. Requirements for Salt Storage

Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a stormwater discharge associated with industrial activity which is discharged to waters of the State shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Dischargers shall demonstrate compliance with this provision not later than 3 years from the effective date of this permit. Annual reports of progress towards compliance shall be compiled and added to the Pollution Prevention Plan. Piles do not need to be enclosed or covered where stormwater from the pile is not discharged to waters of the State.

E. WATER QUALITY MONITORING

The permittee shall **monitor the effluent at outfall 001 for the substances noted in Attachment A** according to the indicated sample type and frequency. Using Attachment A as the reporting form, **the data shall be submitted with the DMR following the month in which the analyses were conducted.** It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The Department will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of those substances.

Quantification level (QL) is defined as the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method.

Dashes, ---, mean that the QL is at the discretion of the permittee. For any substances addressed in 40 CFR Part 136, the permittee shall use one of the approved methods in 40 CFR Part 136.

Units for the quantification levels are micrograms/liter unless otherwise specified.

Metals shall be reported as dissolved and as total recoverable.

Sample Type	G	=	Grab
Frequency:	A	=	once per six months beginning July 1, 1997
	B	=	once per year
	C	=	once per permit term beginning July 1, 1997
	D	=	quarterly beginning July 1, 1997
	X	=	no monitoring required by this special condition

Chemical monitoring required by Part I.A. of this permit shall satisfy the requirements of this condition where the two coincide, provided the specified minimum quantification levels and sample types of this condition are met.

If chemical monitoring is not required by Part I.A. of this permit until completion of a schedule of compliance, then no monitoring for those same parameters will be required under this condition until completion of that schedule.

3/18

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING
ATTACHMENT A

FACILITY NAME: PIER IX TERMINAL COMPANY
ADDRESS: P. O. BOX 38
NEWPORT NEWS, VA 23607

PERMIT NO.: VA0057142

REPORTING PERIOD: FROM: __/__/__ TO: __/__/__ OUTFALL NO.: 001

DEQ PARAM #	EPA PARAM #	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL	REPORTING RESULTS	SAMPLE TYPE	SAMPLE FREQUENCY
		METALS					
438	01009	Arsenic (Dis.)	206.2	10.0		G	X
212	00978	Arsenic (Tot. Rec.)		10.0		G	X
439	01005	Barium (Dis.)	200.7	20.0		G	X
449	01009	Barium (Tot. Rec.)		20.0		G	X
440	01025	Cadmium (Dis.)	213.2	1.0		G	A
202	01113	Cadmium (Tot. Rec.)		1.0		G	A
232	01033	Trivalent Chromium III*	218.2 minus 218.4	10.0		G	A
023	01032	Hexavalent Chromium VI	218.4	10.0		G	A
211	01118	Chromium (Tot. Rec.)		10.0		G	A
442	01040	Copper (Dis.)	220.2	10.0		G	A
203	01119	Copper (Tot. Rec.)		10.0		G	A
308	01046	Iron (Dis.)	236.1 or 236.2	---		G	X
361	00980	Iron (Tot. Rec.)		---		G	X
405	01049	Lead (Dis.)	239.2	5.0		G	A
233	01114	Lead (Tot. Rec.)		5.0		G	A
443	01056	Manganese (Dis.)	243.1	---		G	X
362	01123	Manganese (Tot. Rec.)		---		G	X
444	71890	Mercury (Dis.)	245.1 or 245.2	0.3		G	A
235	71901	Mercury (Tot. Rec.)		0.3		G	A
445	01065	Nickel (Dis.)	249.2	40.0		G	A
021	01067	Nickel (Tot. Rec.)		40.0		G	A
446	01145	Selenium (Dis.)	270.2 or 270.3	5.0		G	A
408	00981	Selenium (Tot. Rec.)		5.0		G	A
447	01075	Silver (Dis.)	272.2	2.0		G	A
186	01079	Silver (Tot. Rec.)		2.0		G	A
448	01092	Zinc (Dis.)	289.2	20.0		G	A
196	01094	Zinc (Tot. Rec.)		20.0		G	A
		PESTICIDES/PCB'S					

3/19

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING
ATTACHMENT A

FACILITY NAME: PIER IX TERMINAL COMPANY
ADDRESS: P. O. BOX 38
NEWPORT NEWS, VA 23607

PERMIT NO.: VA0057142

REPORTING PERIOD: FROM: / / TO: / / OUTFALL NO.: 001

DEQ PARAM #	EPA PARAM #	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL	REPORTING RESULTS	SAMPLE TYPE	SAMPLE FREQUENCY
332	39330	Aldrin	608	0.05		G	C
334	77969	Chloropyriphos (Dursban)	622	---		G	C
333	39350	Chlordane	608	0.2		G	C
335	39370	DDT	608	0.1		G	C
336	39560	Demeton	(i)	---		G	C
523	39730	2,4-dichlorphenoxy acetic acid (2,4-D)	(i)	---		G	X
337	39380	Dieldrin	608	0.1		G	C
338	39388	Endosulfan I	608	0.1		G	C
640		Endosulfan II	608	0.1		G	C
617	34351	Endosulfan Sulfate	608	0.1		G	C
339	39390	Endrin	608	0.1		G	C
340	39580	Guthion	622	---		G	C
341	39410	Heptachlor	608	0.05		G	C
342	77835	Hexachlorocyclohexane (Lindane)	608	0.05		G	C
343	39530	Malathion	(i)	---		G	C
344	39480	Methoxychlor	(i)	---		G	C
345	39755	Mirex	(i)	---		G	C
346	39540	Parathion	(i)	---		G	C
641		PCB-1242	608	1.0		G	C
642		PCB-1254	608	1.0		G	C
643		PCB-1221	608	1.0		G	C
644		PCB-1232	608	1.0		G	C
645		PCB-1248	608	1.0		G	C
618	39508	PCB-1260	608	1.0		G	C
646		PCB-1016	608	1.0		G	C
647		2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	(i)	---		G	X
349	39400	Toxaphene	608	5.0		G	C
BASE NEUTRAL EXTRACTABLES							
275	34222	Anthracene	625	10.0		G	C

3/20

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING
ATTACHMENT A

FACILITY NAME: PIER IX TERMINAL COMPANY
ADDRESS: P. O. BOX 38
NEWPORT NEWS, VA 23607

PERMIT NO.: VA0057142

REPORTING PERIOD: FROM: __/__/__ TO: __/__/__ OUTFALL NO.: 001

DEQ PARAM #	EPA PARAM #	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL	REPORTING RESULTS	SAMPLE TYPE	SAMPLE FREQUENCY
276	34526	Benzo(a)anthracene	625	10.0		G	C
648		Benzo(b)fluoranthene	625	10.0		G	C
278	34242	Benzo(k)fluoranthene	625	10.0		G	C
277	34247	Benzo(a)pyrene	625	10.0		G	C
282	34320	Chrysene	625	10.0		G	C
654		Dibenz(a,h)anthracene	625	20.0		G	C
259	34536	1,2-Dichlorobenzene	625	10.0		G	C
264	34566	1,3-Dichlorobenzene	625	10.0		G	C
266	34571	1,4-Dichlorobenzene	625	10.0		G	C
239	34611	2,4-Dinitrotoluene	625	10.0		G	C
170		Di-2-Ethylhexyl Phthalate	625	10.0		G	C
287	34376	Fluoranthene	625	10.0		G	C
288	34381	Fluorene	625	10.0		G	C
650		Isophorone	625	10.0		G	C
651		Indeno(1,2,3-cd)pyrene	625	20.0		G	C
293	34696	Naphthalene	625	10.0		G	C
296	34469	Pyrene	625	10.0		G	C
		VOLATILES					
216	34030	Benzene	624	10.0		G	C
484	32104	Bromoform	624	10.0		G	C
236	32102	Carbon Tetrachloride	624	10.0		G	C
652		Chlorodibromomethane	624	10.0		G	C
223	32106	Chloroform	624	10.0		G	C
499	38678	Chloromethane	624	20.0		G	C
649		Dichloromethane	624	20.0		G	C
244	79603	Dichlorobromomethane	624	10.0		G	C
260	34531	1,2-Dichloroethane	624	10.0		G	C
172	34371	Ethylbenzene	624	10.0		G	C
653		Monochlorobenzene	624	50.0		G	C
220	34475	Tetrachloroethylene	624	10.0		G	C
222	34010	Toluene	624	10.0		G	C
155	39180	Trichloroethylene	624	10.0		G	C

3/21

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING
ATTACHMENT A

FACILITY NAME: PIER IX TERMINAL COMPANY
ADDRESS: P. O. BOX 38
NEWPORT NEWS, VA 23607

PERMIT NO.: VA0057142

REPORTING PERIOD: FROM: / / TO: / / OUTFALL NO.: 001

DEQ PARAM #	EPA PARAM #	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL	REPORTING RESULTS	SAMPLE TYPE	SAMPLE FREQUENCY
173	39175	Vinyl Chloride	624	10.0		G	C
		ACIDS EXTRACTABLES					
210	39032	Pentachlorophenol	625	50.0		G	C
175	46000	Phenol	625**	10.0		G	C
602	34621	2,4,6-Trichlorophenol	625	10.0		G	C
		MISCELLANEOUS					
039	00610	Ammonia as NH3-N	350.1	200		G	A
005	50060	Total Residual Chlorine	(i)	100		G	C
018	00720	Cyanide	335.3	10.0		G	B
306	03556	Dioxin	1613	0.00001		G	X
137	00900	Hardness	(i)	---		G	A
009	00945	Sulfate	(i)	---		G	X
350	30340	Tributyltin	NBSR 85-3295	---		G	C
252	81551	Xylene (total)	SW 846 Method 8020	---		G	C

* If the result of the total chromium analysis is less than or equal to the QL of 10 micrograms/liter, the result for chromium III can be reported as not quantifiable.

** Requires continuous extraction.

(i) = Any approved method presented in 40 CFR Part 136.

Name of Principal Exec. Officer or Authorized Agent / Title

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. §1001 and 33 U.S.C. §1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

Signature of Principal Officer or Authorized Agent / Date

3/22

Attachment 4

RATIONALE FOR PARAMETERS MONITORING FREQUENCY AND LIMITATION

Outfall 001

Flow:	Frequency is 1 per month, estimate. Monitoring flow is standard for VPDES permits. Frequency is based on the appropriate flow for this type of facility.
pH:	6.0 S.U. minimum, 9.0 S.U. maximum. This is in accordance with State Water Quality Standards, VR680-21-01.5. Monitoring frequency is once per month based on flow.
Total Nitrogen:	Monthly average sampling. Monitoring frequency at once per month. This requirement is in accordance with Nutrient Enriched Water Policy for those facilities which discharge into nutrient enriched waters.
Total Phosphorous:	2 mg/l, 26 lb/d monthly average. Monitoring frequency at once per month. This requirement is in accordance with Nutrient Enriched Water Policy for those facilities which discharge into nutrient enriched waters.
Total Suspended Solids:	50 mg/l daily maximum. Monitoring frequency at once per month (based on BEJ). This requirement is in accordance with OWRM Guidance no. 93-010A for facilities with coal pile runoffs.
Oil & Grease:	Daily maximum reporting requirement. Monitoring frequency is semi-annual. This requirement is in accordance with OWRM Guidance no. 93-010A for facilities with coal pile runoffs.
Dissolved Copper Nickel and Zinc:	Daily maximum reporting requirement. Monitoring frequency is semi-annual. This requirement is in accordance with OWRM Guidance no. 93-010A for facilities with coal pile runoffs. In addition, technical data review and results obtained from running the wasteload allocation program indicated that these metals are detected at elevated concentrations.

Outfalls 002, 003, 005

Flow:	Frequency is once per six month, estimate. Monitoring flow is standard VPDES permits. Frequency is based on the appropriate flow for this type of facility.
pH:	6.0 S.U. minimum, 9.0 S.U. maximum. This is in accordance with State Water Quality Standards, VR680-21-01.5. Monitoring frequency is once per six month based on flow.
Oil & Grease:	Daily maximum reporting requirement. Monitoring frequency at once per six month. This requirement is in accordance with OWRM Guidance no. 93-010A for facilities with coal pile runoffs.
Total Suspended Solids:	50 mg/l daily maximum. Monitoring frequency at once per six month. This requirement is in accordance with OWRM Guidance no. 93-010A for facilities with coal pile runoffs.
Dissolved Copper Nickel and Zinc:	Daily maximum reporting requirement. Monitoring frequency at once per six month. This requirement is in accordance with OWRM Guidance no. 93-010A for facilities with coal pile runoffs.

(4) EXAMPLE FOR FACILITIES WITH COAL PILE RUNOFF
NOTE: Does Not Include Coal Pile Runoff From Steam Electric Category

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 9XX (storm event monitoring at Outfall 0XX).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Minimum	Maximum	Frequency	Sample Type
Flow (MG)	NA	NL	1/6M	Estimate*
Oil and Grease (mg/l)	NA	NL	1/6M	Grab**
Total Suspended Solids (mg/l)	NA	NL	1/6M	Grab**
pH (SU)	NL	NL	1/6M	Grab**
Copper (dissolved) (ug/l) ***	NA	NL	1/6M	Grab**
Nickel (dissolved) (ug/l) ***	NA	NL	1/6M	Grab**
Zinc (dissolved) (ug/l) ***	NA	NL	1/6M	Grab**

NL= No Limitation, monitoring required
NA= Not Applicable

2. All samples shall be collected from the discharge resulting from a measurable storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event.
3. Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with a 10 year, 24 hour rainfall event shall not be subject to the 50 mg/l limitation for total suspended solids.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts.

* Estimate of the total volume of the discharge during the storm event.
** The grab sample shall be taken within the first three hours of the discharge.
*** Monitoring for metals shall commence within 3 years of the effective date of this permit.

Rationale for the Removal of pH Limits at Outfall 004

Anti-backsliding Issue

As a result of a site inspection conducted on 3/8/96, and further conversations with the facility engineer, the staff is satisfied that outfall 004 no longer discharges any contaminated stormwater from coal pile and Portland cement storage activities. Based on this finding, the staff decided to remove all monitorings at this outfall. However, there remains a concern for the backsliding issue since pH limits were dropped from the permit. Based on a conversation with OWRM on September 28, 1994, and also the memo written by MHS addressing the same issue for Plasser American Corp., the staff believes this action is appropriate. See attached memo.

MEMORANDUM

Department of Environmental Quality
Tidewater Regional Office

Plasser American General
VA 0084131
Gen.

287 Pembroke Office Park
Pembroke No. 2, Suite 310
Virginia Beach, VA 23462

SUBJECT: Plasser American Corporation, VPDES VA0084131
Permitting Strategy for Reissuance of VPDES Permit

TO: Carl D. Thomas — Concur w/ proposed action 9-29-94

FROM: Mark H. Sauer

DATE: September 29, 1994

COPIES: R, Goode, TRO; M. Gregory, B. Tuxford, OWRM; File

Plasser American Corporation is currently authorized to discharge stormwater from industrial areas via one outfall under VPDES Permit number VA0084131. The permit contains monitoring requirements for Total Suspended Solids and Oil and Grease, but no limits for these parameters. No other technology-based limits are included in the permit. The permit does contain limits for pH, based on water quality standards. The permit will expire July, 1995, and the application for reissuance is due in January, 1995. During the review of facility information for reissuance, it has become apparent that this facility would be a potential candidate for a stormwater general permit. The SIC Code for this facility is 3743, which is covered under the Stormwater Regulations for Light Manufacturing, VR 680-14-17.

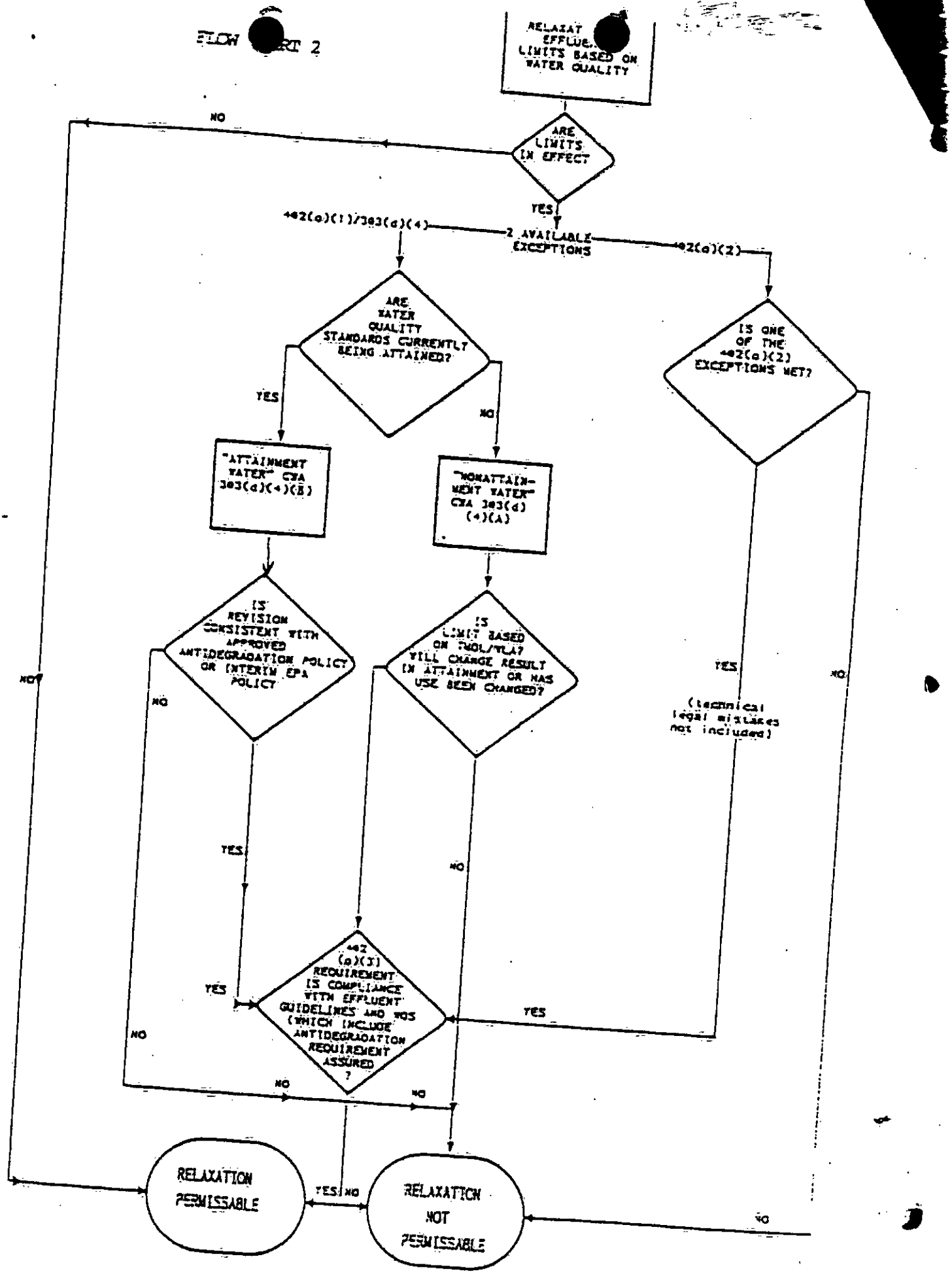
There is a question whether converting this individual permit to a stormwater general permit would be backsliding because the pH limits would be dropped from the permit. Information from OWRM's Stormwater Training Session and guidance concerning EPA's General Permit Minimum Monitoring Requirements indicate that storm water discharges associated with industrial activity that have existing permit limits may not be covered under a general permit (Attachment 1, page 5). However, water quality-based limits have not been specifically addressed in anti-backsliding guidance up to this point. M. Sauer contacted M. Gregory in OWRM on September 28, 1994. OWRM staff reviewed the situation, and according to M. Gregory, it is OWRM's interpretation that removing the pH limits would not be considered backsliding. OWRM's decision was based on their interpretation of a June 3, 1994 memorandum from M. Ferguson, titled "Removing Permit Limits Prior to Limits' Effective Date," and the document "Region III Guidance Anti-backsliding," dated February 18, 1992, that was distributed with the June 3, 1994 memorandum. Specifically referenced in their decision was Flow Chart 2, Relaxation of Effluent Limits Based on Water Quality (Attachment 2).

4/5

Based on this decision from DEQ-OWRM, M. Sauer intends to review pH data from the facility and conduct a site inspection. If these actions indicate no pH violations or apparent environmental impacts from this facility, a stormwater general permit will be issued upon expiration of the current individual permit.

If you have any questions, or need additional information, please contact me.

FLOW CHART 2


RELAXAT EFFLUE... LIMITS BASED ON WATER QUALITY
ARE LIMITS IN EFFECT
NO
YES
402(a)(1)/303(d)(4)
2 AVAILABLE EXCEPTIONS
402(a)(2)
ARE WATER QUALITY STANDARDS CURRENTLY BEING ATTAINED?
YES
NO
IS ONE OF THE 402(a)(2) EXCEPTIONS MET?
"ATTAINMENT WATER" CWA 303(d)(4)(B)
"NONATTAIN-MENT WATER" CWA 303(d)(4)(A)
IS REVISION CONSISTENT WITH APPROVED ANTIDEGRADATION POLICY OR INTERIM EPA POLICY
IS LIMIT BASED ON TMDL/WLA? WILL CHANGE RESULT IN ATTAINMENT OR HAS USE BEEN CHANGED?
YES
NO
(technical legal mistakes not included)
402 (a)(3) REQUIREMENT IS COMPLIANCE WITH EFFLUENT GUIDELINES AND WQS (WHICH INCLUDE ANTIDEGRADATION REQUIREMENT ASSURED ?
RELAXATION PERMISSABLE
RELAXATION NOT PERMISSABLE

Analysis of the Pier IX Terminal effluent data for Copper

The statistics for Copper are:

Number of values	=	7
Quantification level	=	10
Number < quantification	=	2
Expected value	=	16.11093
Variance	=	93.4423
C.V.	=	.6
97th percentile	=	39.20461
Statistics used	=	Reasonable potential assumptions - Type 1 data

The WLAs for Copper are:

Acute WLA	=	5.8
Chronic WLA	=	----
Human Health WLA	=	----

The limits are based on acute toxicity and 1 samples/month.

Maximum daily limit	=	5.8
Average monthly limit	=	5.800001

It is recommended that only the maximum daily limit be used.

DATA
190
20
6
11
13
14.9
8.8

Analysis of the Pier IX Terminal effluent data for Zinc

The statistics for Zinc are:

Number of values	=	3
Quantification level	=	20
Number < quantification	=	0
Expected value	=	506.6667
Variance	=	92416.01
C.V.	=	.6
97th percentile	=	1232.932
Statistics used	=	Reasonable potential assumptions - Type 2 data

The WLAs for Zinc are:

Acute WLA	=	190
Chronic WLA	=	----
Human Health WLA	=	----

The limits are based on acute toxicity and 1 samples/month.

Maximum daily limit	=	190
Average monthly limit	=	190

It is recommended that only the maximum daily limit be used.

DATA
910
400
210

02-28-1996 STANDARDS FOR James River at Pier IX Terminal VA0057142

Units = ug/l unless noted mg/l

PARAMETER	STANDARD			QL	WLAa	WLA
	Acute	Chronic	HH			
NH3-N,mg/l	2.57	0.39		0.2	5.148341	NA
Aldrin	1.3	.13	.0014	0.05	2.6	NA
Anthracene			110000	10		
AS III	69	36			138	NA
Benzene			710	10		
Benzo(a)anthracene			.311	10		
Benzo(b)fluoranthene			.311	10		
Benzo(k)fluoranthene			.311	10		
Benzo(a)pyrene			.311	10		
Bromoform			3600	10		
Cadmium	43.00	9.30	170	1	86	NA
Carbon Tetrachloride			45	10		
Chlordane	0.0900	0.0040	0.0059	0.2	.18	NA
Chlorodibromomethane			57000	10		
Chloroform			4700	10		
Chloromethane			4700	20		
Chlorpyrifos	.011	.0056		0.2	.022	NA
CR III			670000	10		
CR VI	1100	50	3400	10	2200	NA
Chrysene			.311	10		
Copper	2.900	2.900		10	5.8	NA
Cyanide	1	1	215000	10	2	NA
DDT	.13	.001	.0059	0.1	.26	NA
Demeton		.1				NA
Dibenz(a,h)anthracene			.311	20		
Dichloromethane			16000	20		
1,2-Dichlorobenzene			17000	10		
1,3-Dichlorobenzene			2600	10		
1,4-Dichlorobenzene			2600	10		
Dichlorobromomethane			220	10		
1,2-Dichloroethane			990	10		

PARAMETER	STANDARD		QL	WLAa	WLA
	Acute	Chronic	HH			
Dieldrin	.71	.0019	.0014	0.1	1.42	NA
Di-2-EthylhexylPhthalate			59	10		
2,4-Dinitrotoluene			91	10		
Endosulfan*	.034	.0087	2	0.1	6.800001E-02	NA
Endrin	.037	.0023	.81	0.1	.074	NA
Ethylbenzene			29000	10		
Fluoranthene			370	10		
Fluorene			14000	10		
Guthion		.01				NA
Heptachlor	.053	.0036	.0021	0.05	.106	NA
Hexachlorocyclohexane	.16	.01	25	0.05	.32	NA
Hydrogen Sulfide		2				NA
Indeno(1,2,3cd)pyrene			.311	20		
Isophorone			490000	10		
Kepone		0				NA
Lead	220.000	8.500		5	440	NA
Malathion		.1				NA
Mercury	2.1	.025	.146	0.2	4.2	NA
Methoxyclor		.03		0.2		NA
Mirex		0				NA
Monchlorobenzene			21000	50		
Nickel	75.000	8.300	4583	40	150	NA
PCB (check isomer**)		.03	.00045	1		NA
Pentachlorophenol	13.000	7.900	82	50	26	NA
Phenol			4600000	10		
Phosphorus (el.)		.1				NA
Pyrene			11000	10		
Selenium	300	71	11200	5	600	NA
Silver	2.300			2	4.6	
Tetrachloroethylene			3519	10		

4/11

PARAMETER	STANDARD			QL	WLAa	WLA
	Acute	Chronic	HH			
Toluene			200000	10		
Toxaphene	.21	.0002	.0075	5	.42	NA
Trichlorethylene			807	10		
2,4,6-Trichlorophenol			65	10		
Vinyl Chloride			5250	10		
Zinc	95.000	86.000		20	190	NA

Standards also applicable for D.O., pH, Temp., Chlorine, Dioxin, TBT and Radioactiv

* Endosulfan I-0.014,Endosulfan II-0.004,Endosulfan Sulfate-0.066
** PCB 1242, 1254, 1221, 1232, 1248, 1260 or 1016 (only 1242 has a detection level)

If background data is available correct the WLA by subtracting the product of backg
and the appropriate factor (Q7/QE, Q1/QE, Q30/QE, QH/QE, 0, 1 or 49)

If receiving waters are transitional, run fresh and salt and use most stringent

INPUT INFORMATION
Receiving stream is salt water
PWS = n Lake, marsh or swamp = n Contaminated stormwater = y
90th percentile Temperature = 27.17 90th percentile pH = 8.12
Salinity= 16.23

4/12

M E M O R A N D U M

DEPARTMENT OF ENVIRONMENTAL QUALITY
Tidewater Regional Office

Pembroke Two - Suite 310 Virginia Beach, VA 23462

SUBJECT: PIER IX TERMINAL COMPANY, VA0057142, TOXICS MANAGEMENT PROGRAM - TECHNICAL DATA REVIEW

TO: Anhthu Nguyen, TRO

FROM: Kirk A. Batsel, TRO-TMP

DATE: February 27, 1996

COPIES: OWPS-TMP; TRO-TMP

A total of eight (8) toxicity tests were evaluated in this review. Toxicity tests were conducted by CBI from 8/91-2/93 and Microbac 2/94-2/95. In addition, a total of seven (7) chemical analyses were evaluated.

DATA SUMMARY:

Outfall 001

Eight (8) acute toxicity tests, three (3) Cyprinodon variegatus and five (5) Mysidopsis bahia, were evaluated. Two of these tests, one of each species, were determined to be invalid. All of the remaining six (6) valid tests resulted in LC_{50} values >100% effluent. This results in a toxicity test pass percentage of 100%. Based on these results, this discharge proceeds with annual acute toxicity tests utilizing the most sensitive indicator organism, identified as M. bahia. Please refer to Table 1. for evaluated toxicity tests results.

Seven (7) chemical analyses were also reviewed. These tests indicate the presence of several priority pollutant metals in this wastestream. Of these metals, copper has been detected in all seven (7) analyses at concentrations which may have the violated VA Water Quality Standard (WQS) for protection of aquatic life. In addition, nickel and zinc were detected at concentrations which may have violated the respective WQS on one and three occasions, respectively. Please refer to Attachment 1 for the results of evaluated chemical analyses.

4/13

CONCLUSIONS:

Outfall 001

Based on toxicity tests to date, this discharge has been demonstrated as non-toxic. As a result, the discharge remains in the annual compliance reduced monitoring frequency and testing mode. Annual tests should utilize only the most sensitive organism, identified as M. bahia.

Chemical analyses to date have indicated copper, nickel, and zinc at elevated concentrations. As a result, chemical-specific monitoring and/or limitations may be necessary for this discharge.

RECOMMENDATIONS:

1) This discharge is to proceed with annual acute compliance monitoring utilizing M. bahia as the indicator species.

2) It is recommended that the permit engineer evaluate the need for chemical-specific effluent monitoring requirements or limitations based on the contents of this data review.

C:\WP51\DR95-96\PIERIX.96

4/14

FACILITY INFORMATION

FACILITY: Pier IX Terminal Company

LOCATION: 21st & Terminal Ave.
Newport News, VA 23607

VPDES#: VA0057142 Expiration Date: 7/20/96

SIC CODE/DESCRIPTION:

5052/Coal Handling Facility
5032/Cement Handling Facility

OUTFALLS/FLOWS (MGD):

001: Sedimentation Pond Discharge/1.58 MGD
002: Storm Dependent (10,000 sq ft drainage area)
003: " " (18,750 sg ft drainage area)
004: " " (5,313 sq ft drainage area)
005: " " (12,500 sq ft drainage area)

TREATMENT:

001: Sedimentation, pH neutralization
002-005: None

RECEIVING STREAM(s)/CRITICAL FLOWS/IWC/HARDNESS:

Receiving Stream: Lower James River

IWC = 2%

TMP REQUIREMENTS:

Biological: Annual acute M. bahia.

Chemical: No TMP monitoring, at this time. Chemical specific monitoring elsewhere in permit.

DATE PROTOCOLS APPROVED: Coastal Bioanalysts Inc. 11/19/92, Microbac Laboratories, Inc. 11/30/92

DATE OF LAST DATA REVIEW: 2/7/90 M. Richards; 10/20/89 M. Richards

4/15

OUTFALL 001

Table 1. Acute toxicity test results from effluent collected at outfall 001.

Date	Test Organism	Result	% Survival in 100% Effluent
08/15/91	*Mysidopsis bahia*	LC50 ≥ 100%	100 %
07/20/92	*Mysidopsis bahia*	LC50 ≥ 100%	100 %
02/22/93	*Mysidopsis bahia*	LC50 ≥ 100%	100 %
02/10/94	*Mysidopsis bahia*	LC50 ≥ 100%	55 %
02/22/95	*Mysidopsis bahia*	INVALID	INVALID
08/15/91	*Cyprinodon variegatus*	INVALID	INVALID
01/27/92	*Cyprinodon variegatus*	LC50 ≥ 100%	100 %
07/20/92	*Cyprinodon variegatus*	LC50 ≥ 100%	100 %

PROBLEMS:

8/91 & 2/93 M.b., and 1/92 Cv

- Salinity of sample not measured/reported; salinity needs to be determined for each sample which discharges to an estuarine system.

8/91
C.v. - Organism age range exceeded max range of 3 days allowed at time; Test Invalid

7/92
C.v.- Test salinity out of required range (22-24)

2/95
M.b. - Test salinity 25-28 ppt; Test Invalid

4/16

Chemical Test Data

Please refer to Attachment 1 for results of chemical tests evaluated during this review.

ANALYSES PERFORMED BY: Bionetics, Inc.

POLLUTANTS ANALYZED: Priority pollutant (PP) heavy metals, PP volatile organic compounds (method 624), PP semi-volatile organic compounds (method 625), and PP Pesticide/PCB (Method 608)

APPROPRIATE TEST METHODS USED? Yes

APPROPRIATE DETECTION LEVELS? Yes

4/17

ATTACHMENT 1

Virginia's acute standards for the protection of saltwater aquatic life for stormwater or intermitent discharges compared to concentrations of toxic substances in the effluent from outfall 001 . (Only those parameters which were present are identified.)

Facility: PIER IX TERMINAL CO (MASSEY) VPDES#: VA0057142

VPDES#: VA0057142	Facility: PIER IX TERMINAL CO (MASSEY)
Outfall: 001	Sponsor: PIER IX
Sample Date: 07/25/88	Lab: Bionetics

POLLUTANT	ACUTE		CONCENTRATION (ug/l)	
METALS				
Aluminum	0.000		6,400.00	
Arsenic	138.000	*	4.00	
Beryllium	0.000		7.00	
Cadmium	86.000		5.00	
Copper	5.800		190.00	A
Selenium	600.000		14.00	
Zinc	190.000		910.00	A
VOLATILE ORGANICS				
ACID EXTRACTABLES				
BASE/NEUTRAL EXTRACTABLES				
c Bis(2-ethylhexyl)phthalate	5,888.000	*	20.00	
PESTICIDES				

TENTATIVELY IDENTIFIED COMPOUNDS (ug/l)

COMMENTS

Metals reported as T. Recoverable.

VPDES#: VA0057142	Facility: PIER IX TERMINAL CO (MASSEY)
Outfall: 001	Sponsor: PIER IX
Sample Date: 08/21/89	Lab: Bionetics

POLLUTANT	ACUTE	CONCENTRATION (ug/l)
METALS		
Aluminum	0.000	600.00
Copper	5.800	20.00 A
Nickel	150.000	60.00
Zinc	190.000	130.00
VOLATILE ORGANICS		
ACID EXTRACTABLES		
BASE/NEUTRAL EXTRACTABLES		
PESTICIDES		
TENTATIVELY IDENTIFIED COMPOUNDS		(ug/l)

COMMENTS

Metals reported as T. Recoverable.

VPDES#: VA0057142	Facility: PIER IX TERMINAL CO (MASSEY)
Outfall: 001	Sponsor: PIER IX
Sample Date: 07/30/90	Lab: Bionetics

POLLUTANT	ACUTE	CONCENTRATION (ug/l)	
METALS			
Aluminum	0.000	330.00	
Copper	5.800	6.00	A
Nickel	150.000	25.00	
Zinc	190.000	60.00	
VOLATILE ORGANICS			
ACID EXTRACTABLES			
BASE/NEUTRAL EXTRACTABLES			
PESTICIDES			
TENTATIVELY IDENTIFIED COMPOUNDS		(ug/l)	

COMMENTS
Metals reported as T. Recoverable.

VPDES#: VA0057142	Facility: PIER IX TERMINAL CO (MASSEY)
Outfall: 001	Sponsor: PIER IX
Sample Date: 08/14/91	Lab: Bionetics

POLLUTANT	ACUTE	CONCENTRATION (ug/l)
METALS		
Copper	5.800	11.00 A
Nickel	150.000	67.00
Zinc	190.000	130.00
VOLATILE ORGANICS		
ACID EXTRACTABLES		
BASE/NEUTRAL EXTRACTABLES		
PESTICIDES		
TENTATIVELY IDENTIFIED COMPOUNDS		(ug/l)

COMMENTS

Metals reported as T. Recoverable.

ATTACHMENT 1
PAGE 6 of 8

VPDES#: VA0057142	Facility: PIER IX TERMINAL CO (MASSEY)
Outfall: 001	Sponsor: PIER IX
Sample Date: 01/27/92	Lab: Bionetics

POLLUTANT	ACUTE	CONCENTRATION (ug/l)	
METALS			
Cadmium	86.000	1.80	
Chromium(VI)	2,200.000	60.00	
Copper	5.800	13.00	A
Nickel	150.000	200.00	A
Selenium	600.000	20.00	
Silver	4.600	0.30	
Zinc	190.000	400.00	A
VOLATILE ORGANICS			
ACID EXTRACTABLES			
BASE/NEUTRAL EXTRACTABLES			
c Bis(2-ethylhexyl)phthalate	5,888.000 *	12.02	
PESTICIDES			

TENTATIVELY IDENTIFIED COMPOUNDS (ug/l)

COMMENTS

Hex Cr reported as Dissolved.

All other metals reported as T. Recoverable.

VPDES#: VA0057142	Facility: PIER IX TERMINAL CO (MASSEY)
Outfall: 001	Sponsor: PIER IX
Sample Date: 07/20/92	Lab: Bionetics

POLLUTANT	ACUTE	CONCENTRATION (ug/l)	
METALS			
Cadmium	86.000	2.40	
Copper	5.800	14.90	A
Nickel	150.000	100.00	
Silver	4.600	0.20	
Thallium	4,260.000 *	180.00	
VOLATILE ORGANICS			
ACID EXTRACTABLES			
BASE/NEUTRAL EXTRACTABLES			
c Bis(2-ethylhexyl)phthalate	5,888.000 *	21.00	
PESTICIDES			

TENTATIVELY IDENTIFIED COMPOUNDS (ug/l)

COMMENTS

Metals reported as T. Recoverable.

ATTACHMENT I
Page 8 of 8

VPDES#: VA0057142	Facility: PIER IX TERMINAL CO (MASSEY)
Outfall: 001	Sponsor: PIER IX
Sample Date: 02/22/93	Lab: Bionetics

POLLUTANT	ACUTE	CONCENTRATION (ug/l)
METALS		
Cadmium	86.000	1.10
Copper	5.800	8.80 A
Nickel	150.000	110.00
Zinc	190.000	210.00 A
VOLATILE ORGANICS		
ACID EXTRACTABLES		
BASE/NEUTRAL EXTRACTABLES		
PESTICIDES		

TENTATIVELY IDENTIFIED COMPOUNDS (ug/l)

COMMENTS

Metals reported as T. Recoverable.

4/25

SUMMARY

POLLUTANT	NUMBER OF VIOLATIONS ACUTE
Copper	7
Nickel	1
Zinc	3

* = EPA criterion
A = Exceeds the Allowable Concentration Acute for Aquatic Life

4/26

Attachment 5

MMONWEALTH OF VIRGINIA
ISION OF MINERAL RESOURCES

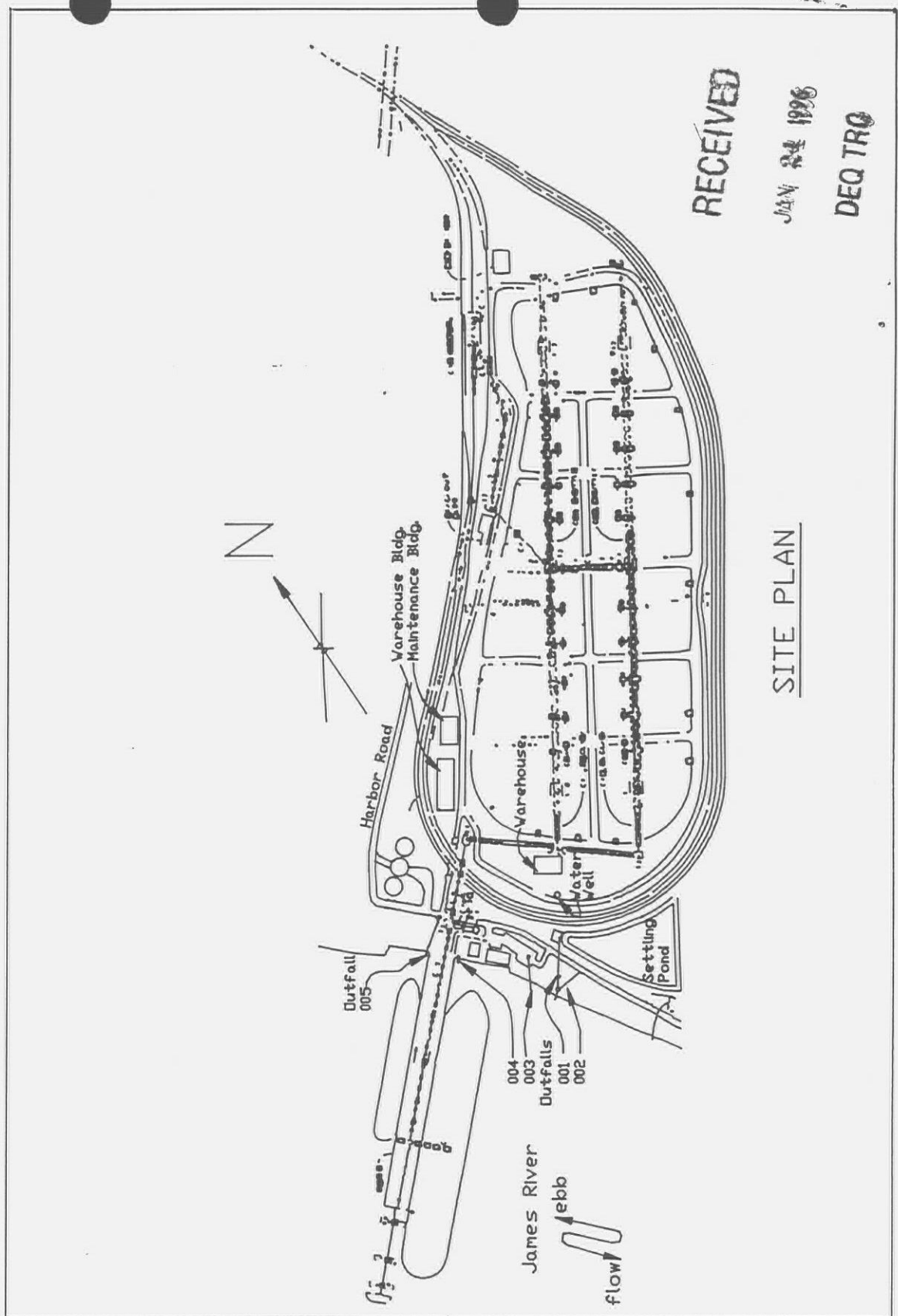
NEWPOR

7.5 M

NEWPORT NEWS

5/1

Attachment 6



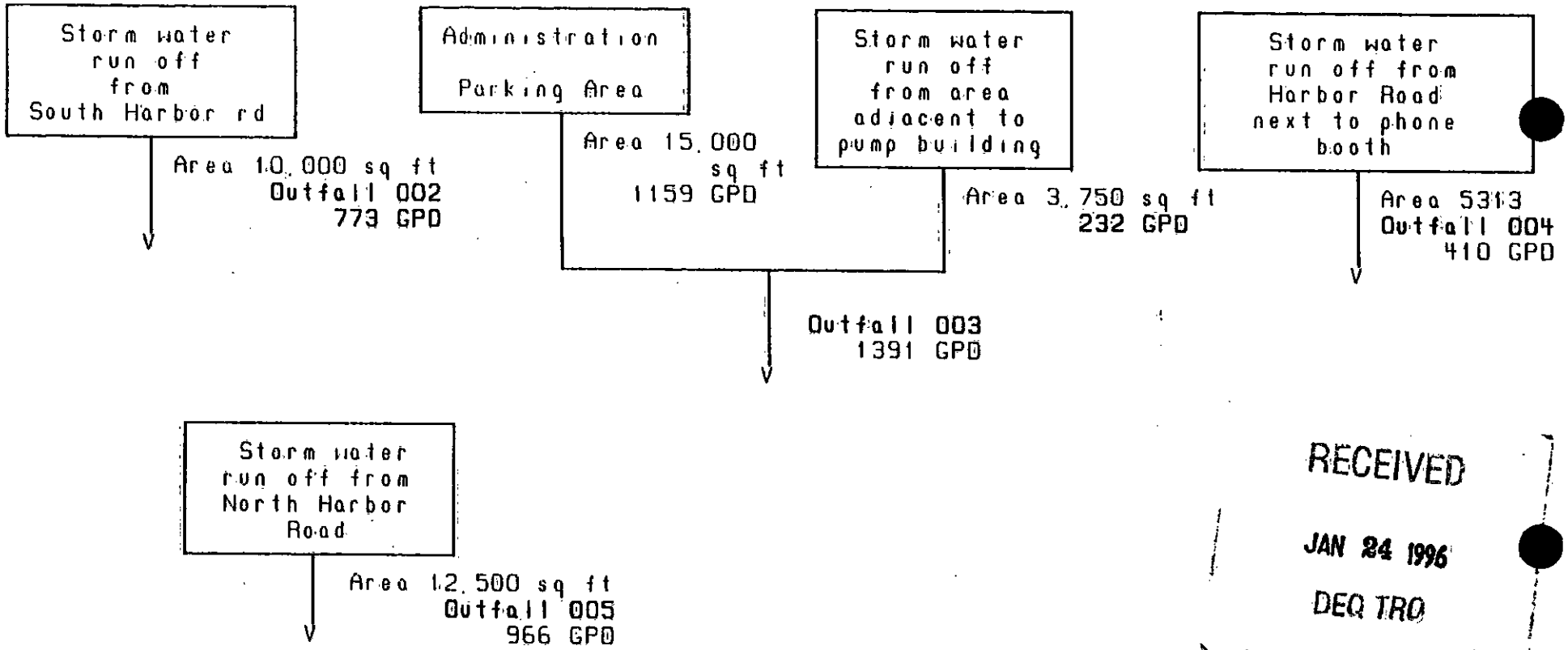
DEQ

State Water Control Board

Facility Outfalls

Pier IX Terminal Company

Facility Site Plan



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JAN 24 1996

DEQ TRO

All flow rates are based on the National Weather Bureau local average rainfall of 45.77 in/yr

2/9

Attachment 7
TABLE III(a)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes MADE DURING PERMIT PROCESS and give a brief rationale for the change).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
All references regarding samplings during rainfall events have been removed from outfall 001 because the discharge at this outfall is not rainfall dependant. All stormwater from the drainage area of outfall 001 flows into a sedimentation pond where pH adjustment is applied. The wastewater then discharges through outfall 001 out to the James River.	-Flow measurement is now MGD instead of MG -Sampling methodology is no longer required at outfall 001	6/5/96 AN

TABLE III(b)

?VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the change).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
004	NA	Monitoring is removed.	NA	Stormwater runoff not associated with industrial activities but not associated with coal pile activities.	3/7/96 AN
002, 003, 005	Flow, pH, Total Suspended Solids	1/3M to 1/6M	NA	OWRM Guidance 93-010A	2/28/96

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
The removal of Hexavalent Chromium, total Aluminum, total Arsenic, total Copper, total Lead, total Magnesium, total Mercury, total Nickel ,total Selenium, and total Zinc from outfall 001. A data review revealed that the levels of these metals are very low and do not pose any threats to water quality.	The addition of Oil & Grease (monitoring frequency at 1/6M) and dissolved Copper, dissolved Nickel, and dissolved Zinc (monitoring frequency at 1/6M).	2/28/96 AN
The addition of Oil & Grease, dissolved Copper, dissolved Nickel, and dissolved Zinc (monitoring frequency at 1/6M) at outfalls 002, 003, and 005.	NA	2/28/96
The addition of the following special conditions: -Water Quality Reopener -Stormwater Management Plan -Water Quality Standards Monitoring -Quatification Levels	NA	3/8/96

2/2

Attachment 8

NPDES Permit Rating Work Sheet

___ Regular Addition
___ Discretionary Addition
___ Score change, but no status change
___ Deletion

NPDES NO: VA0057142

Facility Name: PIER IX TERMINAL COMPANY

City: NEWPORT NEWS

Receiveing Water: JAMES RIVER

Reach Number:

Is this facility a steam electric power plant (SIC=4911) with one or more of the following characteristics?

1. Power output 500 MW or greater (not using a cooling pond/lake)
2. A nuclear power plant
3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rate

___ YES: score is 600 (stop here) X NO (continue)

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

___ YES; score is 700 (stop here)
X NO (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: Primary SIC Code: 5052

Other SIC Codes: 5032

Industrial Subcategory Code: 000 (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
X No process waste streams	0	0	___ 3.	3	15	___ 7.	7	35
___ 1.	1	5	___ 4.	4	20	___ 8.	8	40
___ 2.	2	10	___ 5.	5	25	___ 9.	9	45
			___ 6.	6	30	___ 10.	10	50

Code Number Checked: 0

Total Points Factor 1: 0

FACTOR 2: Flow/Stream Flow Volume *(Complete Either Section A or Section B; check only one)*

Section A–Wastewater Flow Only Considered Section B–Wastewater and Stream Flow Considered

Wastewater Type (See Instructions)			Code	Points
Type I:	Flow < 5 MGD	___	11	0
	Flow 5 to 10 MGD	___	12	10
	Flow > 10 to 50 MGD	___	13	20
	Flow > 50 MGD	___	14	30
Type II:	Flow < 1 MGD	___	21	10
	Flow 1 to 5 MGD	X	22	20
	Flow > 5 to 10 MGD	___	23	30
	Flow > 10 MGD	___	24	50
Type III:	Flow < 1 MGD	___	31	0
	Flow 1 to 5 MGD	___	32	10
	Flow > 5 to 10 MGD	___	33	20
	Flow > 10 MGD	___	34	30

Wastewater Type (See Instructions)	Percent of Instream Wastewater Concentration at Receiveing Stream Low Flow		Code	Points
Type I/III:	< 10%	___	41	0
	≥ 10% to < 50%	___	42	10
	≥ 50%	___	43	20
Type II:	<10%	___	51	0
	≥ 10% to < 50%	___	52	20
	≥ 50%	___	53	30

Code Checked from Section A or B: 22

Total Points Factor 2: 20

8/1

NPDES Permit Rating Work Sheet

NPDES No.: VA0057142

FACTOR 3: Conventional Pollutants

only when limited by the permit)

A. Oxygen Demanding Pollutant: (check one) ___ BOD ___ COD ___ Other: _____

Permit Limits: (check one)		Code	Points
___	< 100 lbs/day	1	0
___	100 to 1000 lbs/day	2	5
___	>1000 to 3000 lbs/day	3	15
___	>3000 lbs/day	4	20

Code Checked: ___

Points Scored: ___

B. Total Suspended Solids (TSS)

Permit Limits: (check one)		Code	Points
___	< 100 lbs/day	1	0
___	100 to 1000 lbs/day	2	5
___	>1000 to 5000 lbs/day	3	15
___	>5000 lbs/day	4	20

Code Checked: ___

Points Scored: ___

C. Nitrogen Pollutant: (check one) ___ Ammonia ___ Other: _____

Permit Limits: (check one)		Code	Points
___	< 300 lbs/day	1	0
___	300 to 1000 lbs/day	2	5
___	>1000 to 3000 lbs/day	3	15
___	>3000 lbs/day	4	20

Code Checked: ___

Points Scored: ___

Total Points Factor 3: 00

FACTOR 4: Public Health Impact

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this includes any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above referenced supply.

___ YES (if yes, check toxicity potential number below)

X NO (if no, go to Factor 5)

Determine the human health toxicity potential from Appendix A. Use the same SIC code and subcategory reference as in Factor 1. (Be sure to use the human health toxicity group column -- check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
___ No process waste streams	0	0	___ 3.	3	0	___ 7.	7	15
___ 1.	1	0	___ 4.	4	0	___ 8.	8	20
___ 2.	2	0	___ 5.	5	5	___ 9.	9	25
			___ 6.	6	10	___ 10.	10	30

Code Number Checked: ___

Total Points Factor 4: 00

8/2

VPDES Permit Rating Work Sheet

NPDES No.: VA0057142

FACTOR 5: Water Quality Factors

A. Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-based federal effluent guidelines, or technology-based state effluent guidelines), or has a wasteload allocation been assigned to the discharge?

		Code	Points
X	Yes	1	10
___	No	2	0

B. Is the receiving water in compliance with applicable water quality statndards for pollutants that are water quality limited in the permit?

		Code	Points
X	Yes	1	0
___	No	2	5

C. Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

		Code	Points
___	Yes	1	10
X	No	2	0

Code Number Checked: A 1 B 1 C 2

Points Factor 5: A 10 + B 0 + C 0 = 10 TOTAL

FACTOR 6: Proximity to Near Coastal Waters

A. Base Score: Enter flow code here (from Factor 2): 22

Enter the multiplication factor that corresponds to the flow code: 3.0

Check appropriate facility HPRI Code (from PCS):

	HPRI #	*Code*	*HPRI Score*
___	1	1	20
___	2	2	0
X	3	3	30
___	4	4	0
___	5	5	20

Flow Code	Multiplication Factor
11, 31, or 41	0.00
12, 32, or 42	0.05
13, 33, or 43	0.10
14 or 34	0.15
21 or 51	0.10
22 or 52	0.30
23 or 53	0.60
24	1.00

HPRI code checked: 3

Base Score: (HPRI Score) 30 x (Multiplication Factor) 0.30 = 9 (TOTAL POINTS)

B. Additional Points—NEP Program
For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

		Code	Points
___	Yes	1	10
X	No	2	0

C. Additional Points—Great Lakes Area of Concern
for a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 areas of concern (see instructions)

		Code	Points
___	Yes	1	10
X	No	2	0

Code Number Checked: A 3 B 2 C 2

Points Factor 5: A 9 + B 0 + C 0 = 9 TOTAL

8/3

NPDES Permit Rating Work Sheet

NPDES NO: VA0057142

SCORE SUMMARY

Factor	Description	Total Points
1	Toxic Pollutant Potential	0
2	Flow/Stream flow Volume	20
3	Conventional Pollutants	0
4	Public Health Impacts	0
5	Water Quality Factors	10
6	Proximity to Near Coastal Waters	9
	TOTAL (Factors 1-6)	39

S1. Is the total score equal to or greater than 80? ___ Yes (Facility is a major) X No

S2. If the answer to the above question is no, would you like this facility to be discretionary major?

X No

___ Yes (add 500 points to the above score and provide reason below:

Reason: _____

NEW SCORE: 39

OLD SCORE: 39

Anh Thu Nguyen

Permit Reviewer's Name

(804) 552-1132

Phone Number

2/28/96

Date

8/4

Attachment 9

VPDES PERMIT PROGRAM

FACILITY NAME: Pier IX Terminal Company VA0057142

CHRONOLOGY OF EVENTS (Meetings, telephone calls, letters, memos, hearings, etc. affecting permit from application to issuance)

APPL. REC'D.	APPL. RETURNED	ADD. INFO REQUESTED	APPL./ADD INFO DUE BACK IN RO	APPL./ADD. INFO REC'D.
1-24-96		2-7-96 2-21-96		2-23-96

APPL. TO VDH: 2-27-96	VDH COMMENTS REC'D.: 3-28-96
APPL. TO OWPS: NA	OWPS COMMENTS REC'D.: NA
APPL. ADMIN. COMPLETE: 2-23-96	APPL. TECH. COMPLETE: 3-28-96
ADMIN COPIED:	

DATE	DESCRIPTIVE STATEMENT
2-27-96	TMP and Technical data review received.
2-28-96	Fact sheet complete. Awaiting site inspection report.
3-6-96	Site inspection conducted.
3-8-96	Fact sheet complete.
3-11-96	Fact sheet forwarded to MHS for review.
4-10-96	Spoke with Ed Wolfington concerning the status of the permit. He is aware of the monitoring requirements and special conditions in the permit and indicated that he has no problem with them.

9/1

Attachment 10

Site Inspection Report

Subject: Pier IX Terminal Company, Site Inspection

To: File

From: Anhthu Nguyen

Date: 3/7/96

On March 6, 1996, I conducted a site inspection of the subject facility. Present at the time of my visit was Mr. Ed Wolfington, the facility's environmental engineer. This facility operates as a coal and Portland Cement storage area for transshipment. The Portland Cement is handled in enclosed areas. Stormwater runoff from coal storage and handling areas drains to the sedimentation pond on site where pH adjustment and filtering devices are applied. Wastewater from this pond is then discharged into the James River through outfall 001.

Outfall 002 drains the South Harbor road which receives stormwater runoff from pump house and sedimentation pond areas.

Outfall 003 drains the administration parking lot and the area near the pump house which pumps all the stormwater runoff from the site into the sedimentation pond. I indicated that monitoring at this outfall could be removed if the pump house discharge is redirected to the sedimentation pond. Ed agrees that this is an economical proposal, and will start working on it. Until further notice from the facility, monitoring at this outfall will remain in the reissued permit.

Outfall 004 drains the phone booth area on Harbor road. This part of the road serves as an access route to the administration building. The only type of vehicle travelling on this road are the employees' cars. Speed bumps are placed at this area to reduce the speed and also to prevent contaminated stormwater from entering this part of the road. I am satisfied that this particular area does not receive stormwater runoff from any of the coal handling areas nearby; therefore, monitoring will be removed for this reissuance.

Outfall 005 drains the North Harbor Road where stormwater runoff has the potential to be contaminated with the coal handling operations.

Overall, the facility appears to be very clean for a coal storage facility. The company is doing its best to keep the entire facility in compliance with the permit as well as protecting the environment.

Attachment 11

M E M O R A N D U M

Department Of Environmental Quality
Tidewater Regional Office

Pembroke Two - Suite 310 Virginia Beach, VA 23462

SUBJECT: PIER IX TERMINAL COMPANY, VA0057142, TOXICS MANAGEMENT PROGRAM

TO: Anhthu Nguyen, TRO

FROM: Kirk A. Batsel, TRO-TMP KAB

DATE: February 27, 1996

COPIES: OWPS-TMP; TRO-TMP

Please find attached the TMP developed for the subject facility. The attached TMP requires annual acute toxicity tests using M. bahia as the indicator organism. This TMP has been developed based on data previously submitted as evaluated in the TRO-TMP Technical Data Review completed on this date.

RECOMMENDATION:

1) Please include the attached TMP in the subject facility's draft permit.

11/1

D. TOXICS MANAGEMENT PROGRAM (TMP)

1. Biological Monitoring

a. In accordance with the schedule in 3. below and commencing within three months of the effective date of this permit, the permittee shall annually conduct an acute toxicity test for the duration of the permit using grab samples of final effluent from outfall 001. The acute tests shall be 48-hour static tests using Mysidopsis bahia conducted in such a manner and at sufficient dilutions for calculation of a valid LC_{50}. The permittee may provide additional samples to address data variability. These data may be included in the evaluation of effluent toxicity. The results of all such additional analyses shall be reported. Technical assistance in developing the procedures for these tests shall be provided by the DEQ staff, if requested by the permittee. Test protocols and the use of alternative species shall be approved by the DEQ staff **prior** to initiation of testing.

b. If, in the testing according to 1.a. or 1.f., any of the annual acute toxicity tests yields an LC_{50} of less than 100% effluent, the test shall be repeated within one month.

(1) If the retest also indicates an LC_{50} of less than 100% effluent, quarterly toxicity testing as in 1.c. below shall commence within three months. The results of these tests will be included in the evaluation of the need for toxicity reduction.

(2) If the retest does not confirm the results of the first test, then annual testing in accordance with the annual compliance monitoring schedule shall resume.

c. If required as in 1.b.(1) above, the permittee shall conduct quarterly acute toxicity tests for a period of one year using grab samples of final effluent from outfall 001. The acute tests shall be 48-hour static tests using M. bahia and C. variegatus conducted in such a manner and at sufficient dilutions for calculation of a valid LC_{50}. The permittee may provide additional samples to address data variability during the one-year period of initial data generation. These data may be included in the evaluation of effluent toxicity. The results of all such additional analyses shall be reported. Technical assistance in developing the procedures for these tests shall be provided by the DEQ staff, if requested by the permittee. Test protocols and the use of alternative species shall be approved by

the DEQ staff **prior** to initiation of testing.

d. The following criterion shall be used in evaluating the toxicity test data generated in 1.c. above:

(1) LC_{50} greater than or equal to 100% effluent in six of the total of eight acute toxicity tests, or in at least 75% of the tests conducted, if more than eight tests are conducted.

Any effluent failing the above criterion shall be considered to have demonstrated actual or potential toxicity and a Toxicity Reduction Evaluation (TRE) will be required.

e. If, prior to completing the monitoring requirements specified in 1.c. above, it is determined that the effluent fails the decision criterion outlined in 1.d., a TRE may be required. Upon notification by the DEQ staff that a TRE is required, the permittee shall initiate a TRE and may discontinue the toxicity tests of 1.c.

f. Following completion of the testing of outfall 001 as in 1.c. above, the permittee shall continue acute toxicity testing of the outfall annually. The first annual test shall be conducted within three months from the last quarterly tests. The test organism shall be the one identified as the most sensitive species from the quarterly acute and chronic tests or an alternative species approved by DEQ staff. Annual testing of the outfall is not required in cases where the need for a TRE of the outfall has been established.

2. Toxicity Reduction Evaluation

a. If the results of this Toxics Management Program or other available information indicate that the wastewaters are actually or potentially toxic, the permittee shall submit:

(1) a Toxicity Reduction Evaluation (TRE) plan, or

(2) at the permittee's option, an instream impact study plan, and

(3) an accompanying implementation schedule

within 120 days of the notification of such a determination by the DEQ.

b. The requirement of this plan shall be to:

(1) assure the absence of actual or potential toxicity, or

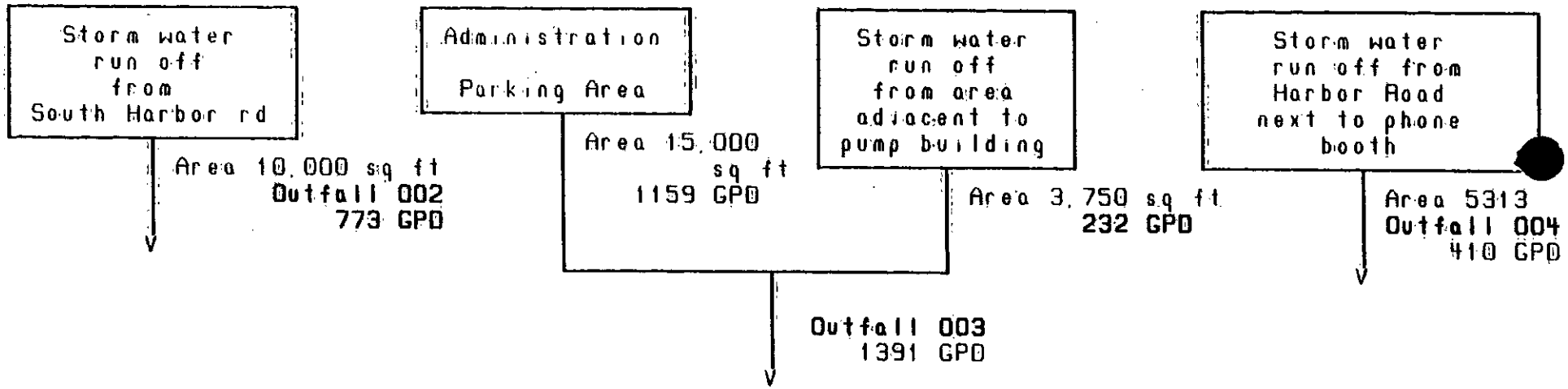
(2) to demonstrate that there is, or would be, no adverse impact from the discharge on all reasonable and beneficial uses of the State's waters.

c. Upon completion of the review of the plan, the permittee shall implement the plan and the permit may be modified or, alternatively, revoked and reissued in order to reflect appropriate permit conditions and a compliance schedule.

3. Monitoring & Reporting Schedule

The permittee shall conduct and report the results of the toxicity tests specified in this Toxics Management Program in accordance with the following schedule (submit three copies of these reports to the Tidewater Regional Office):

a.	**Submit toxicity test protocols for approval**	**Within one month following the effective date of the permit**
b.	**Conduct first annual biological tests on outfall 001**	**Within three months following the effective date of the permit**
c.	**Submit results of all tests conducted during the first annual period on outfall 001**	**With the Discharge Monitoring Report (DMR) for the fourth month following the effective date of the permit**
d.	**Conduct subsequent annual biological tests on outfall 001**	**Within subsequent twelve-month periods from 3.b.**
e.	**Submit results of subsequent biological tests for outfall 001**	**With the DMR submitted every twelve months** from 3.C.



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JAN 24 1996

DEQ TRO

All flow rates are based on the National Weather Bureau local average rainfall of 45.77 in/yr

HE INTERIOR
URVEY

DIVISION OF MINERAL RESOURCES

YORKTOWN (VIA U.S. 17) 17 MI.
1.7 MI. TO U.S. 60

WILLIAMSBURG 24 MI.
FORT EUSTIS 16 MI.

5758 III SW
(NEWPORT NEWS NORTH)

2 610 000 FEET

BUCKROE BEACH 7 MI.
2.6 MI. TO VA. 134

NORFOLK 12 MI.
3.8 MI. TO INTERSTATE 64

1.4 MI. TO U.S. 60

76°22'30"

37°

27'30"

25'

NEWPORT NEWS

HAMPTON

JAMES RIVER

NEWPORT NEWS CITY FLATS

Shipways

Shipways

Drydocks

Lighto

Pier IX
Terminal Company

Light

Light

Lights

Radio Tower
(WGH)

Newport News
Point

Lt

Newport News Bar

Newport News Middle Ground

NEWPORT NEWS CHANNEL

NEWPORT NEWS CITY

HAMPTON

INDEFINITE
PORTSMOUTH CITY

Light

Jry Dock

Playground

Booker T Washington

Greenlawn Cemetery

Virginia School for the Deaf and Blind

Pleasant Shade Cem

Mark Sch

Woodrow Wilson Sch

Huntington High Sch

Thomas Jefferson Sch

Esther Reed Sch

Marshall Sch

Athletic Field

Anderson Park

Dunbar Sch

Ermin Sch

James Lee Sch

Courthouse

Library

Fire Sta

Post Office

Water Tank

Lincoln Park

Sewage Disposal

Hospital

Baltimore

Fields

Flats

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4094
4093
2400
FEET
4092
4091
57'3
4090

MMONWEALTH OF VIRGINIA
SION OF MINERAL RESOURCES

NEWPORT

7.5 MIN

DEQ

State Water Control Board

Facility Outfalls

Pier IX Terminal Company

Facility Site Plan

SITE PLAN