

VPDES PERMIT PROGRAM FACT SHEET

FILE NO: 451

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, 2001

2. FACILITY NAME AND LOCAL MAILING ADDRESS

FACILITY LOCATION ADDRESS (IF DIFFERENT)

Kinder Morgan Bulk Terminals - Pier IX Terminal 21st and Terminal Avenue
P.O. Box 38
Newport News, VA 23607

CONTACT AT FACILITY:

NAME: Mr. Robert Coffey
TITLE: Senior Facility Manager
PHONE: (757) 928-1520

CONTACT AT LOCATION ADDRESS

NAME: Mr. Robert Coffey
TITLE: Senior Facility Manager
PHONE: (757) 928-1520

3. OWNER CONTACT: (TO RECEIVE PERMIT)

CONSULTANT CONTACT: NA

NAME: Ms. Marie E. Krien-Schmidt
TITLE: Director, Environmental Affairs
COMPANY NAME: Kinder Morgan Operating L.P. "C"
ADDRESS: P.O. Box 625
Sorrento, LA 70778-0625
PHONE: (800) 535-8170

4. PERMIT DRAFTED BY: DEQ, Water Permits, Tidewater Regional Office

Permit Writer(s): Fox, Sauer
Reviewed By: Robert P. Goode

Date(s): 3/20/01

Date(s):

5. PERMIT CHARACTERIZATION: (Check as many as appropriate)

Issuance
 Reissuance
 Revoke & Reissue
 Owner Modification
 Board Modification
 Change of Ownership/Name
(Effective Date: _____)
 Municipal
SIC Code(s)
 Industrial
SIC Code(s): 4491
 POTW
 PVOTW
 Private
 Federal
 State
 Publicly-Owned Industrial

Existing Discharge
 Proposed Discharge
 Effluent Limited
 Water Quality Limited
 WET Limit
 Interim Limits in Permit
 Interim Limits in Other Document
 Compliance Schedule Required
 Site Specific WQ Criteria
 Variance to WQ Standards
 Water Effects Ratio
 Discharge to 303(d) Listed Segment
 Toxics Management Program Required
 Toxics Reduction Evaluation
 Storm Water Management Plan
 Pretreatment Program Required
 Possible Interstate Effect

6. RECEIVING WATERS CLASSIFICATION: River basin information.

Outfall No(s): 001, 002 and 003

Receiving Stream: James River
River Mile: 2-JMS001.23
Basin: James River (Lower)
Subbasin: N/A
Section: 1
Class: II
Special Standard(s): a, NEW-19
Tidal: YES
7-Day/10-Year Low Flow: N/A MGD
1-Day/10-Year Low Flow: N/A MGD
30-Day/5-Year Low Flow: N/A MGD
Harmonic Mean Flow: N/A MGD

7. FACILITY DESCRIPTION: Describe the type facility from which the discharges originate.

EXISTING industrial discharge resulting from the storm water runoff from site whose actives include storage and transshipment of coal and Portland cement.

8. LICENSED OPERATOR REQUIREMENTS: (x) No () Yes Class:

9. RELIABILITY CLASS: Industrial Facility - NA

10. SITE INSPECTION DATE: 01/18/01 REPORT DATE: 01/25/01

Performed By: REF

SEE ATTACHMENT 1

11. DISCHARGE(S) LOCATION DESCRIPTION: Provide USGS Topo which indicates the discharge location, significant (large) discharger(s) to the receiving stream, water intakes, and other items of interest.

Name of Topo: Newport News South Quadrant No.: 35B SEE ATTACHMENT 2

12. ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.]. FOR INDUSTRIAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES. FOR MUNICIPAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE TREATMENT PROVIDED.

Natural Water:

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

SEE ATTACHMENT 3 (CAN ALSO REFERENCE TABLE I)

13. DISCHARGE DESCRIPTION: Describe each discharge originating from this facility.

SEE TABLE I (OR CAN SUBSTITUTE PAGE 2C) - SEE ATTACHMENT 4

14. COMBINED TOTAL FLOW:

TOTAL: 1.6614 MGD (for public notice)

PROCESS FLOW: 0.0001 MGD (IND.)

NONPROCESS/RAINFALL DEPENDENT FLOW: 1.6613 (Est.)

15. **STATUTORY OR REGULATORY BASIS FOR EFFLUENT LIMITATIONS AND SPECIAL CONDITIONS:**
(Check all which are appropriate)

- State Water Control Law
- Clean Water Act
- VPDES Permit Regulation (9 VAC 25-31-10 et seq.)
- EPA NPDES Regulation (Federal Register)
- EPA Effluent Guidelines (40 CFR 133 or 400 - 471)
- Water Quality Standards (9 VAC 25-260-5 et seq.)
- Wasteload Allocation from a TMDL or River Basin Plan

16. **EFFLUENT LIMITATIONS/MONITORING:** Provide all limitations and monitoring requirements being placed on each outfall.

SEE TABLE II - ATTACHMENT 5

17. **SPECIAL CONDITIONS:** Provide all actual permit special conditions.

SEE ATTACHMENT 6

18. **EFFLUENT LIMITATIONS/MONITORING RATIONALE:** Attach any analyses of an outfall by individual toxic parameter. As a minimum, it will include: statistics summary (number of data values, quantification level, expected value, variance, covariance, 97th percentile, and statistical method); wasteload allocation (acute, chronic and human health); effluent limitations determination; input data listing. Include all calculations used for each outfall and set of effluent limits and those used in any model(s). Include all calculations/documentation of any antidegradation or anti-backsliding issues in the development of any limitations; complete the review statements below. Provide a rationale for limiting internal waste streams and indicator pollutants. Attach chlorine mass balance calculations, if performed. Attach any additional information used to develop the limitations, including any applicable water quality standards calculations (acute, chronic and human health).

OTHER CONSIDERATIONS IN LIMITATIONS DEVELOPMENT:

VARIANCES/ALTERNATE LIMITATIONS: Provide justification or refutation rationale for requested variances or alternatives to required permit conditions/limitations. This includes, but is not limited to: waivers from testing requirements; variances from technology guidelines or water quality standards; WER/translator study consideration; variances from standard permit limits/conditions.

N/A

SUITABLE DATA: In what, if any, effluent data were considered in the establishment of effluent limitations and provide all appropriate information/calculations.

All suitable effluent data were reviewed.

ANTIDEGRADATION REVIEW: Provide all appropriate information/calculations for the antidegradation review.

The receiving stream has been classified as tier 2; therefore, no significant degradation of the existing water quality will be allowed. See antidegradation calculations/determinations.

ANTIBACKSLIDING REVIEW: Indicate if antibacksliding applies to this permit and, if so, provide all appropriate information.

Backsliding applies to this permit but conforms to the anti-backsliding provisions of section 402(o) of the Clean Water Act, 9 VAC 25-31-220 L. of the VPDES Permit regulation and 40 CFR 122.4 (1).

SEE ATTACHMENT 7 (for TSS at outfalls 002 and 003)

19. **SPECIAL CONDITIONS RATIONALE:** Provide a rationale for each of the permit's special conditions.

SEE ATTACHMENT 8

20. **TOXICS MONITORING/TOXICS REDUCTION AND WET LIMIT SPECIAL CONDITIONS RATIONALE:**
Provide the justification for any toxics monitoring program and/or toxics reduction program and WET limit; the actual conditions for the permit are to be included under Attachment 6.

SEE ATTACHMENT 9

21. **SLUDGE DISPOSAL PLAN:** Provide a description of the sludge disposal plan (e.g., type sludge, treatment provided and disposal method). Indicate if any of the plan elements are included within the permit.
- N/A
22. **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.
- SEE ATTACHMENT 10
23. **RECEIVING WATERS INFORMATION:** Refer to the State Water Control Board's Water Quality Standards [e.g., River Basin Section Tables (9 VAC 25-260-5 et seq.). Use 9 VAC 25-260-140 C (introduction and numbered paragraph) to address tidal waters where fresh water standards would be applied or transitional waters where the most stringent of fresh or salt water standards would be applied. Attach any memoranda or other information which helped to develop permit conditions (i.e. tier determinations, PReP complaints, special water quality studies, STORET data and other biological and/or chemical data, etc.

SEE ATTACHMENT 11

24. **303(d) Listed Segments:** Indicate if the facility discharges to a segment that is listed on the current 303(d) list and, if so, provide all appropriate information/calculations.

This facility discharges directly to James River. This receiving stream segment has been listed on Part 1 of the 303(d) list for non-attainment of shellfish restriction. A TMDL has not been prepared or approved for this stream segment. The permit contains a TMDL reopen clause which will allow the permit to be modified, in compliance with section 303(d)(4) of the Act once a TMDL is approved.

SEE ATTACHMENT 12

25. **CHANGES TO PERMIT:** Use TABLE III(a) to record any changes from the previous permit and the rationale for those changes. Use TABLE III(b) to record any changes made to the permit during the permit processing period and the rationale for those changes [i.e., use for comments from the applicant, VDH, EPA, other agencies and/or the public where comments resulted in changes to the permit limitations or any other changes associated with the special conditions or reporting requirements].

SEE ATTACHMENT 13

26. **NPDES INDUSTRIAL PERMIT RATING WORKSHEET:**

(Handwritten)
TOTAL SCORE: 49/18 SEE ATTACHMENT 14

27. **DEQ PLANNING COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from DEQ planning.

The discharge is not addressed in any planning document but will be included when the plan is updated.

28. **PUBLIC PARTICIPATION:** Document comments/responses received during the public participation process. If comments/responses provided, especially if they result in changes to the permit, place in the attachment.

VDH/DSS COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the Virginia Dept. of Health and noted how resolved.

The VDH had no objections to the draft permit, as stated by letter dated _____.

OR

By letter dated _____, the VDH provided the following comments:

EPA COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the U.S. Environmental Protection Agency and noted how resolved.

EPA waived the right to comment and/or object to the adequacy of the draft permit.

ADJACENT STATE COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from an adjacent state and noted how resolved.

Not Applicable.

OTHER AGENCY COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from any other agencies (e.g., VIMS, VMRC, DGIF, etc.) and noted how resolved.

Not Applicable.

OTHER COMMENTS RECEIVED FROM RIPARIAN OWNERS/CITIZENS ON DRAFT PERMIT: Document any comments received from other sources and note how resolved.

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation, and no comments were received.

PUBLIC NOTICE INFORMATION: Comment Period: Start Date April 16, 2001
End Date May 16, 2001

Persons may comment in writing or by e-mail to the DEQ on the proposed reissuance of the permit within 30 days from the date of the first notice. Address all comments to the contact person listed below. Written or e-mail comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The Director of the DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requestor's interests would be directly and adversely affected by the proposed permit action.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Mark H. Sauer at: Department of Environmental Quality (DEQ), Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, VA 23462. Telephone: 757-518-2105. E-mail: mhsauer@deq.state.va.us

Following the comment period, the Board will make a determination regarding the proposed reissuance. This determination will become effective, unless the Director grants a public hearing. Due notice of any public hearing will be given.

29. ADDITIONAL FACT SHEET COMMENTS/PERTINENT INFORMATION:

None.

30. SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS:

Attachment 1	Site Inspection Report/Memorandum
Attachment 2	Discharge Location/Topographic Map
Attachment 3	Schematic/Plans & Specs/Site Map/Water Balance
Attachment 4	TABLE I - Discharge/Outfall Description
Attachment 5	TABLE II - Effluent Monitoring/Limitations
Attachment 6	Special Conditions
Attachment 7	Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding
Attachment 8	Special Conditions Rationale
Attachment 9	Toxics Monitoring/Toxics Reduction/WET Limit Rationale
Attachment 10	Material Stored
Attachment 11	Receiving Waters Info./Tier Determination/STORET Data/Stream Modeling
Attachment 12	303(d) Listed Segments
Attachment 13	TABLE III(a) and TABLE III(b) - Change Sheets
Attachment 14	NPDES Industrial Permit Rating Worksheet
Attachment 15	Chronology Sheet
Attachment 16	General Correspondence
Attachment	Public Participation

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Attachment <u>4</u>	TABLE I - Discharge/Outfall Description
Attachment <u>5</u>	TABLE II - Effluent Monitoring/Limitations
Attachment <u>6</u>	Special Conditions
Attachment <u>7</u>	Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding
Attachment <u>8</u>	Special Conditions Rationale
Attachment <u>9</u>	Toxics Monitoring/Toxics Reduction/WET Limit Rationale
Attachment <u>10</u>	Material Stored
Attachment <u>11</u>	Receiving Waters Info./Tier Determination/STORET Data/Stream Modeling
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ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM

MEMORANDUM

1-1

Department of Environmental Quality Tidewater Regional Office

5636 Southern Boulevard

Virginia Beach, VA 23462

SUBJECT: Kinder Morgan Bulk Terminals - Pier IX Terminal
VPDES Permit No. VA0057142
Site Inspection

TO: Permit Processing File (PPP-#451)

FROM: Richard E. Fox, Jr. *RF*

DATE: January 25, 2001

COPIES: R. Pinkoski, M. Sauer, Fact Sheet

On January 18, 2001, Ron Pinkoski, Mark Sauer and I conducted site inspection at the above referenced facility as part of the VPDES permit reissuance process and a pollution prevention (P2) review. The purpose of this site inspection was to review all permitted outfalls and any changes that have been made to each outfall/drainage area.

The facility actives are storage and transshipment of coal and Portland cement.

Outfall 001

There were no changes to outfall 001 since the permit modification (change of ownership). Stormwater runoff from coal storage area, Portland cement storage area and equipment wash down water flows to a settling pond for sedimentation then to the James River.

Outfall 002

There were no changes to outfall 002 since the permit modification (change of ownership). Stormwater runoff from South Harbor Road flows to James River.

Outfall 003

There were no changes to outfall 003 since the permit modification (change of ownership). Stormwater runoff from South Harbor Road and administration parking lot flows to James River.

Outfall 004

Since the previous permit outfall 004 has been eliminated.

Outfall 005

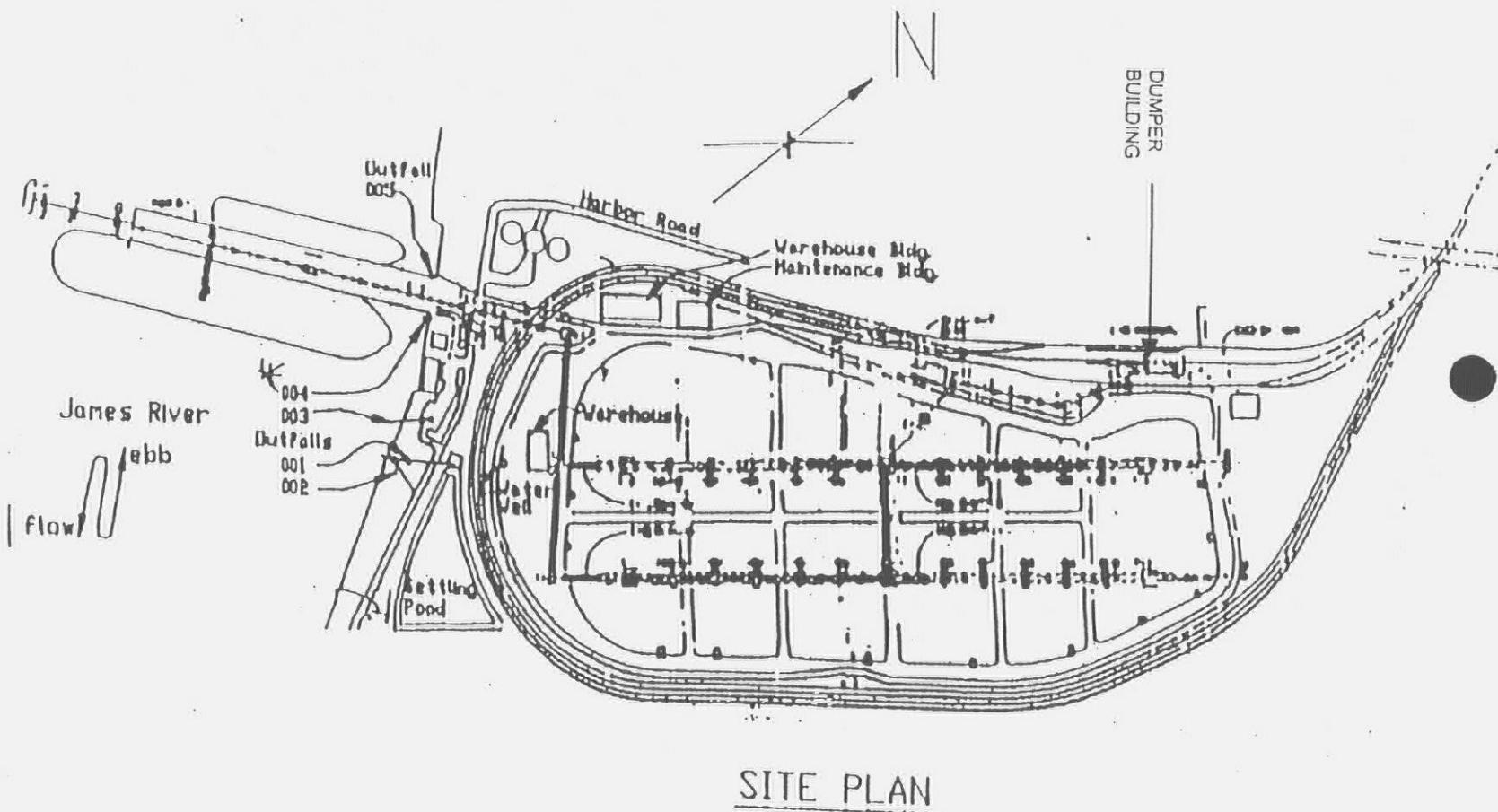
Since the previous permit outfall 005 has been eliminated.

We met with Mr. Robert Coffey of Kinder Morgan Bulk Terminals, Inc. and Mr. Robert Polino of Malcolm Pirnie (Kinder Morgan's consultant). Mr. Coffey and Mr. Polino gave us a tour of the site. We observed outfalls 001, 002 and 003 and where outfall 004 and outfall 005 were located before they were eliminated. We observed the coal stored outdoors and Portland cement stored in enclosed silos that discharge to sedimentation pond to James River. We rode around the coal pile and viewed the dust suppression system reusing the treated storm water from the sedimentation pond. We visited a shop area where bulldozers, equipment and vehicles are fueled and maintained. We observed used oil, antifreeze, equipment filters, etc. being collected for recycling in the maintenance shop and the underground storage tanks for the fuel.

Attached to this memorandum is a copy of the site map.

Attachment:

TERMINAL SITE PLAN FIGURE 10



Memo

To: Mark Sauer
Richard Fox
Bill Cash-Robertson

From: Ron Pinkoski *R*

Date: 1/25/01

Re: Office of Pollution Prevention comments for Kinder Morgan, Pier IX VPDES Application

Based on our visit to the site, conducted January 18, 2001, and my review of the VPDES application, I offer the following comments.

The facility has already implemented a number of pollution prevention (P2) measures and best management practices (BMPs). Most notably:

- All stormwater is collected for reuse in the dust suppression system, minimizing the need for groundwater/city water and reducing the amount of stormwater discharged.
- Conveyer belt runs are covered to the maximum extent practical, to minimize product losses and emissions.
- Coal fines/sediment are recovered from the detention pond, dried and sold as product.
- Hazardous materials and chemicals are stored under cover to prevent contact with rainwater.
- Site grading, curbing and drainage are designed to control runoff.
- Uncontrolled free fall of bulk materials is minimized through the use of piping.
- Used oil, antifreeze, filters, etc. are collected for recycling in the maintenance shop.

While the inclusion of P2 opportunities into the VPDES permit as special conditions appears limited, the following P2/BMP concepts are suggested to further improve facility operations.

- Install mulch berms or silt fences along the drainage ditch to prevent product loss and loss of effectiveness of the drainage system through siltation.
- Install a sump at the inlet to the detention pond to trap coal fines/sediment. Install filtering mechanisms in the drainage system to minimize transport of solids to the pond.
- Develop a maintenance schedule for the drainage ditch and detention pond to ensure that the maximum capacity is available for stormwater collection/retention.
- Conduct a pollution prevention opportunity assessment of the maintenance shop to identify areas for further improvement and cost savings.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

5636 Southern Boulevard
Virginia Beach, VA 23462
Tel# (757) 518-2000
<http://www.deq.state.va.us>

Dennis H. Treacy
Director

Francis L. Daniel
Tidewater Regional Director

January 29, 2001

Mr. Robert Coffey
Senior Facility Manager
Kinder Morgan Pier IX Terminal
P.O. Box 38
Newport News, VA 23607

Re: VPDES Permit Number VA0057142; Pier IX Terminal
Newport News, VA
Pollution Prevention Opportunities review

Dear Mr. Coffey;

Enclosed is a review completed by Mr. Ron Pinkoski, our Pollution Prevention (P2) Engineer, discussing P2 opportunities at the Kinder Morgan Pier IX facility. While it appears that no opportunities or incentives can be directly related to the VPDES permit in this situation, there are some opportunities for P2 concepts in certain areas of the facility.

Please review the enclosed memorandum, and if you would like to further discuss these opportunities with DEQ staff, please feel free to contact Mr. Ron Pinkoski at the above address or by telephone at (757) 518-2007. If you have any other questions or need additional information, please contact me at the above address, or by telephone at (757) 518-2105.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark H. Sauer".

Mark H. Sauer
Permit Engineer

Cc: B. Polino, Malcolm Pirnie
TRO file

VPDES PERMIT PROGRAM
POLLUTION PREVENTION IN VPDES PERMITS
CHRONOLOGY OF EVENTS

FACILITY: Kinder Morgan - Pier IX

PERMIT NUMBER: VA0057142

PERMIT WRITER: Fox/Sauer

APPLICATION RECEIVED	SITE VISIT/MEETING	ADDITIONAL INFO REQUESTED/RECEIVED	PROPOSED DATE FOR P2 FOLLOW-UP	P2 FOLLOW-UP
1/19/01	1/18/01	/	1/25/01	1/29/01
		/		
		/		
APPLICATION TO P2: 1/22/01		P2 COMMENTS RECEIVED: 1/25/01		
PW/P2 APP/PERMIT MEETING:		P2 OPPORTUNITIES IN VPDES PERMIT?: NO		
P2 OPPORTUNITIES OUTSIDE OF PERMIT?: Yes		P2 OBJECTIVES: Assist permittee in identifying alternate Materials and practices in shop area		

Date DESCRIPTIVE STATEMENT [CHRONOLOGY OF EVENTS] (Meetings, telephone calls, letters, memos, etc. affecting P2 at the facility)

ATTACHMENT 2

DISCHARGE LOCATION/TOPOGRAPHIC MAP

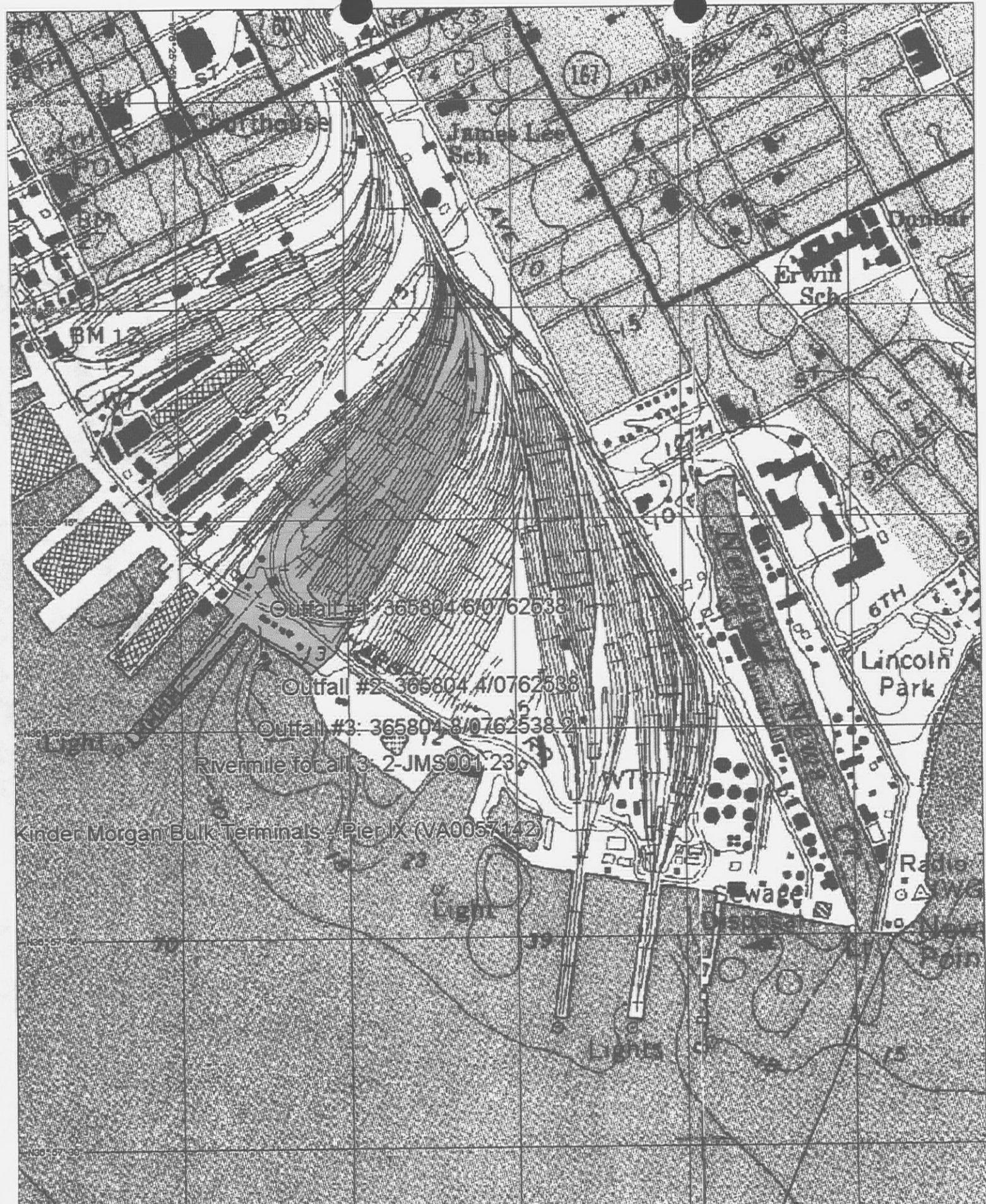


**MALCOLM
PIRNIE**

Kinder Morgan Bulk Terminals Pier IX Terminal - Site Location Map

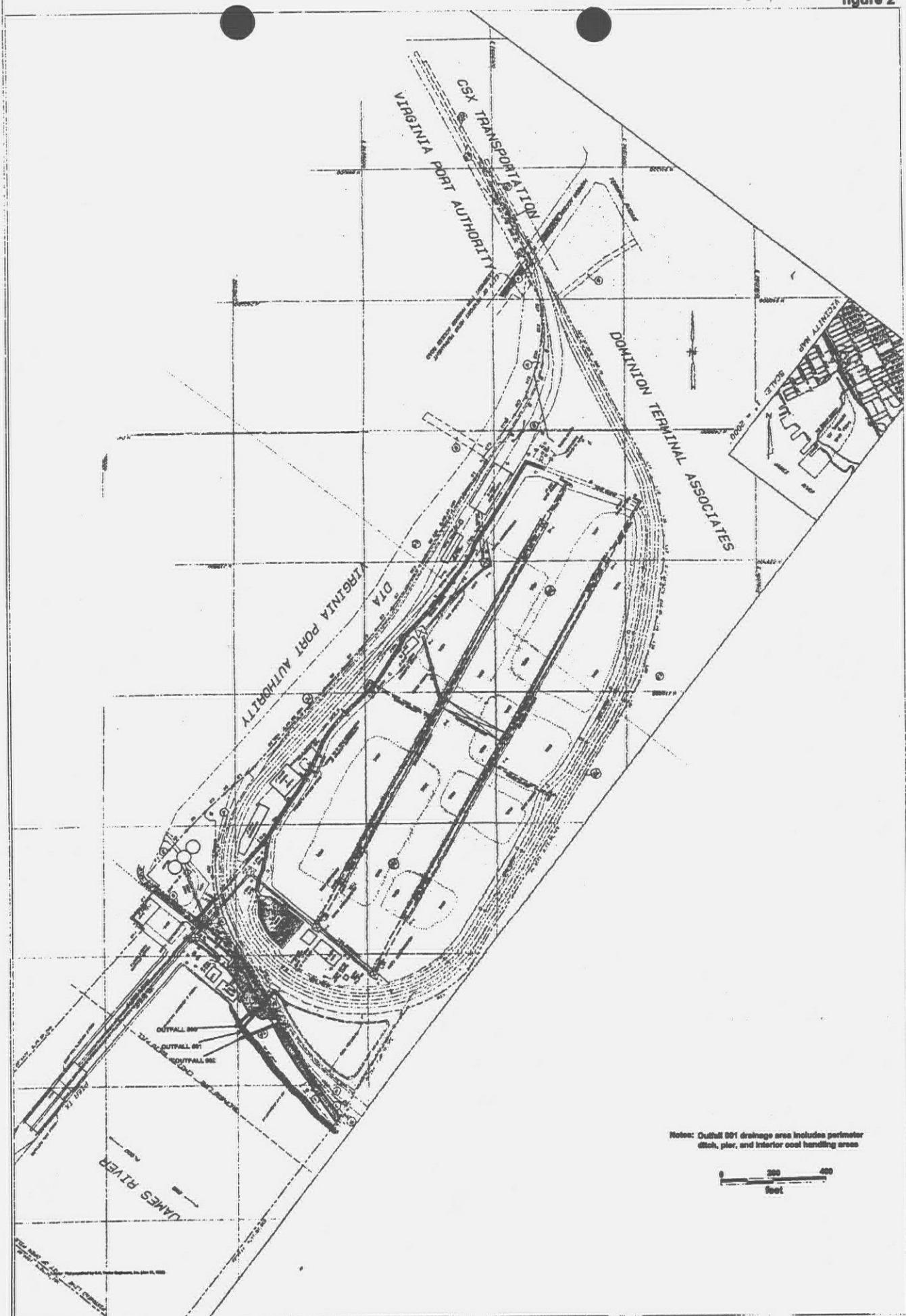
January 2001

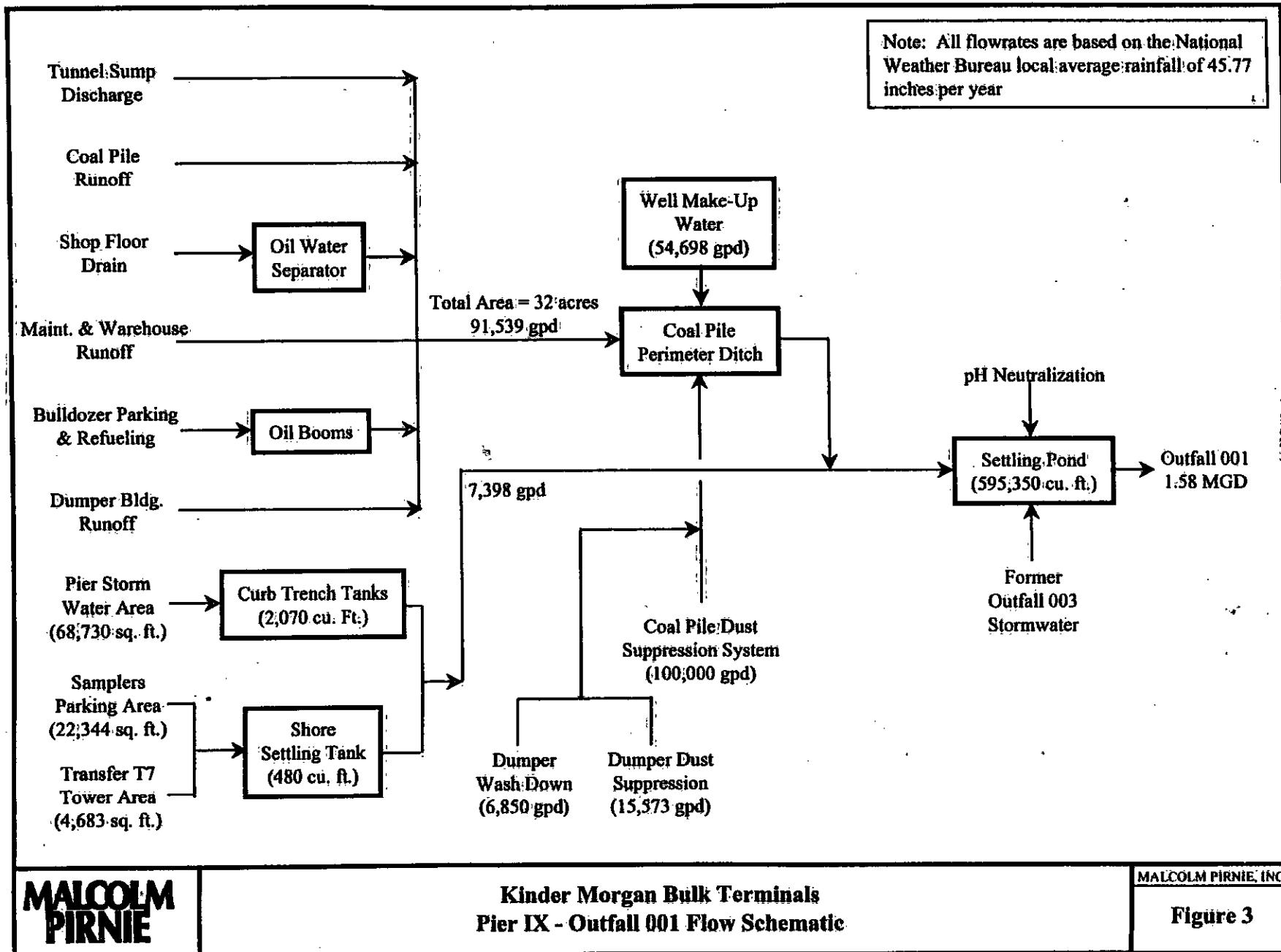
Kinder Morgan Bulk Terminals, Inc.
Pier IX Terminals
NPDES Permit Application



ATTACHMENT 3

SCHEMATIC/PLANS & SPECS/SITE MAP/
WATER BALANCE





South Harbor Road
(Approx. 10,000 sq. ft.)

Outfall 002
0.0405 MG

Administration
Parking Lot and
South Harbor Road
(Approx. 15,000 sq. ft.)

Outfall 003
0.0408 MG



**MALCOLM
PIRNIE**

Kinder Morgan Bulk Terminals
Pier IX -- Outfall 002 and 003 Flow Schematic

MALCOLM PIRNIE, INC.

Figure 4

ATTACHMENT 4

TABLE I - DISCHARGE/OUTFALL DESCRIPTION

TABLE I
NUMBER AND DESCRIPTION OF OUTFALLS

OUTFALL NO.	DISCHARGE LOCATION	DISCHARGE SOURCE (1)	TREATMENT (2)	FLOW (3)
001		Stormwater runoff from coal storage area, Portland cement storage area and equipment wash down water flows to a settling pond for sedimentation.	Sedimentation pH neutralization	1.5801 MGD
002		Stormwater runoff from South Harbor Road.	Best Management Practice	0.0405 MG
003		Stormwater runoff from South Harbor Road and administration parking lot.	Best Management Practice	0.0408 MG

- (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 5

TABLE II - EFFLUENT MONITORING/LIMITATIONS

The bases for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

2. Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with 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 amounts.

TABLE II - STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 002Outfall Description: Stormwater runoff from South Harbor RoadSIC CODE: 4491

PARAMETER & UNITS	STORM CATEGORY 1-29 or BPJ	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS [a]	
		MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MG)	3	NA	NL	1/3 Months	Estimate [b]
pH (S.U.)	3	6.0	9.0	1/6 Months	Grab
Total Petroleum Hydrocarbons (TPH) (mg/l)	3	NA	NL	1/6 Months	Grab
Total Suspended Solids (TSS) (mg/l)	3	NA	NL	1/3 Months	Grab
Dissolved Copper (ug/l) [d] [e]	3	NA	NL	1/3 Months	Grab

1/3 Months = In accordance with the following schedule: 1st quarter (January 1 - March 31); 2nd quarter (April 1 - June 30); 3rd quarter (July 1 - September 30); 4th quarter (October 1 - December 31).

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

[a] See Parts I.C.1. (Sampling Methodology) and I.C.3. (General Storm Water Conditions) for additional storm water sampling and reporting requirements.

[b] Estimate of the total volume of the discharge during the storm event.

[c] The grab sample shall be taken within the first three hours from the initiation of a discharge.

[d] See Parts I.B.4. and I.B5. for quantification levels and reporting requirements, respectively.

[e] See Part I.C.2. for storm water evaluation requirements.

The bases for the limitations codes are:

- A. Technology (e.g., Federal Effluent Guidelines)
- B. Water Quality Standards (9 VAC 25-260 et. seq.)
- C. Best Professional Judgment

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

TABLE II - STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 003

Outfall Description: Stormwater runoff from South Harbor Road and
administration parking lot

SIC CODE: 4491

PARAMETER & UNITS	STORM CATEGORY 1-29 or BPJ	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS [a]	
		MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MG)	3	NA	NL	1/3 Months	Estimate [b]
PH (S.U.)	3	6.0	9.0	1/6 Months	Grab
Total Petroleum Hydrocarbons (TPH) (mg/l)	3	NA	NL	1/6 Months	Grab
Total Suspended Solids (TSS) (mg/l)	3	NA	NL	1/3 Months	Grab
Dissolved Copper (ug/l) [d] [e]	3	NA	NL	1/3 Months	Grab

1/3 Months = In accordance with the following schedule: 1st quarter (January 1 - March 31); 2nd quarter (April 1 - June 30); 3rd quarter (July 1 - September 30); 4th quarter (October 1 - December 31).

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

[a] See Part I.C.1. (General Storm Water Conditions) for additional storm water sampling and reporting requirements.

[b] Estimate of the total volume of the discharge during the storm event.

[c] The grab sample shall be taken within the first three hours from the initiation of a discharge.

[d] See Parts I.B.4. and I.B.5. for quantification levels and reporting requirements, respectively.

[e] See Part I.C.2. for storm water evaluation requirements.

The bases for the limitations codes are:

- A. Technology (e.g., Federal Effluent Guidelines)
- B. Water Quality Standards (9 VAC 25-260 et. seq.)
- C. Best Professional Judgment

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

ATTACHMENT 6

SPECIAL CONDITIONS

6-1

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS

B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. Permit Reopeners

a. Water Quality Standards 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.

b. Nutrient Enriched Waters 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.

c. Total Maximum Daily Load (TMDL) Reopener

The Board may modify or, alternatively, revoke and reissue this permit if any applicable standard(s) promulgated under section 303(d) of the Clean Water Act or as a result of the development of a TMDL would result in more stringent limits or other requirements in this permit.

2. Operations and Maintenance (O & M) Manual

The permittee shall review the existing O & M Manual and notify the DEQ Tidewater Regional Office (TRO), 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 TRO within 90 days from the effective date of the permit. Once approved, this revised 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.

3. Notification Levels

The permittee shall notify the Department as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

- (1) One hundred micrograms per liter (100 ug/l);
- (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
- (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or

- (4) The level established by the Board.
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
- (1) Five hundred micrograms per liter (500 ug/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application;
 - (4) The level established by the Board.

4. Quantification Levels Under Part I.A.

- a. The maximum quantification levels (QL) shall be as follows:

<u>Effluent Characteristic</u>	<u>Quantification Level</u>
Copper	7.2 $\mu\text{g/l}$
Zinc	52 $\mu\text{g/l}$

- b. The permittee may use any approved method which has a QL equal to or lower than the QL listed in 4.a. above. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method.
- c. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained.
- d. An appropriate analytic method for metals shall be selected from the following list of EPA methods, or any approved method in 40 CFR Part 136, which will achieve a QL that is less than or equal to the QL specified in 4.a. above.

<u>Metal</u>	<u>Analytical Methods</u>
Copper	220.1; 200.7; 220.2; 200.9; 1638; 1640; 200.8
Zinc	289.1; 200.7; 1638; 1639; 200.8; 289.2

5. Compliance Reporting Under Part I.A.

- a. **Daily maximum** -- Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I.B.4.a. above shall be determined as follows: All data below the test method QL listed in Part I.B.4.a. above shall be treated as zero. All data equal to or above the test method QL shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR. If all data for each daily maximum are less than the test method QL, a "<[XX]" shall be reported on the DMR, where the actual test method QL shall be substituted for "[XX]".

6. Materials Handling and 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.

C. STORM WATER MANAGEMENT CONDITIONS

6-4

1. Sampling Methodology for Specific Outfalls 001, 002 and 003

Due to the nature of the effluent discharged at these outfalls, the following shall be required when obtaining samples required by Part I.A. of this permit:

- a. 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
- b. 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.

2. Storm Water Management Evaluation

The Storm Water Pollution Prevention Plan, which is to be developed and maintained in accordance with Part I.C.4. of this permit, shall have a goal of reducing pollutants discharged at all the regulated storm water outfalls.

a. Pollutant Specific Screening

The goal shall place emphasis on reducing, to the maximum extent practicable, the following screening criteria parameters in the outfalls noted below.

<u>OUTFALL NO.</u>	<u>POLLUTANTS</u>
001	copper and zinc
002	copper
003	copper

- b. The effectiveness of the Plan will be evaluated via the required monitoring for all parameters listed in Part I.A. of this permit for the regulated storm water outfalls, including the screening criteria parameters. Monitoring results which are above the screening criteria values will not indicate unacceptable values. However, those results will justify the need to reexamine the effectiveness of the Plan and any best management practices (BMPs) being utilized for the affected outfalls. In addition, the permittee shall amend the Plan whenever there is a change in the facility or its operation which materially increases the potential for activities to result in a discharge of significant amounts of pollutants.

By February 10th of each year, the permittee shall submit to the

DEQ Tidewater Regional Office an annual report which includes the pollutant-specific data from the outfalls included in this condition along with a summary of any steps taken to modify either the Plan or any BMPs based on the monitoring data. The first report is due on February 10, 2002.

3. General Storm Water Conditions

a. Sample Type - Outfalls 002 and 003

For all storm water monitoring required in Part I.A. or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all such 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 measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the nonstorm water discharge.

b. 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 Reports (DMRs) the following information:

- (1) The date and duration (in hours) of the storm event(s) sampled;
- (2) The rainfall measurements or estimates (in inches) of the storm event which generated the sampled discharge; and
- (3) The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

In addition, the permittee shall maintain a monthly log documenting the amount of rainfall received at this facility on a daily basis. A summarization of this information shall also be submitted with the DMRs.

c. Sampling Waiver

When a permittee is unable to collect storm water samples required in Part I.A. or other applicable sections of this permit

within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include 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.).

d. Representative Discharge

When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes substantially identical effluents are discharged, the permittee may test the effluent of one of such outfalls and report that the quantitative data also apply to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [(i.e., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. Permittees required to submit monitoring information under this permit shall include the description of the location of the outfalls, an explanation of why outfalls are expected to be substantially identical effluents, and an estimate of the size of the drainage area and runoff coefficient with the discharge monitoring report. The representative discharge provision is not applicable to compliance monitoring requirements under Part I.A. of this permit.

e. Quarterly Visual Examination of Storm Water Quality

Unless another more frequent schedule is established elsewhere within this permit, the permittee shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December.

- (1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such 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 previous measurable (greater than 0.1 inch rainfall) storm event. The required

72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.

- (2) Visual examination reports must be maintained onsite with the pollution prevention plan. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
- (3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.
- (4) When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include 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.).

f. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the storm water discharge(s) from a facility shall be prevented or minimized in accordance with the applicable storm water pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity

established under either 40 CFR 110 (1998), 40 CFR 117 (1998) or 40 CFR 302 (1998) occurs during a 24-hour period, the permittee is required to notify the Department in accordance with the requirements of Part II.G. of this permit as soon as he or she has knowledge of the discharge. In addition, the storm water pollution prevention plan required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110 (1998), 40 CFR 117 (1998) and 40 CFR 302 (1998) or \square 62.1-44.34:19 of the Code of Virginia.

4. Storm Water Pollution Prevention Plan

A storm water 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 storm water 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 storm water 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 storm water pollution prevention plan as a condition of this permit.

The storm water pollution prevention plan requirements of this permit may be fulfilled by incorporating by reference other plans or documents such as an erosion and sediment control plan, a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act or best management practices (BMP) programs otherwise required for the facility provided that the incorporated plan meets or exceeds the plan requirements of this section. If an erosion and sediment control plan is being incorporated by reference, it shall have been approved by the locality in which the activity is to occur or by another appropriate plan approving authority authorized under the Virginia Erosion and Sediment Control Regulation 4 VAC 50-30-10 et seq. All plans incorporated by reference into the storm water pollution prevention plan become enforceable under this permit.

a. Deadlines for Plan Preparation and Compliance

Existing Facilities

The storm water pollution prevention plan which was previously prepared and implemented shall be complied with, and continually updated as needed in accordance with sections b., c., d. and e. below.

(1) Measures That Require Construction

In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 3 years after the effective date of the permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or

temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

b. Signature and Plan Review

(1) Signature/Location

The plan shall be signed in accordance with Part II.K. of this permit and be retained onsite at the facility which generates the storm water discharge in accordance with Part II.B. of this permit. For inactive facilities, the plan may be kept at the nearest office of the permittee.

(2) Availability

The permittee shall make the storm water pollution prevention plan, annual site compliance inspection report, or other information available to the Department upon request.

(3) Required Modifications

The Regional Office may notify the permittee at any time that the plan does not meet one or more of the minimum 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 permit. Within 60 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.

c. Keeping Plans Current

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 storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under section d. below, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. New owners shall review the existing plan and make appropriate changes. Amendments to the plan may be reviewed by the Department in the same manner as noted in section b. above.

d. Contents of Plan

The contents of the pollution prevention plan shall comply with the requirements listed below. These requirements are cumulative. The following requirements are applicable to all storm water pollution prevention plans developed under this permit. The plan shall include, at a minimum, the following items.

(1) Pollution Prevention Team

The plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water 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 storm water pollution prevention plan.

(2) 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 storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. The plan shall identify all activities and significant materials which may potentially be significant pollutant sources. The plan shall include, at a minimum:

(a) Drainage

- i. A site map indicating an outline of the portions of the drainage area of each storm water outfall within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under section (2) (c) below 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 and wastewaters; locations used for the treatment, filtration or storage of water supplies; liquid storage tanks; processing areas; and, storage areas. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of these outfalls.
- ii. For each area of the facility that generates storm water 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 storm water discharges. Factors to consider include: the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and, history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) 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 storm water 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 storm water 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 storm water runoff; and a description of any treatment the storm water receives.

(c) 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 storm water 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.

(d) Sampling Data

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

(e) 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 and wastewater treatment activities to include sludge drying, storage, application or disposal activities. 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, total suspended solids, etc.) of concern shall be identified.

(3) Measures and Controls

The permittee shall develop a description of storm water management controls appropriate for the facility and implement these controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address

the following minimum components, including a schedule for implementing such controls.

(a) Good Housekeeping

Good housekeeping requires the clean and orderly maintenance of areas which may contribute pollutants to storm water discharges. The plan shall describe procedures performed to minimize contact of materials with storm water runoff. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks, material handling areas, and loading/unloading areas.

(b) Preventive Maintenance

A preventive maintenance program shall involve: timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins); inspection and testing of facility equipment and systems to uncover conditions that could cause breakdowns or failures which could result in discharges of pollutants to surface waters; and, appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures

Areas where potential spills may occur which can contribute pollutants to storm water discharges, and their accompanying drainage points shall be identified clearly in the storm water 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.

(d) Inspections

In addition to or as part of the comprehensive site compliance evaluation required under section d.(4) below, qualified facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall be identified to inspect designated equipment and areas of the facility at appropriate intervals. The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit. A set of tracking or follow-up 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.

(e) Employee Training

Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water 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.

(f) 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 storm water 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.

(g) 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.

(h) Management of Runoff

The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices [practices other than those which control the generation or source(s) of pollutants] used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water 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 storm water 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 storm water (such as for a process or as an irrigation source); inlet controls (such as oil/water separators); snow management activities; infiltration devices; wet detention/retention devices; or, other equivalent measures.

(4) Comprehensive Site Compliance Evaluation

Qualified facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan 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 include the following.

- (a) Areas contributing to a storm water discharge associated with industrial activity, such as material storage, handling and disposal activities, 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 storm water 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.
- (b) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with section d.(2) above and pollution prevention measures and controls identified in the plan in accordance with section d.(3) above shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.
- (c) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with section (4)(b) above shall be made and retained as part of the storm water pollution prevention plan for at least three years from the date of the evaluation. 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 storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part II.K. of this permit.
- (d) Where compliance evaluation schedules overlap with inspections required under section d.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

e. Special Pollution Prevention Plan Requirements

In addition to the minimum standards listed in section d. above, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines.

- (1) Additional Requirements for Storm Water Discharges Associated with Industrial Activity from Facilities Subject to Emergency Planning and Community Right-to Know Act (EPCRA) Section 313 Requirements

In addition to the requirements of other applicable conditions of this permit, storm water pollution prevention plans for facilities subject to reporting requirements under EPCRA Section 313 prior to May 1, 1997, for chemicals which are classified as Section 313 water priority chemicals in accordance with the definition at the end of this section, except as provided in section e.(1)(b)ii. below, and where there is the potential for these chemicals to mix with storm water discharges, shall describe and ensure the implementation of practices which are necessary to provide for conformance with the following guidelines.

- (a) In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided unless otherwise exempted under section e.(1)(c) below. At a minimum, one of the following preventive systems or its equivalent shall be used:
- i. Curbing, culverting, gutters, sewers or other forms of drainage control to prevent or minimize the potential for storm water runoff to come into contact with significant sources of pollutants; or
 - ii. Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water and wind.
- (b) In addition to the minimum standards listed under section e.(1) above and except as otherwise exempted under section e.(1)(c) below, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with other effective storm water pollution prevention procedures, and applicable state rules, regulations, and guidelines.
- i. Liquid Storage Areas Where Storm Water Comes Into Contact with Any Equipment, Tank, Container, or Other Vessel Used for Section 313 Water Priority Chemicals
 - No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure, temperature, etc.
 - Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of these chemicals. Appropriate measures to minimize discharges of Section 313 water priority chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan,

and/or other equivalent measures.

ii. Material Storage Areas for Section 313 Water Priority Chemicals Other Than Liquids

Material storage areas for Section 313 water priority chemicals other than liquids which are subject to storm water runoff, leaching, or wind effects shall incorporate drainage or other control features which will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with those chemicals.

iii. Truck and Rail Car Loading and Unloading Areas for Liquid Section 313 Water Priority Chemicals

Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of those chemicals. Protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans (including the proper disposal of materials collected in the drip pans) where spillage may occur (such as hose connections, hose reels and filler nozzles) when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

iv. Areas Where Section 313 Water Priority Chemicals are Transferred, Processed or Otherwise Handled

Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall minimize storm water contact with Section 313 water priority chemicals. Additional protection such as covers or guards to prevent exposure to wind effects, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

v. Discharges from Areas Covered by Paragraphs i., ii., iii. or iv.

- Drainage from areas covered by paragraphs i., ii., iii. or iv. of this section should be restrained by valves or other positive

means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.

- Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.
- If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.
- Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

vi. Facility Site Runoff Other Than From Areas Covered by i., ii., iii. or iv.

Other areas of the facility [those not addressed in paragraphs i., ii., iii. or iv.], from which runoff which may contain Section 313 water priority chemicals or where spills of Section 313 water priority chemicals could cause a discharge, shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in storm water runoff or leachate.

vii. Preventive Maintenance and Housekeeping

All areas of the facility shall be inspected at specific intervals identified in the plan for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or for direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage areas shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, corrosion, support or foundation failure, effects of wind blowing, or other forms of deterioration or noncontainment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or

other condition is discovered which may result in significant releases of Section 313 water priority chemicals to waters of the State, action to stop the leak or otherwise prevent the significant release of Section 313 water priority chemicals to waters of the State shall be immediately taken or the unit or process shut down until such action can be taken. When a leak or noncontainment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.

viii. Facility Security

Facilities shall have the necessary security systems to prevent accidental or intentional entry which could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

ix. Training

Facility employees and contractor personnel that work in areas where Section 313 water priority chemicals are used or stored shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year. Training shall address pollution control laws and regulations, the storm water pollution prevention plan and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of those chemicals can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

- (c) Facilities subject to reporting requirements under EPCRA Section 313 for chemicals that are classified as Section 313 water priority chemicals, in accordance with the definition at the end of this section, that are handled and stored onsite only in gaseous or nonsoluble liquid or solid (at atmospheric pressure and temperature) forms may provide a certification as such in the pollution prevention plan in lieu of the additional requirements in section e.(1) above. Such certification shall include a narrative description of all water priority chemicals and the form in which they are handled and stored, and shall be signed in

accordance with Part II.K. of this permit.

- (d) The storm water pollution prevention plan shall be certified in accordance with Part II.K. of this permit.

(2) Requirements for Salt Storage

Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to surface 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. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters of the State.

"Section 313 Water Priority Chemicals" means a chemical or chemical categories which: 1) are listed at 40 CFR Part 372.65 (1998) pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986) (42 USC 11001 et seq.); 2) are present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR Part 122 (1998) on either Table II (organic priority pollutants), Table III (certain metals, cyanides and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the Clean Water Act at 40 CFR Part 116.4 (1998); or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

5. Facility-Specific Storm Water Conditions

The requirements listed under this category shall apply to storm water discharges from water transportation facilities that have vehicle maintenance shops and/or equipment cleaning operations. The water transportation industry includes facilities engaged in foreign or domestic transport of freight or passengers in deep sea or inland waters; marine cargo handling operations; ferry operations; towing and tugboat services; and marinas (facilities commonly identified by Standard Industrial Classification (SIC) code Major Group 44).

In addition to the requirements of Part ~~II.C.4.~~, the storm water pollution prevention plan shall include, at a minimum, the following items.

a. Description of Potential Pollutant Sources

(1) Drainage

A site map indicating the locations of the following activities where such activities are exposed to precipitation: fueling, engine maintenance and repair, painting, sanding, blasting, welding, metal fabrication, loading/unloading areas, locations used for the treatment, storage or disposal of wastes; liquid storage tanks, liquid storage areas (e.g., paint, solvents, resins), and material storage areas (e.g., blasting media,

aluminum, steel, scrap iron) processing areas and buildings; treatment ponds; location of short and long term storage of general materials (including but not limited to: supplies, construction materials, plant equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizers, and pesticides) and locations of stock pile areas (such as coal piles and limestone piles).

b. Measures and Controls

(1) Good Housekeeping

The following areas must be specifically addressed, when applicable at a facility.

(a) Blasting and Painting Areas

The permittee must consider containing all blasting and painting activities to prevent abrasives, paint chips, and overspray from reaching the receiving water or the storm sewer system. The plan must describe measures taken at the facility to prevent or minimize the discharge of spent abrasive, paint chips, and paint into the receiving waterbody and storm sewer system. The permittee may consider hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris. Where required, a schedule for cleaning storm water conveyances to remove deposits of abrasive blasting debris and paint chips should be addressed within the plan. The plan should include any standard operating practices with regard to blasting and painting activities. Such included items may be the prohibition of performing uncontained blasting and painting over open water or blasting and painting during windy conditions which can render containment ineffective.

(b) Material Storage Areas

All stored and containerized materials (fuels, paints, solvents, waste oil, antifreeze, batteries) must be stored in a protected, secure location away from drains and plainly labeled. The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The plan must specify which materials are stored indoors and consider containment or enclosure for materials that are stored outdoors. Above ground storage tanks, drums, and barrels permanently stored outside must be delineated on the site map with a description of the containment measures in place to prevent leaks and spills. The permittee must consider implementing an inventory control plan to prevent excessive purchasing, storage, and handling of potentially hazardous materials. Where abrasive blasting is performed, the plan must specifically include a discussion on the storage and disposal of spent abrasive materials generated at the facility.

(c) Engine Maintenance and Repair Areas

The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for engine maintenance and repair. The permittee may

consider performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and/or collecting the storm water runoff from the maintenance area and providing treatment or recycling.

(d) Material Handling Areas

The plan must describe measures that prevent or minimize contamination of the storm water runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). The permittee may consider covering fueling areas; using spill and overflow protection; mixing paints and solvents in a designated area, preferably indoors or under a shed; and minimizing runoff of storm water to material handling areas or other equivalent measures.

(e) Fugitive Dust Emissions

The plan must describe measures that prevent or minimize fugitive dust emissions from coal handling areas. The permittee shall consider establishing procedures to minimize offsite tracking of coal dust. To prevent offsite tracking the facility may consider specially designed tires, or washing vehicles in a designated area before they leave the site, and controlling the wash water.

(f) Delivery Vehicles

The plan must describe measures that prevent or minimize contamination of storm water runoff from delivery vehicles arriving on the plant site. At a minimum the permittee should consider the following: (1) Develop procedures for the inspection of delivery vehicles arriving on the plant site, and ensure overall integrity of the body or container; and, (2) Develop procedures to deal with leakage or spillage from vehicles or containers, and ensure that proper protective measures are available for personnel and environment.

(g) Chemical Loading/Unloading Areas

The plan must describe measures that prevent or minimize the contamination of storm water runoff from chemical loading/unloading areas. Where practicable, chemical loading/unloading areas should be covered, and chemicals should be stored indoors. At a minimum the permittee must consider using the following measures or an equivalent: (1) Use containment curbs at chemical loading/unloading areas to contain spills; and, (2) During deliveries station personnel familiar with spill prevention and response procedures must be present to ensure that any leaks or spills are immediately contained and cleaned up.

(h) Miscellaneous Loading/Unloading Areas

The plan must describe measures that prevent or minimizes

the contamination of storm water runoff from loading and unloading areas. The plan may consider covering the loading area, minimizing storm water runoff to the loading area by grading, berthing, or curbing the area around the loading area to direct storm water away from the area, or locate the loading/unloading equipment and vehicles so that leaks can be contained in existing containment and flow diversion systems.

(i) Oil Bearing Equipment in Switchyards

The plan must describe measures to reduce the potential for storm water contamination from oil bearing equipment in switchyard areas.

(j) Administrative Parking Lots and Harbor Point Road

The plan must address measures to minimize coal fines in the administrative parking lot(s) and on Harbor Point Road, and shall include procedures for regular cleaning and inspection of these areas specifically to minimize total suspended solids in the discharges from outfalls 002 and 003. Structural and non-structural BMP's may be considered in order to achieve the intent of minimizing coal fines and associated solids in the discharges from outfalls 002 and 003.

(2) Inspections

The following areas shall be included in all inspections: blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; general yard area, switchyard areas, administrative parking lots and Harbor Point Road.

(3) Employee Training

Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify how often training will take place, but in all cases training must be held at least annually (once per calendar year). Employee training must, at a minimum, address the following areas when applicable to a facility: used oil management; spent solvent management; proper disposal of spent abrasives; spill prevention and control; fueling procedures; general good housekeeping practices; proper painting and blasting procedures; and used battery management. Employees, independent contractors, and customers must be informed about BMPs and be required to perform in accordance with these practices. The plan must consider posting instructions, easy to read descriptions or graphic depictions of BMPs, spill control/clean-up equipment and emergency phone numbers in the work areas.

ATTACHMENT 7

EFFLUENT LIMITATIONS/MONITORING
RATIONALE/SUITABLE DATA/
ANTIDEGRADATION/ANTIBACKSLIDING

VPDES PERMIT PROGRAM

Effluent Limitations and Monitoring Rationale

OUTFALL 001

The discharge conveyed through this outfall consists of equipment wash down water and treated storm water runoff from coal stored outdoors and Portland cement stored in enclosed silos to sedimentation pond to James River. Average flow is approximately 1.5801 MGD. Average storm water runoff flow is approximately 1.58 MGD. Average equipment wash down water flow is 0.0001 MGD. Equipment wash down water flow is reused treated storm water from the sedimentation pond. Since the equipment wash down water flow is very small part of average flow, the discharge will be treated as storm water. All samples will be grab. The monitoring frequency will be 1/3 months for all parameters. The basis is Best Professional Judgement (BPJ). This permit is similar to other coal and Portland cement storage facility permits in the Tidewater Region.

Outfall 001 is a valved outfall and needs to be manually released to have a discharge during or after a storm event, so the storm water language and sampling requirements will not apply to this outfall. This outfall also has toxicity screening criteria requirements that are addressed in the storm water management evaluation.

Guidance Memo 96-001 recommends that chemical water quality-based limits not be placed on storm water outfalls at this time because the methodology for developing limits and the proper method of sampling is still a concern and under review by EPA. Therefore, in the interim, screening criteria have been established at 2 times the acute criteria. These criteria are applied solely to identify those pollutants that should be given special emphasis during development of the Storm Water Pollution Prevention Plan (SWPPP). Any storm water outfall data (pollutant specific) submitted by the permittee which were above the established screening criteria levels requires monitoring in Part I.A. of the permit for that specific outfall and pollutant. Based on the review of the water quality monitoring data and the VPDES application, screening criteria and monitoring were not established for any specific pollutants (see table below). However, toxicity screening is required for this outfall. This outfall was sampled during their previous permit term and has a potential for toxicity, and should continue to be monitored.

The SWPPP required by Part I.C.4. of this permit is designed to reduce pollutants in storm water runoff. Annual toxicity screening is recommended. Pollutant specific monitoring results above the toxicity screening which results in an LC50 of less than 100% effluent, do not indicate unacceptable values; however, they do justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants, especially those identified by the application of the screening criteria, including toxicity, to the maximum extent practicable. An annual report is to be submitted to the Regional office and shall include the data collected the previous year with an indication if the SWPPP or any BMPs were modified based on the monitoring results.

OUTFALL 001						
PARAMETER	MONITORING DATA					2 X ACUTE CRITERION
Copper (ug/l)	20.0	5.0	4.0	6.0	.003	11.8
Nickel (ug/l)	20.0	12.0	70.0	<40.0	99.0	150
Zinc (ug/l)	220.0	<5.0	160.0	174.0	<2.5	190

Flow

Flow limits are NL mgd monthly average and NL mgd daily maximum. The flow is estimated. Monitoring frequency is 1/3 months. The basis is Best Professional Judgement (BPJ). The measurement of flow is necessary to evaluate the potential impact of the discharge on receiving waters.

pH

Effluent pH limits are 6.0 standard units (s.u.) minimum and 9.0 standard units (s.u.) maximum. The basis is BPJ to protect water quality. The Water Quality Standards at 9 VAC 25-260-50 limit pH in surface waters to the range of 6.0-9.0.

TPH

TPH limit is NL mg/l daily maximum. The basis is BPJ. The previous permit monitored for oil and grease NL mg/l daily maximum. Guidance Memo 96-002 recommends the replacement of oil and grease monitoring with the TPH requirements for facilities monitoring petroleum based contaminants. Petroleum-based oily materials are expected to be present in collected storm water. TPH is believed to be more representative parameter than oil and grease at this facility. Therefore, based on Guidance Memo 96-002 oil and grease monitoring was removed in favor of TPH monitoring. This parameter is also considered a good indicator of the effectiveness of the storm water BMPs to meet the intentions of the storm water pollution prevention plan.

Total phosphorus:

Phosphorus is limited at 2 mg/l monthly average and monitored 1/3 months in accordance with the State's Nutrient Policy. Previous flow measurements from this outfall indicate that the average flow has surpassed 1.0 mgd, requiring application of the nutrient policy to the outfall. There was a mass limit included in the previous permit, but the mass limit has been removed from the permit since the discharge is stormwater and does not include process wastewater. The concentration limit has been retained and has not changed from the previous permit.

Nitrogen:

Nitrogen is not limited, but is monitored 1/3 months in accordance with the State's Nutrient Policy. Previous flow measurements from this outfall indicate that the average flow has surpassed 1.0 mgd, requiring application of the nutrient policy to the outfall.

TSS:

TSS is limited to 50 mg/l daily maximum and is monitored 1/3 months. The basis is BPJ, and is typical of the requirements for TSS monitoring from a sedimentation basin treatment unit at an industrial facility. The limit is identical to the limit contained in the previous permit.

Dissolved Copper and Zinc:

These parameters will be monitored 1/3 months by grab samples as recommended in storm water evaluation advice memoranda.

**DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT**

FACILITY NAME: KINDER MORGAN BULK TERMINALS - PIER IX TERMINAL

PERMIT NUMBER: VA0057142

OUTFALL NUMBER: 001

QL = QUANTIFICATION LEVEL

NO FLOW DURING MONITORING PERIOD = *

PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JUN 1996		JUL 1996		AUG 1996		SEP 1996		OCT 1996	
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL				*	*	*	*	*	*	*	*
PH	1/M	SU	8.0 > 9.0				*	*	*	*	*	*	*	*
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50				*	*	*	*	*	*	*	*
OIL & GREASE	1/6M	MG/L	NL				*	*	*	*	*	*	*	*
TOTAL PHOSPHORUS	1/M	MG/L	2				*	*	*	*	*	*	*	*
TOTAL PHOSPHORUS	1/M	LBS/D	28				*	*	*	*	*	*	*	*
TOTAL NITROGEN	1/M	MG/L	NL				*	*	*	*	*	*	*	*
TOTAL NITROGEN	1/M	LBS/D	NL				*	*	*	*	*	*	*	*
DIS. COPPER	1/6M	UG/L	NL	10.0										
DIS. NICKEL	1/6M	UG/L	NL	40.0										
DIS. ZINC	1/6M	UG/L	NL	20.0										

DEPARTMENT OF ENVIRONMENTAL QUALITY
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PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					NOV 1996		DEC 1996							
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		0.18	0.18	*	*						
PH	1/M	SU	8.0 - 9.0		8.1	8.1	*	*						
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50			88		*						
OIL & GREASE	1/6M	MG/L	NL			<5		*						
TOTAL PHOSPHORUS	1/M	MG/L	2		<0.1			*						
TOTAL PHOSPHORUS	1/M	LBS/D	26		0.15			*						
TOTAL NITROGEN	1/M	MG/L	NL		2.5			*						
TOTAL NITROGEN	1/M	LBS/D	NL											
DIS. COPPER	1/6M	UG/L	NL	10.0										
DIS. NICKEL	1/6M	UG/L	NL	40.0										
DIS. ZINC	1/6M	UG/L	NL	20.0										

DEPARTMENT OF ENVIRONMENTAL QUALITY
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PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JAN 1997		FEB 1997		MAR 1997		APR 1997		MAY 1997	
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		0.24	0.24	*	*	*	*	*	*	*	*
PH	1/M	SU	6.0 - 9.0		7.1	7.1	*	*	*	*	*	*	*	*
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50			8		*		*		*		*
OIL & GREASE	1/6M	MG/L	NL			<5		*		*		*		*
TOTAL PHOSPHORUS	1/M	MG/L	2		<0.1		*		*		*		*	
TOTAL PHOSPHORUS	1/M	LBS/D	26		<0.20		*		*		*		*	
TOTAL NITROGEN	1/M	MG/L	NL		4.9		*		*		*		*	
TOTAL NITROGEN	1/M	LBS/D	NL											
DIS. COPPER	1/6M	UG/L	NL	10.0										
DIS. NICKEL	1/6M	UG/L	NL	40.0										
DIS. ZINC	1/6M	UG/L	NL	20.0										

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OUTFALL NUMBER: 001

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PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JUN 1997		JUL 1997		AUG 1997		SEP 1997		OCT 1997	
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		0.48	0.48	1.44	1.44	*	*	*	*	*	*
PH	1/M	PSU	8.0 - 9.0		8.6	8.6	7.5	7.5	*	*	*	*	*	*
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50			14		32		*		*		*
OIL & GREASE	1/6M	MG/L	NL			<5		<5		*		*		*
TOTAL PHOSPHORUS	1/M	MG/L	2		0.2		0.1		*		*		*	
TOTAL PHOSPHORUS	1/M	LBS/D	26		0.80		1.2		*		*		*	
TOTAL NITROGEN	1/M	MG/L	NL		24		20		*		*		*	
TOTAL NITROGEN	1/M	LBS/D	NL											
DIS. COPPER	1/6M	UG/L	NL	10.0										
DIS. NICKEL	1/6M	UG/L	NL	40.0										
DIS. ZINC	1/6M	UG/L	NL	20.0										

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PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					NOV 1997		DEC 1997		JAN 1998		FEB 1998		MAR 1998	
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		1.44	1.44	1.32	1.32						
PH	1/M	SU	6.0 - 9.0		6.8	6.8	7.7	7.7						
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50			52		40.0						
OIL & GREASE	1/6M	MG/L	NL			<5		<5						
TOTAL PHOSPHORUS	1/M	MG/L	2		0.1		<0.1							
TOTAL PHOSPHORUS	1/M	LBS/D	26		1.20		1.20							
TOTAL NITROGEN	1/M	MG/L	NL		15		21							
TOTAL NITROGEN	1/M	LBS/D	NL											
DIS. COPPER	1/6M	UG/L	NL	10.0										
DIS. NICKEL	1/6M	UG/L	NL	40.0										
DIS. ZINC	1/6M	UG/L	NL	20.0										

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PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JAN 1998		FEB 1998		MAR 1998		APR 1998		MAY 1998	
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		0.27	1.44	0.1	1.44	0.1	1.44	0.1	1.44	0.1	1.44
PH	1/M	SU	6.0 - 9.0		7.92	7.92	7.6	7.5	8.0	8.0	8.0	8.0	8.1	8.1
TOTAL SUSPENDED SOLIDS	1/M	MG/L	60			9.0		4		8		9		15
OIL & GREASE	1/6M	MG/L	NL			<5		<5		<5		<5		<5
TOTAL PHOSPHORUS	1/M	MG/L	2		0.2		<0.1		<0.1		0.1		0.2	
TOTAL PHOSPHORUS	1/M	LBS/D	26		2.4		1.2		1.2		0.51		2.70	
TOTAL NITROGEN	1/M	MG/L	NL		24.8		14.9		14.6		8.0		10.6	
TOTAL NITROGEN	1/M	LBS/D	NL											
DIS. COPPER	1/6M	UG/L	NL	10.0										
DIS. NICKEL	1/6M	UG/L	NL	40.0										
DIS. ZINC	1/6M	UG/L	NL	20.0										

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PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JUN 1998		JUL 1998		AUG 1998		SEP 1998		OCT 1998	
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		*	*	*	*	*	*	*	*	0.24	0.24
PH	1/M	SU	6.0 - 9.0		*	*	*	*	*	*	*	*	8.4	8.4
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50		*	*	*	*	*	*	*	*		19.0
OIL & GREASE	1/6M	MG/L	NL		*	*	*	*	*	*	*	*		<5
TOTAL PHOSPHORUS	1/M	MG/L	2		*	*	*	*	*	*	*	*	0.1	
TOTAL PHOSPHORUS	1/M	LBS/D	26		*	*	*	*	*	*	*	*	0.2	
TOTAL NITROGEN	1/M	MG/L	NL		*	*	*	*	*	*	*	*	11.5	
TOTAL NITROGEN	1/M	LBS/D	NL											
DIS. COPPER	1/6M	UG/L	NL	10.0										
DIS. NICKEL	1/6M	UG/L	NL	40.0										
DIS. ZINC	1/6M	UG/L	NL	20.0										

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PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					NOV 1998		DEC 1998							
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		*	*	0.080	0.070						
PH	1/M	SU	6.0 - 9.0		*	*	7.5	7.5						
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50			*			14					
OIL & GREASE	1/6M	MG/L	NL			*			<5					
TOTAL PHOSPHORUS	1/M	MG/L	2			*		<0.1						
TOTAL PHOSPHORUS	1/M	LBS/D	26			*		<0.07						
TOTAL NITROGEN	1/M	MG/L	NL			*		1.39						
TOTAL NITROGEN	1/M	LBS/D	NL											
DIS. COPPER	1/6M	UG/L	NL	10.0										
DIS. NICKEL	1/6M	UG/L	NL	40.0										
DIS. ZINC	1/6M	UG/L	NL	20.0										

**DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT**

FACILITY NAME: KINDER MORGAN BULK TERMINALS - PIER IX TERMINAL

PERMIT NUMBER: VA0057142

OUTFALL NUMBER: 001

QL = QUANTIFICATION LEVEL

NO FLOW DURING MONITORING PERIOD = *

PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JAN 1999		FEB 1999		MAR 1999		APR 1999		MAY 1999	
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		0.1829	1.4	*	*	*	*	0.044	1.32	*	*
PH	1/M	SU	6.0 - 9.0		8.1	8.1	*	*	*	*	7.9	7.9	*	*
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50			30		*		*		24		*
OIL & GREASE	1/6M	MG/L	NL		<5		*		*			<5		*
TOTAL PHOSPHORUS	1/M	MG/L	2		<0.1		*		*		0.2		*	
TOTAL PHOSPHORUS	1/M	LBS/D	26		0.1525		*		*		0.0734		*	
TOTAL NITROGEN	1/M	MG/L	NL		0.77		*		*		1.32		*	
TOTAL NITROGEN	1/M	LBS/D	NL										*	
DIS. COPPER	1/6M	UG/L	NL	10.0										*
DIS. NICKEL	1/6M	UG/L	NL	40.0										*
DIS. ZINC	1/6M	UG/L	NL	20.0										*

DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT

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PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JUN 1999		JUL 1999		AUG 1999		SEP 1999		OCT 1999	
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		0.023	0.69	0.050	0.81	0.0263	0.42	0.2005	1.44	0.073	1.05
PH	1/M	SU	6.0 - 9.0		7.74	7.74	7.6	7.6	8.15	8.15	6.4	6.4	7.1	7.1
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50			30		15		53*		15		6
OIL & GREASE	1/6M	MG/L	NL		<5		<5		<5		2		<1	
TOTAL PHOSPHORUS	1/M	MG/L	2		0.2		0.1		0.1		0.1		<0.1	
TOTAL PHOSPHORUS	1/M	LBS/D	26		0.0383		0.042		0.02		0.167		0.06	
TOTAL NITROGEN	1/M	MG/L	NL		1.5		1.0		1.9		5.8		3.55	
TOTAL NITROGEN	1/M	LBS/D	NL						0.42		9.6		2.15	
DIS. COPPER	1/6M	UG/L	NL	10.0						N/R		N/R		N/R
DIS. NICKEL	1/6M	UG/L	NL	40.0						N/R		N/R		N/R
DIS. ZINC	1/6M	UG/L	NL	20.0						N/R		N/R		N/R

PRS-001 Revised 02-01-01

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**DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT**

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PERMIT NUMBER: VA0057142

OUTFALL NUMBER: 001

QL = QUANTIFICATION LEVEL

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PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					NOV 1989		DEC 1989							
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		0.052	0.93	0.019	0.35						
PH	1/M	SU	6.0 - 8.0		7.5	7.5	7.7	7.7						
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50			13		28						
OIL & GREASE	1/6M	MG/L	NL			1		<1.0						
TOTAL PHOSPHORUS	1/M	MG/L	.2		0.3		0.5							
TOTAL PHOSPHORUS	1/M	LBS/D	26		0.13		0.08							
TOTAL NITROGEN	1/M	MG/L	NL		2.9		0.85							
TOTAL NITROGEN	1/M	LBS/D	NL		1.26		0.19							
DIS. COPPER	1/6M	UG/L	NL	10.0		NR		<0.05						
DIS. NICKEL	1/6M	UG/L	NL	40.0		NR		<0.10						
DIS. ZINC	1/6M	UG/L	NL	20.0		NR		0.17						

**DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT**

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OUTFALL NUMBER: 001

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PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JAN 2000		FEB 2000		MAR 2000		APR 2000		MAY 2000	
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		0.08	1.02	0.015517	0.3	0.046065	1.428	0.0395	1.185	.118703	1.44
PH	1/M	SU	6.0 - 9.0		7.5	7.5	6.9	6.9	8.5	8.5	8.5	8.5	8.4	8.4
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50			24		5		10		18		5
OIL & GREASE	1/6M	MG/L	NL			<1		<1.0		<1.0		<1		<1
TOTAL PHOSPHORUS	1/M	MG/L	2		0.5		<0.1		0.1		0.1		<0.1	
TOTAL PHOSPHORUS	1/M	LBS/D	26		0.248		0.012941		0.038418		0.032943		0.098988	
TOTAL NITROGEN	1/M	MG/L	NL		2.1		0.9		1.1		1.1		<0.5	
TOTAL NITROGEN	1/M	LBS/D	NL		1.04		0.181179		0.422596		0.362373		0.988985	
DIS. COPPER	1/6M	UG/L	NL	10.0		N/R		N/R		N/R		N/R		N/R
DIS. NICKEL	1/6M	UG/L	NL	40.0		N/R		N/R		N/R		N/R		N/R
DIS. ZINC	1/6M	UG/L	NL	20.0		N/R		N/R		N/R		N/R		N/R

**DEPARTMENT OF ENVIRONMENTAL QUALITY
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PERMIT NUMBER: VA0057142

OUTFALL NUMBER: 001

QL = QUANTIFICATION LEVEL

NO FLOW DURING MONITORING PERIOD = *

PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JUN 2000		JUL 2000		AUG 2000		SEP 2000		OCT 2000	
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		.0088063	1.44	.144194	1.44	.049355	1.53	0.5	1.17	0.318	0.48
PH	1/M	8U	6.0 - 9.0		6.9	6.9	8.2	8.2	7.9	7.9	6.07	6.07	7.2	7.2
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50			16		4		8		7		2
OIL & GREASE	1/6M	MG/L	NL			<1		1		<1		1		N/R
TOTAL PHOSPHORUS	1/M	MG/L	2		0.1		<0.1		<0.1		<0.1		0.03	
TOTAL PHOSPHORUS	1/M	LBS/D	28		0.188		0.120		.041162		<0.417		0.060048	
TOTAL NITROGEN	1/M	MG/L	NL		1.5		1		<0.5		<1		0.67	
TOTAL NITROGEN	1/M	LBS/D	NL		2.96		1.203		.411619		<4.17		1.77692	
DIS. COPPER	1/6M	UG/L	NL	10.0		<2		N/R		N/R		N/R		N/R
DIS. NICKEL	1/6M	UG/L	NL	40.0		<40		N/R		N/R		N/R		N/R
DIS. ZINC	1/6M	UG/L	NL	20.0		<2.5		N/R		N/R		N/R		N/R

DEPARTMENT OF ENVIRONMENTAL QUALITY
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FACILITY NAME: KINDER MORGAN BULK TERMINALS - PIER IX TERMINAL

PERMIT NUMBER: VA0057142

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QL = QUANTIFICATION LEVEL

NO FLOW DURING MONITORING PERIOD = *

PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					NOV 2000		DEC 2000							
					AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX	AVE/MIN	MAX
FLOW	1/M	MGD	NL		0.376	0.498	0.9108	0.48						
PH	1/M	SU	8.0 - 9.0		7.8	7.8	7.8	7.8						
TOTAL SUSPENDED SOLIDS	1/M	MG/L	50				9		4					
OIL & GREASE	1/6M	MG/L	NL			<5		<5						
TOTAL PHOSPHORUS	1/M	MG/L	2		0.02		0.09							
TOTAL PHOSPHORUS	1/M	LBS/D	26		0.010008		0.010008							
TOTAL NITROGEN	1/M	MG/L	NL		0.48		0.48							
TOTAL NITROGEN	1/M	LBS/D	NL		1.505203		1.505203							
DIS. COPPER	1/6M	UG/L	NL	10.0		3		N/R						
DIS. NICKEL	1/6M	UG/L	NL	40.0		20		N/R						
DIS. ZINC	1/6M	UG/L	NL	20.0		<30		N/R						

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING

FACILITY NAME: Kinder Morgan Bulk Terminals - Pier IX Terminals
PERMIT NUMBER: VA0057142
OUTFALL NUMBER: 001

SAMPLE TYPE: G = Grab for all parameters

SAMPLE 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

— = means that the QL is at the discretion of the permittee

N/R = not recorded 12/05/00 = date reported

PARAMETERS	QUANTIFICATION LEVEL	SAMPLE FREQUENCY	01/01/98 - 02/10/98	01/01/98 - 06/30/98	10/01/98 - 12/31/98	01/01/99 - 06/30/99	07/01/99 - 12/31/99	01/01/00 - 06/30/00	01/07/00 - 12/31/00	01/07/00 - 06/30/01
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Arsenic (Dis.)	10.0	X					N/A	N/R	N/R	N/R
Arsenic (Tot. Rec.)	10.0	X					N/A	N/R	N/R	N/R
Barium (Dis.)	20.0	X					N/A	N/R	N/R	N/R
Barium (Tot. Rec.)	20.0	X					N/A	N/R	N/R	N/R
Cadmium (Dis.)	1.0	A	6.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.0006	12/05/00
Cadmium (Tot. Rec.)	1.0	A	8.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.0006	12/05/00
Trivalent Chromium(III)*	10.0	A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<.01	12/05/00
Hexavalent Chromium VI	10.0	A	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<.01	12/05/00
Chromium (Tot. Rec.)	10.0	A	5.0	<10.0	5.0	<10.0	<5.0	<5.0	.0016	12/05/00
Copper (Dis.)	10.0	A	20.0	5.0	4.0	<10.0	6.0	<2.0	.003	12/05/00
Copper (Tot. Rec.)	10.0	A	55.0	7.0	7.0	<10.0	7.0	<10.0	.004	12/05/00
Iron (Dis.)		X					N/A	N/R	N/R	N/R
Iron (Tot. Rec.)		X					N/A	N/R	N/R	N/R
Lead (Dis.)	5.0	A	3.0	10.0	<5.0	<5.0	<5.0	<5.0	<.001	12/05/00
Lead (Tot. Rec.)	5.0	A	7.0	95.0	<5.0	<5.0	<5.0	<5.0	<.001	12/05/00
Manganese (Dis.)		X					N/A	N/R	N/R	N/R
Manganese (Tot. Rec.)		X					N/A	N/R	N/R	N/R
Mercury (Dis.)	0.3	A	<0.2	<0.2	<0.2	<0.3	<0.2	<0.2	<.0002	12/05/00
Mercury (Tot. Rec.)	0.3	A	<0.2	<0.2	<0.2	<0.3	<0.2	<0.2	<.0002	12/05/00
Nickel (Dis.)	40.0	A	20.0	12.0	70.0	<40.0	99.0	<40.0	.020	12/05/00
Nickel (Tot. Rec.)	40.0	A	20.0	39.0	80.0	<40.0	96.0	53	.024	12/05/00
Selenium (Dis.)	5.0	A	9.0	8.0	<5.0	<5.0	<5.0	<5.0	<.003	12/05/00
Selenium (Tot. Rec.)	5.0	A	9.0	15.0	<5.0	<5.0	<5.0	<5.0	<.003	12/05/00
Silver (Dis.)	2.0	A	2.0	<2.0	4.0	<2.0	5.0	<2.0	<.0002	12/05/00
Silver (Tot. Rec.)	2.0	A	2.0	4.0	7.0	<2.0	5.0	.4	<.0002	12/05/00
Zinc (Dis.)	20.0	A	220.0	<5.0	160.0	<20.0	174.0	<2.5	.03	12/05/00
Zinc (Tot. Rec.)	20.0	A	260.0	27.0	190.0	24.0	199.0	63	.03	12/05/00
Aldrin	0.05	C					N/A	N/R	N/R	<.04
Chloropyriphous	—	C					N/A	N/R	N/R	<.10
Chlordane	0.2	C					N/A	N/R	N/R	<.20
DDT	0.1	C					N/A	N/R	N/R	<.04
Demeton	—	C					N/A	N/R	N/R	<100.0
2,4-dichlorophenoxy acetic acid (2,4-D)		X					N/A	N/R	N/R	N/R
Dieldrin	0.1	C					N/A	N/R	N/R	<.04

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING

FACILITY NAME: Kinder Morgan Bulk Terminals - Pier IX Terminals
PERMIT NUMBER: VA0057142
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SAMPLE TYPE: G = Grab for all parameters

SAMPLE FREQUENCY:

A = once per six months beginning July 1, 1997
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PARAMETERS	QUANTIFICATION LEVEL	SAMPLE	01/01/98 - FREQUENCY	01/01/98 - 02/10/98	10/01/98 - 06/30/98	01/01/99 - 12/31/98	07/01/99 - 06/30/99	01/01/00 - 12/31/99	01/07/00 - 06/30/00	07/01/97 - 12/31/00
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Endosulfan I	0.1	C					N/A	N/R	N/R	<0.04
Endosulfan II	0.1	C					N/A	N/R	N/R	<0.04
Endosulfan Sulfate	0.1	C					N/A	N/R	N/R	<0.04
Endrin	0.1	C					N/A	N/R	N/R	<0.04
Guthion	—	C					N/A	N/R	N/R	<10.0
Heptachlor	0.05	C					N/A	N/R	N/R	<0.04
Hexachlorocyclohexane (Lindane)	0.05	C					N/A	N/R	N/R	<0.04
Malathion	—	C					N/A	N/R	N/R	<0.10
Methoxychlor	—	C					N/A	N/R	N/R	<0.20
Mirex	—	C					N/A	N/R	N/R	<0.10
Parathion	—	C					N/A	N/R	N/R	<0.10
PCB-1242	1.0	C					N/A	N/R	N/R	<0.5
PCB-1254	1.0	C					N/A	N/R	N/R	<0.5
PCB-1221	1.0	C					N/A	N/R	N/R	<0.5
PCB-1232	1.0	C					N/A	N/R	N/R	<0.5
PCB-1248	1.0	C					N/A	N/R	N/R	<0.5
PCB-1260	1.0	C					N/A	N/R	N/R	<0.5
PCB-1016	1.0	C					N/A	N/R	N/R	<0.5
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	X						N/A	N/R	N/R	N/R
Toxaphene	5.0	C					N/A	N/R	N/R	<1
Anthracene	10.0	C					N/A	N/R	N/R	<5
Benzo(a)anthracene	10.0	C					N/A	N/R	N/R	<5
Benzo(b)fluoranthene	10.0	C					N/A	N/R	N/R	<5
Benzo(k)fluoranthene	10.0	C					N/A	N/R	N/R	<5
Benzo(a)pyrene	10.0	C					N/A	N/R	N/R	<5
Chrysene	10.0	C					N/A	N/R	N/R	<5
Dibenz(a,h)anthracene	20.0	C					N/A	N/R	N/R	<5
1,2-Dichlorobenzene	10.0	C					N/A	N/R	N/R	<5
1,3-Dichlorobenzene	10.0	C					N/A	N/R	N/R	<5
1,4-Dichlorobenzene	10.0	C					N/A	N/R	N/R	<5
2,4-Dinitrotoluene	10.0	C					N/A	N/R	N/R	<5
Di-2-Ethylhexyl Phthalate	10.0	C					N/A	N/R	N/R	<15
Fluoranthene	10.0	C					N/A	N/R	N/R	<5
Fluorene	10.0	C					N/A	N/R	N/R	<5

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DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING

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PARAMETERS	QUANTIFICATION LEVEL	SAMPLE FREQUENCY	01/01/98 -	01/01/98 -	10/01/98 -	01/01/99 -	07/01/99 -	01/01/00 -	01/07/00 -	07/01/97 -
			02/10/98	06/30/98	12/31/98	06/30/99	12/31/99	06/30/00	12/31/00	6/30/01

Isophorone	10.0	C					N/A	N/R	N/R	<5
Indeno(1,2,3-cd)pyrene	20.0	C					N/A	N/R	N/R	<5
Naphthalene	10.0	C					N/A	N/R	N/R	<5
Pyrene	10.0	C					N/A	N/R	N/R	<5
Benzene	10.0	C					N/A	N/R	N/R	<1
Bromoform	10.0	C					N/A	N/R	N/R	<1
Carbon Tetrachloride	10.0	C					N/A	N/R	N/R	<1
Chlorodibromomethane	10.0	C					N/A	N/R	N/R	<1
Chloroform	10.0	C					N/A	N/R	N/R	<1
Chloromethane	20.0	C					N/A	N/R	N/R	<1
Dichloromethane	20.0	C					N/A	N/R	N/R	<1
Dichlorobromomethane	10.0	C					N/A	N/R	N/R	<1
1,2-Dichloroethane	10.0	C					N/A	N/R	N/R	<1
Ethylbenzene	10.0	C					N/A	N/R	N/R	<1
Monochlorobenzene	50.0	C					N/A	N/R	N/R	<1
Tetrachloroethylene	10.0	C					N/A	N/R	N/R	<1
Toluene	10.0	C					N/A	N/R	N/R	<1
Trichloroethylene	10.0	C					N/A	N/R	N/R	<1
Vinyl Chloride	10.0	C					N/A	N/R	N/R	<1
Pentachlorophenol	50.0	C					N/A	N/R	N/R	<5
Phenol	10.0	C					N/A	N/R	N/R	<5
2,4,6-Trichlorophenol	10.0	C					N/A	N/R	N/R	<5
Ammonia as NH ₃ -N	200	C				<0.5	0.8	<0.5	<1	12/05/00
Total Residual Chlorine	100	C					N/A	N/R	N/R	0.04
Cyanide	10.0	B	<10			<0.01	N/A	<0.01	N/R	07/07/00
Dioxin	0.00001	X					N/A	N/R	N/R	N/R
Hardness		A				251	661	360	330	12/05/00
Sulfate		X					N/A	N/R	N/R	N/R
Tributyltin		C					N/A	N/R	N/R	<1
Xylene (total)		C					N/A	N/R	N/R	<1

OUTFALL 002

The discharge conveyed through this outfall consists of storm water from South Harbor Road. Average flow is approximately 0.0405 MG. All samples will be grab.

Outfall 002 is storm water associated with regulated industrial activity with no treatment. The storm water language and sampling requirements will apply to this outfall.

Guidance Memo 96-001 recommends that chemical water quality-based limits not be placed on storm water outfalls at this time because the methodology for developing limits and the proper method of sampling is still a concern and under review by EPA. Therefore, in the interim, screening criteria have been established at 2 times the acute criteria. These criteria are applied solely to identify those pollutants that should be given special emphasis during development of the Storm Water Pollution Prevention Plan (SWPPP). Any storm water outfall data (pollutant specific) submitted by the permittee which were above the established screening criteria levels requires monitoring in Part I.A. of the permit for that specific outfall and pollutant. Based on the review of the water quality monitoring data and the VPDES application, screening criteria and monitoring were not established for any specific pollutants (see table below). However, toxicity screening is required for this outfall. This outfall was sampled during their previous permit term and has a potential for toxicity, and should continue to be monitored.

The SWPPP required by Part I.C.4. of this permit is designed to reduce pollutants in storm water runoff. Annual toxicity screening is recommended. Pollutant specific monitoring results above the toxicity screening which results in an LC50 of less than 100% effluent, do not indicate unacceptable values; however, they do justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants, especially those identified by the application of the screening criteria, including toxicity, to the maximum extent practicable. An annual report is to be submitted to the Regional office and shall include the data collected the previous year with an indication if the SWPPP or any BMPs were modified based on the monitoring results.

OUTFALL 002					
PARAMETER	MONITORING DATA				2 X ACUTE CRITERION
Copper (ug/l)	<0.05	<100	<50	<30	11.8
Nickel (ug/l)	<0.10	<50	<10	<200	150
Zinc (ug/l)	<0.50	2	<50	<30	190

Flow

Flow limit is NL mgd daily maximum. The flow is estimated. Monitoring frequency is 1/3 months. The basis is Best Professional Judgment (BPJ). The measurement of flow is necessary to evaluate the potential impact of the discharge on receiving waters.

pH

Effluent pH limits are 6.0 standard units (s.u.) minimum and 9.0 standard units (s.u.) maximum, to be monitored 1/6 months. The basis is BPJ to protect water quality. The Water Quality Standards at 9 VAC 25-260-50 limit pH in surface waters to the range of 6.0-9.0.

TSS

TSS limit is NL mg/l daily maximum, monitored 1/3 months. The basis is BPJ. The Water Quality Standards at 9 VAC 25-260-20 prohibit the presence of substances in amounts which interfere with designated uses and authorize the control of substances that produce turbidity, settle or form sludge deposits. This parameter is also considered a good indicator of the effectiveness of the storm water BMPs to meet the intentions of the storm water pollution prevention plan. The previous permit included a limit of 50 mg/l daily maximum for TSS. This limit was removed during this reissuance process. The limit was placed on storm water that is not associated with coal pile runoff and received no treatment. Guidance for including limits on discharges from coal pile runoff was mistakenly applied to this outfall. Based on the provisions in the anti-backsliding regulations, mistakes in applying regulations or guidance is acceptable for backsliding on a BPJ limit. Facility-specific BMPs will address the specific areas drained by this outfall, and will utilize BMP's to control TSS discharges in the storm water.

TPH

TPH limit is NL mg/l daily maximum. The basis is BPJ. The previous permit monitored for oil and grease NL mg/l daily maximum. Guidance Memo 96-002 recommends the replacement of oil and grease monitoring with the TPH requirements for facilities monitoring petroleum based contaminants. Petroleum-based oily materials are expected to be present in collected storm water. TPH is believed to be more representative parameter than oil and grease at this facility. Therefore, based on Guidance Memo 96-002 oil and grease monitoring was removed in favor of TPH monitoring. This parameter is also considered a good indicator of the effectiveness of the storm water BMPs to meet the intentions of the storm water pollution prevention plan.

Dissolved Copper:

This parameters will be monitored 1/3 months by grab samples as recommended in storm water evaluation advice memoranda.

**DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT**

FACILITY NAME: KINDER MORGAN BULK TERMINALS - PIER IX TERMINAL

PERMIT NUMBER: VA0057142

OUTFALL NUMBER: 002

NO FLOW DURING MONITORING PERIOD = *

UNABLE TO TEST THIS SAMPLE; TEST SHALL BE CONDUCTED DURING NEXT DISCHARGE OCCURRENCE = **

QL = QUANTIFICATION LEVEL

DNRR = DID NOT REPORT RESULTS

NOTE: A = LABORATORY FAILED TO PERFORM ALL NECESSARY TEST FOR JUL-DEC 1999.

THE RE-SAMPLING FOR JUL-DEC 1999 PARAMETERS WERE DONE ON 01/10/00.

PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JAN-JUN 1998		JUL-DEC 1998		JAN-JUN 1999		JUL-DEC 1999		JUL-DEC 1999	
					MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
FLOW	1/6M	MG				DNRR		DNRR		0.00022		0.00096		0.002182
PH	1/6M	SU	6.0 - 9.0			DNRR		DNRR	7.28	7.28	A	A	8.2	8.2
TOTAL SUSPENDED SOLIDS	1/6M	MG/L	50			DNRR		DNRR		80		12		290
OIL & GREASE	1/6M	MG/L				DNRR		DNRR		<5		A		<50
DIS. COPPER	1/6M	UG/L		10.0		DNRR		DNRR		<0.05		A		<100
DIS. NICKEL	1/6M	UG/L		40.0		DNRR		DNRR		<0.10		A		<50
DIS. ZINC	1/6M	UG/L		20.0		DNRR		DNRR		<0.50		A		2

**DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT**

FACILITY NAME: KINDER MORGAN BULK TERMINALS - PIER IX TERMINAL

PERMIT NUMBER: VA0057142

OUTFALL NUMBER: 002

NO FLOW DURING MONITORING PERIOD = *

UNABLE TO TEST THIS SAMPLE; TEST SHALL BE CONDUCTED DURING NEXT DISCHARGE OCCURRENCE = **

QL = QUANTIFICATION LEVEL

NOTE: TSS WAS SAMPLED ON 11/25/00, THE REMINDER PARAMETERS WERE SAMPLED ON 12/14/00.

THIS SAMPLING WAS DONE FOR THE MONITORING PERIOD OF JUN-DEC 2000.

PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS							
					JAN-JUN 2000		JUL-DEC 2000		JUL-DEC 2000		JAN-JUN 2001	
					MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
FLOW	1/6M	MG				0.0004		0.0796		0.151		
PH	1/6M	SU	6.0 - 9.0		6.22	6.22	8.1	8.1				
TOTAL SUSPENDED SOLIDS	1/6M	MG/L	50			1681				37		
OIL & GREASE	1/6M	MG/L	NL			3		<5				
DIS. COPPER	1/6M	UG/L	NL	10.0		<50		<30				
DIS. NICKEL	1/6M	UG/L	NL	40.0		<10		<200				
DIS. ZINC	1/6M	UG/L	NL	20.0		<50		<30				

**DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT**

FACILITY NAME: KINDER MORGAN BULK TERMINALS - PIER IX TERMINAL

PERMIT NUMBER: VA0057142

OUTFALL NUMBER: 002

NO FLOW DURING MONITORING PERIOD = *

UNABLE TO TEST THIS SAMPLE; TEST SHALL BE CONDUCTED DURING NEXT DISCHARGE OCCURRENCE = **

QL = QUANTIFICATION LEVEL

DNRR = DID NOT REPORT RESULTS

PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS							
					JAN-JUN 1996		JUL-DEC 1996		JAN-JUN 1997		JUL-DEC 1997	
					MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
FLOW	1/6M	MG									DNRR	DNRR
PH	1/6M	SU	6.0 - 9.0								DNRR	DNRR
TOTAL SUSPENDED SOLIDS	1/6M	MG/L	50								DNRR	DNRR
OIL & GREASE	1/6M	MG/L									DNRR	DNRR
DIS. COPPER	1/6M	UG/L		10.0								DNRR
DIS. NICKEL	1/6M	UG/L		40.0								DNRR
DIS. ZINC	1/6M	UG/L		20.0								DNRR

VPDES PERMIT PROGRAM

Effluent Limitations and Monitoring Rationale

OUTFALL 003

The discharge conveyed through this outfall consists of storm water from South Harbor Road and administration parking lot. Average flow is approximately 0.0408 MGD. All samples will be grab.

Outfall 003 is storm water associated with regulated industrial activity with no treatment, the storm water language and sampling requirements will apply to this outfall. This outfall also has toxicity screening criteria requirements that are addressed in the storm water management evaluation.

Guidance Memo 96-001 recommends that chemical water quality-based limits not be placed on storm water outfalls at this time because the methodology for developing limits and the proper method of sampling is still a concern and under review by EPA. Therefore, in the interim, screening criteria have been established at 2 times the acute criteria. These criteria are applied solely to identify those pollutants that should be given special emphasis during development of the Storm Water Pollution Prevention Plan (SWPPP). Any storm water outfall data (pollutant specific) submitted by the permittee which were above the established screening criteria levels requires monitoring in Part I.A. of the permit for that specific outfall and pollutant. Based on the review of the water quality monitoring data and the VPDES application, screening criteria and monitoring were not established for any specific pollutants (see table below). However, toxicity screening is required for this outfall. This outfall was sampled during their previous permit term and has a potential for toxicity, and should continue to be monitored.

The SWPPP required by Part I.C.4. of this permit is designed to reduce pollutants in storm water runoff. Annual toxicity screening is recommended. Pollutant specific monitoring results above the toxicity screening which results in an LC50 of less than 100% effluent, do not indicate unacceptable values; however, they do justify the need to reexamine the effectiveness of the SWPPP and any best management practices (BMPs) being utilized. The goal of the SWPPP is to reduce pollutants, especially those identified by the application of the screening criteria, including toxicity, to the maximum extent practicable. An annual report is to be submitted to the Regional office and shall include the data collected the previous year with an indication if the SWPPP or any BMPs were modified based on the monitoring results.

OUTFALL 003

PARAMETER	MONITORING DATA				2 X ACUTE CRITERION
Copper (ug/l)	<0.05	<100	425	<30	11.8
Nickel (ug/l)	<0.10	<50	<10	<20	150
Zinc (ug/l)	<0.05	1	80	<30	190

OUTFALL 003 (continued)**Flow**

Flow limit is NL mgd daily maximum. The flow is estimated. Monitoring frequency is 1/3 months. The basis is Best Professional Judgment (BPJ). The measurement of flow is necessary to evaluate the potential impact of the discharge on receiving waters.

pH

Effluent pH limits are 6.0 standard units (s.u.) minimum and 9.0 standard units (s.u.) maximum, monitored 1/6 months. The basis is BPJ to protect water quality. The Water Quality Standards at 9 VAC 25-260-50 limit pH in surface waters to the range of 6.0-9.0.

TSS

TSS limit is NL mg/l daily maximum, monitored 1/3 months. The basis is BPJ. The Water Quality Standards at 9 VAC 25-260-20 prohibit the presence of substances in amounts which interfere with designated uses and authorize the control of substances that produce turbidity, settle or form sludge deposits. This parameter is also considered a good indicator of the effectiveness of the storm water BMPs to meet the intentions of the storm water pollution prevention plan. The previous permit included a limit of 50 mg/l daily maximum for TSS. This limit was removed during this reissuance process. The limit was placed on storm water that is not associated with coal pile runoff and received no treatment. Guidance for including limits on discharges from coal pile runoff was mistakenly applied to this outfall. Based on the provisions in the anti-backsliding regulations, mistakes in applying regulations or guidance is acceptable for backsliding on a BPJ limit. Facility-specific BMPs will address the specific areas drained by this outfall, and will utilize BMP's to control TSS discharges in the storm water.

TPH

TPH limit is NL mg/l daily maximum, monitored 1/6 months. The basis is BPJ. The previous permit monitored for oil and grease NL mg/l daily maximum. Guidance Memo 96-002 recommends the replacement of oil and grease monitoring with the TPH requirements for facilities monitoring petroleum based contaminants. Petroleum-based oily materials are expected to be present in collected storm water. TPH is believed to be more representative parameter than oil and grease at this facility. Therefore, based on Guidance Memo 96-002 oil and grease monitoring was removed in favor of TPH monitoring. This parameter is also considered a good indicator of the effectiveness of the storm water BMPs to meet the intentions of the storm water pollution prevention plan.

Dissolved Copper:

This parameter will be monitored 1/3 months by grab samples as recommended in storm water evaluation advice memoranda.

DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT

FACILITY NAME: KINDER MORGAN BULK TERMINALS - PIER IX TERMINAL

PERMIT NUMBER: VA0057142

OUTFALL NUMBER: 003

NO FLOW DURING MONITORING PERIOD = *

UNABLE TO TEST THIS SAMPLE; TEST SHALL BE CONDUCTED DURING NEXT DISCHARGE OCCURRENCE = **

QL = QUANTIFICATION LEVEL

DNRR = DID NOT REPORT RESULTS

PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS							
					JAN-JUN 1996		JUL-DEC 1996		JAN-JUN 1997		JUL-DEC 1997	
					MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
FLOW	1/6M	MG									DNRR	DNRR
PH	1/6M	SU	6.0 - 9.0								DNRR	DNRR
TOTAL SUSPENDED SOLIDS	1/6M	MG/L	50								DNRR	DNRR
OIL & GREASE	1/6M	MG/L	NL								DNRR	DNRR
DIS. COPPER	1/6M	UG/L		10.0								DNRR
DIS. NICKEL	1/6M	UG/L		40.0								DNRR
DIS. ZINC	1/6M	UG/L		20.0								DNRR
												DNRR

DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT

FACILITY NAME: KINDER MORGAN BULK TERMINALS - PIER IX TERMINAL

PERMIT NUMBER: VA0057142

OUTFALL NUMBER: 003

NO FLOW DURING MONITORING PERIOD = *

UNABLE TO TEST THIS SAMPLE; TEST SHALL BE CONDUCTED DURING NEXT DISCHARGE OCCURRENCE = **

QL = QUANTIFICATION LEVEL

DNRR = DID NOT REPORT RESULTS

NOTE: A = LABORATORY FAILED TO PERFORM ALL NECESSARY TEST FOR JUL-DEC 1999.

THE RE-SAMPLING FOR JUL-DEC 1999 PARAMETERS WERE DONE ON 01/10/00.

PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS									
					JAN-JUN 1998		JUL-DEC 1998		JAN-JUN 1999		JUL-DEC 1999		JUL-DEC 1999	
					MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
FLOW	1/6M	MG				DNRR		DNRR		0.000331		0.00144		0.004091
PH	1/6M	SU	6.0 - 9.0			DNRR		DNRR	7.78	7.78	A	A	8.1	8.1
TOTAL SUSPENDED SOLIDS	1/6M	MG/L	50			DNRR		DNRR		72		4		230
OIL & GREASE	1/6M	MG/L				DNRR		DNRR		<5		A		<50
DIS. COPPER	1/6M	UG/L		10.0		DNRR		DNRR		<0.05		A		<100
DIS. NICKEL	1/6M	UG/L		40.0		DNRR		DNRR		<0.10		A		<50
DIS. ZINC	1/6M	UG/L		20.0		DNRR		DNRR		<0.05		A		1

DEPARTMENT OF ENVIRONMENTAL QUALITY
DISCHARGE MONITORING REPORT

FACILITY NAME: KINDER MORGAN BULK TERMINALS - PIER IX TERMINAL

PERMIT NUMBER: VA0057142

OUTFALL NUMBER: 003

NO FLOW DURING MONITORING PERIOD = *

UNABLE TO TEST THIS SAMPLE; TEST SHALL BE CONDUCTED DURING NEXT DISCHARGE OCCURRENCE = **

QL = QUANTIFICATION LEVEL

NOTE: TSS WAS SAMPLED ON 11/25/00. THE REMINDER PARAMETERS WERE SAMPLED ON 12/14/00.

THIS SAMPLING WAS DONE FOR THE MONITORING PERIOD OF JUN-DEC 2000.

PARAMETERS	FREQUENCY OF ANALYSIS	UNITS	LIMIT	QL	MONITORING PERIODS							
					JAN-JUN 2000		JUL-DEC 2000		JUL-DEC 2000		JAN-JUN 2001	
					MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
FLOW	1/6M	MG				0.00086		0.0796		0.151		
PH	1/6M	SU	6.0 - 9.0		6.7	6.7	8	8				
TOTAL SUSPENDED SOLIDS	1/6M	MG/L	50			867				31		
OIL & GREASE	1/6M	MG/L	NL			2		<5				
DIS. COPPER	1/6M	UG/L	NL	10.0		425		<30				
DIS. NICKEL	1/6M	UG/L	NL	40.0		<10		<20				
DIS. ZINC	1/6M	UG/L	NL	20.0		80		<30				

ATTACHMENT 10

MATERIAL STORED

SALT WATER**COPPER**

Salt Water Acute Criterion = 5.9 ug/l

$$SC = 5.9 \times 2 = 11.8 \text{ ug/l}$$

ZINC

Salt Water Acute Criterion = 95 ug/l

$$SC = 95 \times 2 = 190 \text{ ug/l}$$

FRESH WATER**COPPER**

Fresh Water Acute Criterion

$$WER \exp\{m_a[\ln(\text{hardness})] + b_a\}$$

$$m_a = 0.9422$$

$$\text{hardness} = 85$$

$$b_a = -1.464$$

$$SC = 15.21 \text{ ug/l} \times 2 = 30.4 \text{ ug/l}$$

ZINC

Fresh Water Acute Criterion

$$WER \exp\{m_a[\ln(\text{hardness})] + b_a\}$$

$$m_a = 0.8473$$

$$\text{hardness} = 85$$

$$b_a = 0.8604$$

$$SC = 101.97 \times 2 = 203.9 \text{ ug/l}$$

ATTACHMENT 8

SPECIAL CONDITIONS RATIONALE

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE

8-1

Name of Condition:

B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1.a. Water Quality Standards Reopener

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-220 D., Water Quality Standards and State Requirements, dictates that the permit shall include limits to prevent violations of water quality standards. 40 CFR Part 131, Water Quality Standards, 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 Clean Water Act authorizes effluent limitations to be established which will contribute to the attainment or maintenance of the water quality.

1.b. Nutrient Enriched Waters Reopener

Rationale: The Policy for Nutrient Enriched Waters, 9 VAC 25-40 et. seq., 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.

1.c. Total Maximum Daily Load (TMDL) Reopener

Rationale: For specified waters, section 303(d) of the Clean Water Act requires the development of total maximum daily loads necessary to achieve the applicable water quality standards. The TMDL must take into account seasonal variations and a margin of safety. In addition, section 62.1-44.19:7 of the State Water Control Law requires the development and implementation of plans to address impaired waters, including TMDLs. This condition allows for the permit to be either modified or, alternatively, revoked and reissued to incorporate the requirements of a TMDL once it is developed. In addition, the reopener recognizes that, in accordance to section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan or other wasteload allocation prepared under section 303 of the Act.

2. Operations & Maintenance (O & M) Manual

Rationale: The State Water Control Law, Section 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. In addition, 40 CFR 122.41 (e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) in order to achieve compliance with the permit (includes laboratory controls and QA/QC).

3. Notification Levels

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-200 and 40 CFR 122.42 (a) require notification of the discharge of certain parameters at or above specific concentrations for existing manufacturing, commercial mining and silvicultural discharges.

4. Quantification Levels Under Part I.A.

Rationale: States are authorized to establish monitoring methods and procedures to compile and analyze data on water quality, as per 40 CFR part 130, Water Quality Planning and Management, subpart 130.4.

5. Compliance Reporting Under Part I.A.

8-2

Rationale: Defines reporting requirements for toxic parameters with quantification levels to ensure consistent, accurate reporting on submitted reports.

6. Materials Handling and Storage

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-50 A., prohibits the discharge of any wastes into State waters unless authorized by permit. The State Water Control 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.

C. STORM WATER MANAGEMENT CONDITIONS

1. Sampling Methodology for Specific Outfalls 001, 002, 003

Rationale: Defines methodology for collecting representative effluent samples in conformance with applicable regulations.

2. Storm Water Management Evaluation

Rationale: The Clean Water Act 402(p) (2) (B) requires permits for storm water discharges associated with industrial activity. VPDES permits for storm water discharges must establish BAT/BCT requirements in accordance with 402(p) (3) of the Act. The Storm Water Pollution Prevention Plan is the vehicle proposed by EPA in the final NPDES General Permits for Storm Water Discharges Associated with Industrial Activity (Federal Register Sept 9, 1992) to meet the requirements of the Act. Additionally, the VPDES Permit Regulation, 9 VAC 25-31-220 K., and 40 CFR 122.44 (k) allow BMPs for the control of toxic pollutants listed in Section 307 (a)(1), and hazardous substances listed in Section 311 of the Clean Water Act where numeric limits are infeasible or BMPs are needed to accomplish the purpose/intent of the law.

Finally, the EPA produced a document dated August 1, 1996, entitled "Interim Permitting Approach for Water Quality- Effluent Limitations in Storm Water Permits". This document indicated that an interim approach to limiting storm water could be through the use of best management practices rather than numerical limits. EPA pointed out that section 502 of the Clean Water Act (CWA) defined "effluent limitation" to mean "any restriction on quantities, rates, and concentrations of constituents discharged from point sources. The CWA does not say that effluent limitations need be numeric." The use of BMPs falls in line with the Clean Water Act which notes the need to control these discharges to the maximum extent necessary to mitigate impacts on water quality.

3. General Storm Water Conditions

a. Sample Type

Rationale: This stipulates the proper sampling methodology for qualifying rain events from regulated storm water outfalls. Use of this condition is a BPI determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

b. Recording of Results

Rationale: This sets forth the information which must be recorded and reported for each storm event sampling (ie. date and duration event, rainfall measurement, and duration between qualifying events). It also requires the maintenance of daily rainfall logs which are to be reported. This condition is carried over from the previous storm water pollution prevention plan requirements contained in the EPA storm water baseline industrial general permit.

c. Sampling Waiver

Rationale: This condition allows the permittee to collect substitute samples of qualifying storm events in the event of adverse climatic conditions. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

d. Representative Discharge

Rationale: This condition allows the permittee to submit the results of sampling from one outfall as representative of other similar outfalls, provided the permittee can demonstrate that the outfalls are substantially identical. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

e. Quarterly Visual Examination of Storm Water Quality

Rationale: This condition requires that visual examinations of storm water outfalls take place at a specified frequency and sets forth what information needs to be checked and documented. These examinations assist with the evaluation of the pollution prevention plan by providing a simple, low cost means of assessing the quality of storm water discharge with immediate feedback. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

f. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities

Rationale: This condition requires that the discharge of hazardous substances or oil from a facility be eliminated or minimized in accordance with the facility's storm water pollution prevention plan. If there is a discharge of a material in excess of a reportable quantity, it establishes the reporting requirements in accordance with state laws and federal regulations. In addition, the pollution prevention plan for the facility must be reviewed and revised as necessary to prevent a reoccurrence of the spill. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

4. Storm Water Pollution Prevention Plan

Rationale: The Clean Water Act 402(p) (2) (B) requires permits for storm water discharges associated with industrial activity. VPDES permits for storm water discharges must establish BAT/BCT requirements in accordance with 402(p) (3) of the Act. The Storm Water Pollution Prevention Plan is the vehicle proposed by EPA in the final NPDES General Permits for Storm Water Discharges Associated with Industrial Activity (Federal Register Sept 9, 1992) to meet the requirements of the Act. Additionally, the VPDES Permit Regulation, 9 VAC 25-31-220 K., and 40 CFR 122.44 (k) allow BMPs for the control of toxic pollutants listed in Section 307 (a)(1), and hazardous substances listed in Section 311 of the Clean Water Act where numeric limits are infeasible or BMPs are needed to accomplish the purpose/intent of the law.

5. Facility-specific Storm Water Conditions

Rationale: These conditions set forth additional site-specific storm water pollution prevention plan requirements. Use of these conditions is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and DEQ's general permit for storm water associated with industrial activities and is consistent with those permits.

ATTACHMENT 9

TOXICS MONITORING/TOXICS REDUCTION/
WET LIMIT RATIONALE

7-1

M E M O R A N D U M

**DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE**

5636 Southern Boulevard

Virginia Beach, VA 23462

SUBJECT: Continuation of Toxic Management Program (TMP) limits for Kinder Morgan Terminals, Inc. (VA0057142)

TO: Richard E. Fox

FROM: Mark F. Bushing

DATE: February 21, 2001

COPIES: TRO File (PPP #451)

Kinder Morgan is a coal storage facility. All outfalls at the facility are considered storm water discharges. Outfall 001 has a lagoon with storage capabilities and thus the normal 72 hour, .1 inch rain event sampling schedule would not apply to that outfall. We have done biological monitoring at outfall 001 during the past permit term and have had failures with *Mysidopsis bahia* in December 1997 and January 1998.

Outfall 002 has been added to the storm water management section of this permit due to elevated ?? levels. However, this facility has redesigned some berthing at the facility to ensure containment and decrease contamination from the rail area and neighboring facility into the discharge of outfall 002. This outfall had a potential for toxicity, and should have biological monitoring. Outfall 003 may also have potential for toxicity, however, since one of the drop inlets that would have caused the most problems was redirected back to outfall 001, chemical monitoring should be done during this permit term.

According to our new guidance memo the following applies to this facility:

**Contaminated stormwater discharges should be addressed through BMP's and the Stormwater Pollution Prevention Plan. Acute toxicity testing should be included and used to show the benefits of actions taken.*

It is recommended that outfalls 001 and 002 be monitored and be included in the permit's special condition I.C.2, Storm Water Management Evaluation.

2. Storm Water Management Evaluation

The Storm Water Pollution Prevention Plan, which is to be developed and maintained in accordance with Part I.C.4 of this permit, shall have a goal of reducing pollutants discharged at all the regulated storm water outfalls.

a. Pollutant Specific Screening

The goal shall place emphasis on reducing, to the maximum extent practicable, the following screening criteria parameters in the outfalls noted below.

OUTFALL NO.	POLLUTANTS
-------------	------------

b. Toxicity Screening

The permittee shall conduct annual acute toxicity tests at outfalls 001 and 002 using grab samples of final effluent. These acute screening tests shall be 48-hour static tests using Mysidopsis bahia and Cyprinodon variegatus, conducted in such a manner and at sufficient dilutions for calculation of a valid LC₅₀. The tests shall be conducted on a calendar year basis with one copy of all results and all supporting information submitted with the annual report due by February 10th of each year.

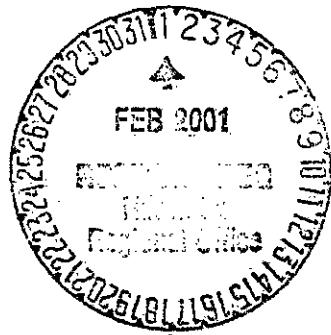
Technical assistance in developing the procedures for these tests shall be provided by the Department of Environmental Quality (DEQ), if requested by the permittee. Laboratory test protocols and the use of alternative species shall be approved by the DEQ staff prior to the initiation of testing. As long as the permittee utilizes the currently approved laboratory and their approved protocols, no protocol approval action is necessary. However, if the permittee changes laboratories, or sampling or testing procedures, test protocols must be submitted for approval at least two months prior to that change. If necessary, submit test protocols for approval by October 10, 2001.

If any of the biological screening tests are invalidated, an additional test shall be conducted within thirty (30) days of notification. If there is no discharge during this 30-day period, a sample must be taken during the first qualifying discharge.

Kinder Morgan Bulk Terminals, Inc.

January 31, 2001

Richard Fox
Department of Environmental Quality
5636 Southern Blvd.
Virginia Beach, VA 23462

**Subject: Information Needed For Permit Renewal****Dear Mr. Fox,**

Enclosed is the information you requested. All above ground storage is within a retention area with enough volume to contain the liquid plus a 10 year storm event.

All oil filters are stored in a container provided by "Safety-Kleen" and disposed of by them on an as needed basis.

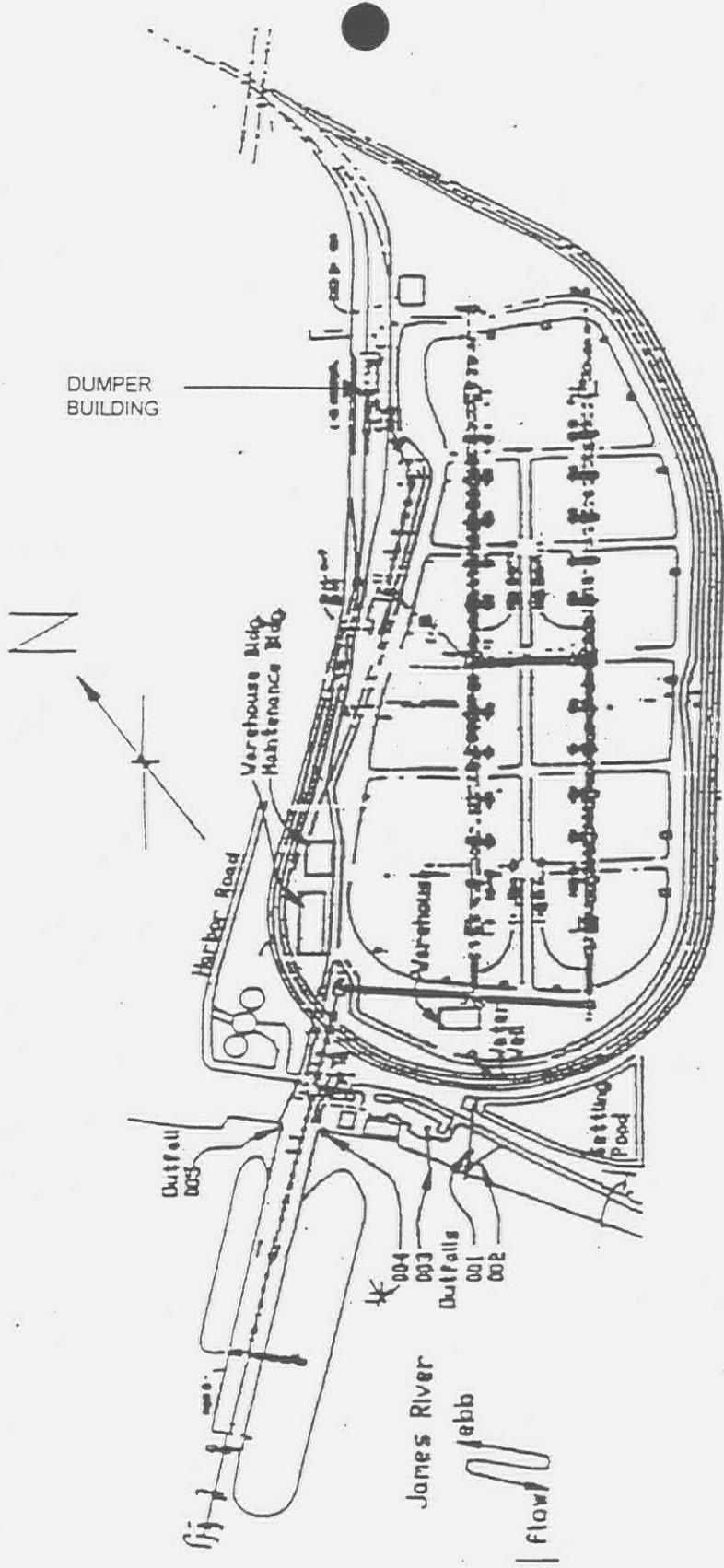
Other contaminated materials are contained in 55 gal. Drums and stored in the "Oil Storage Building" for proper disposal.

If I can be of any further assistance please call me at (757) 928-1541.

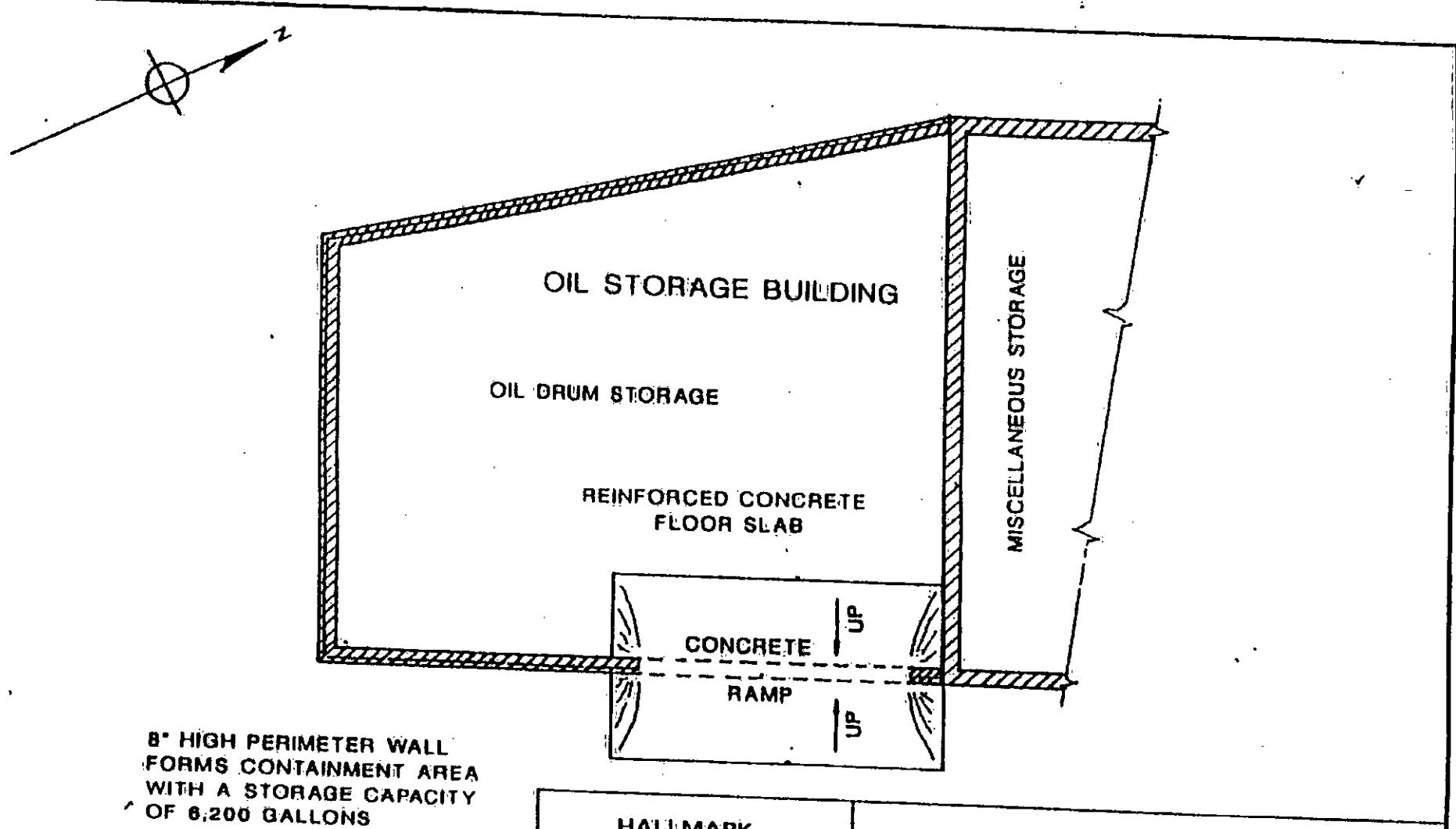
Sincerely,**Robert Coffey****Senior Facility Manager****cc: file****Doug Starrett**



SITE PLAN



TERMINAL SITE PLAN FIGURE 10

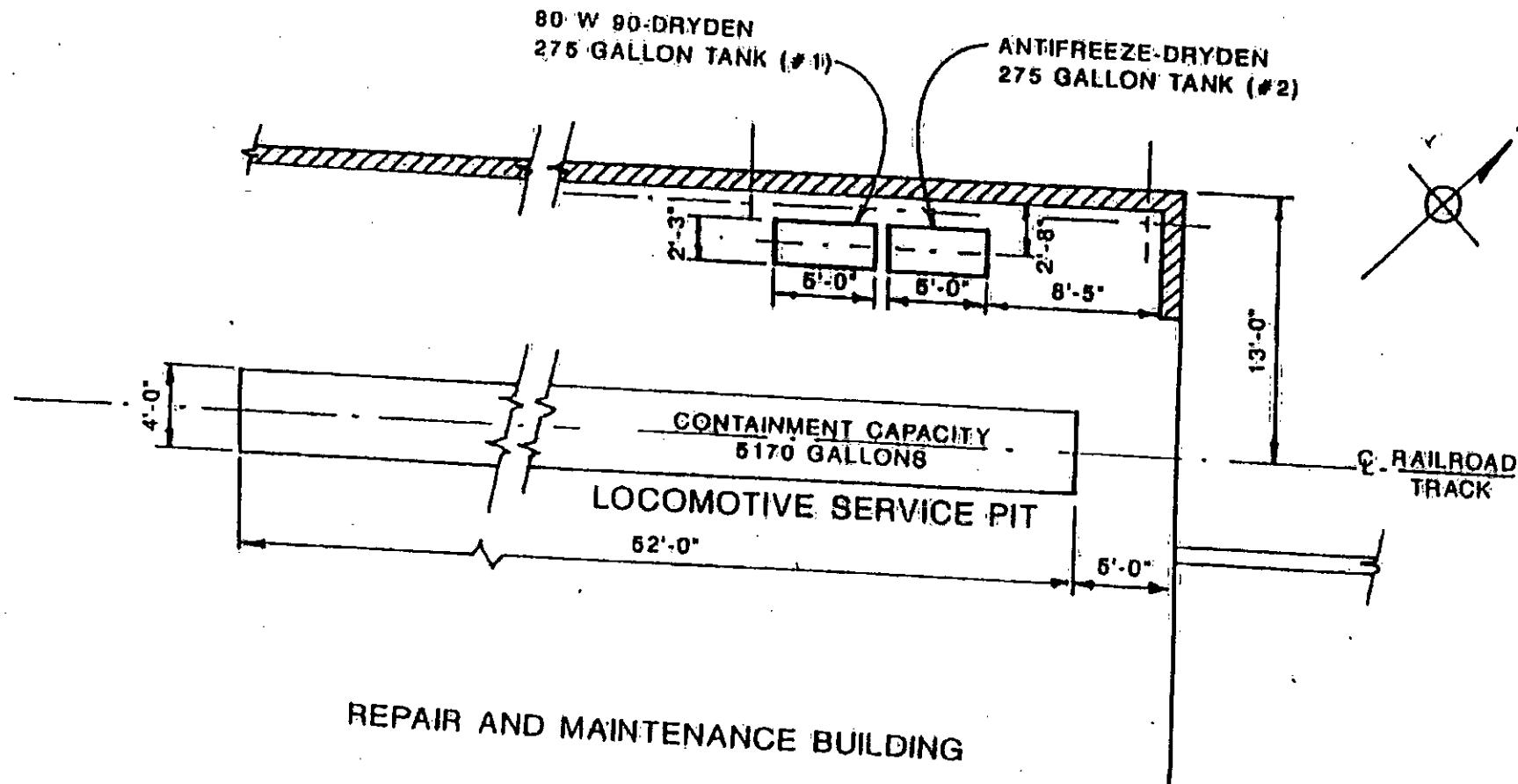


HALLMARK
CONSULTANTS, P.C.
VIRGINIA BEACH, VA
SKETCH BY WWF
DECEMBER 1992

PIER IX TERMINAL FIGURE 4

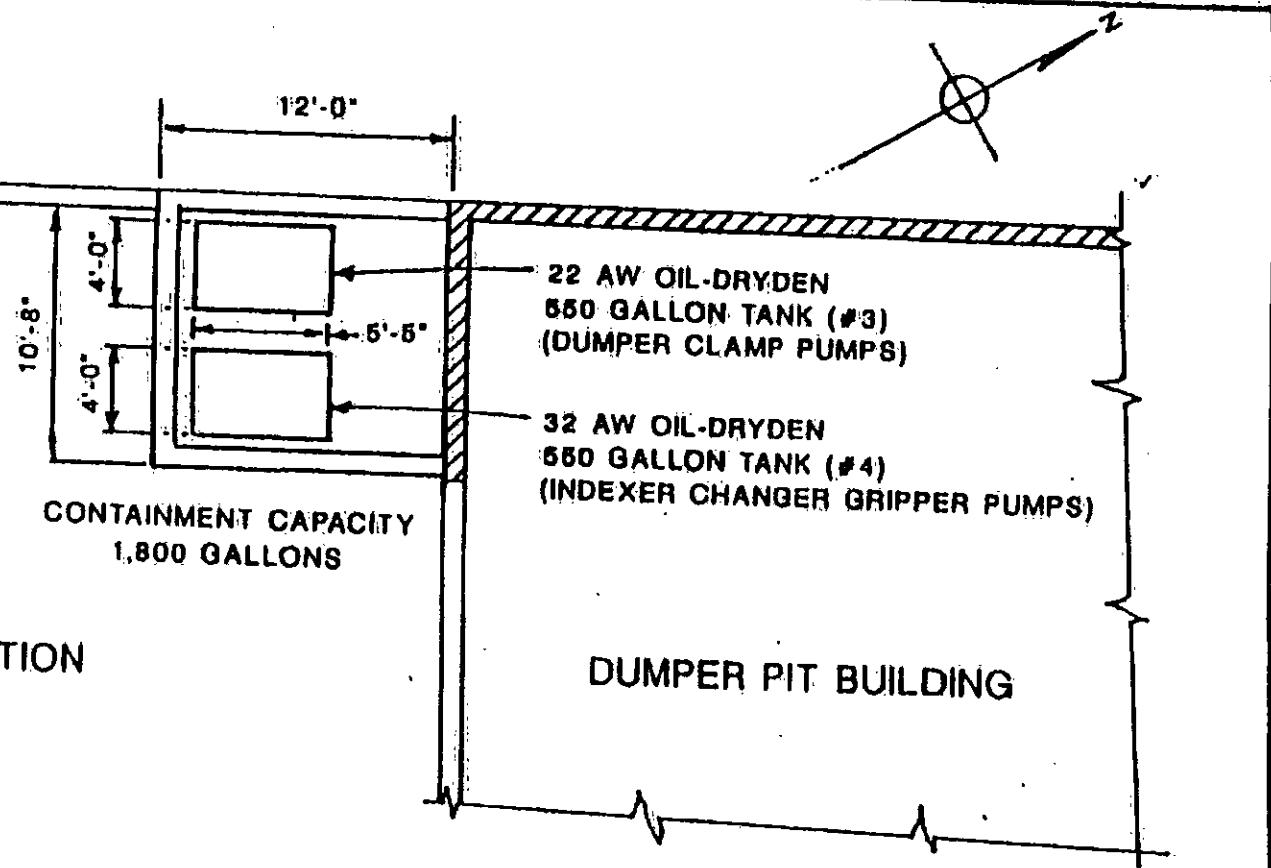
SPILL PREVENTION CONTROL AND
COUNTERMEASURES PLAN UPDATE

SKETCH SHOWING OIL STORAGE BUILDING
WAREHOUSE, PHASE III



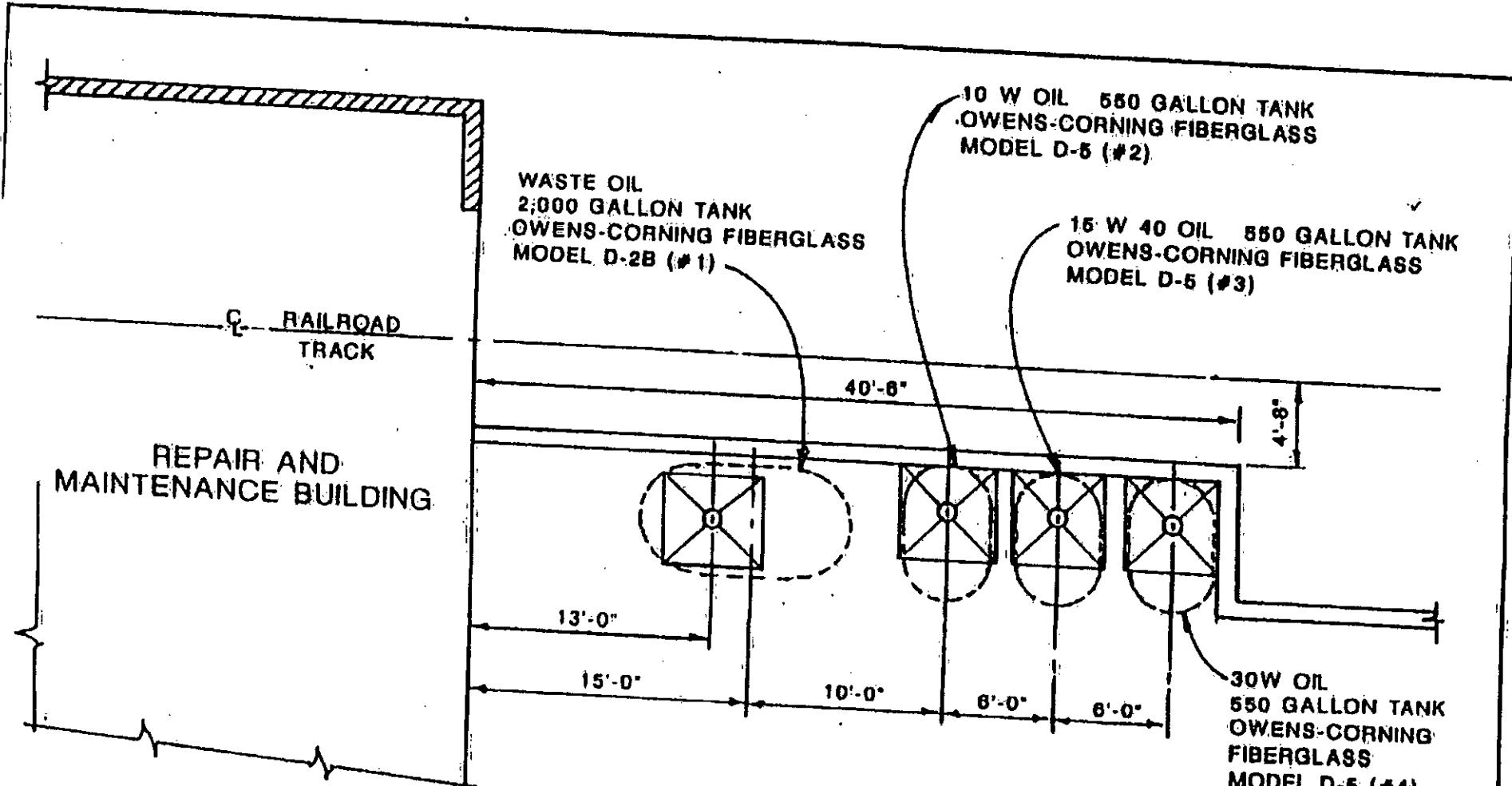
HALLMARK
CONSULTANTS, P.C.
VIRGINIA BEACH, VA
SKETCH BY WWF
DECEMBER 1992

PIER IX TERMINAL FIGURE 5
SPILL PREVENTION CONTROL AND
COUNTERMEASURES PLAN UPDATE
SKETCH SHOWING OIL STORAGE TANKS
NO. 1 AND NO. 2



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VIRGINIA BEACH, VA
SKETCH BY WWF
DECEMBER 1992

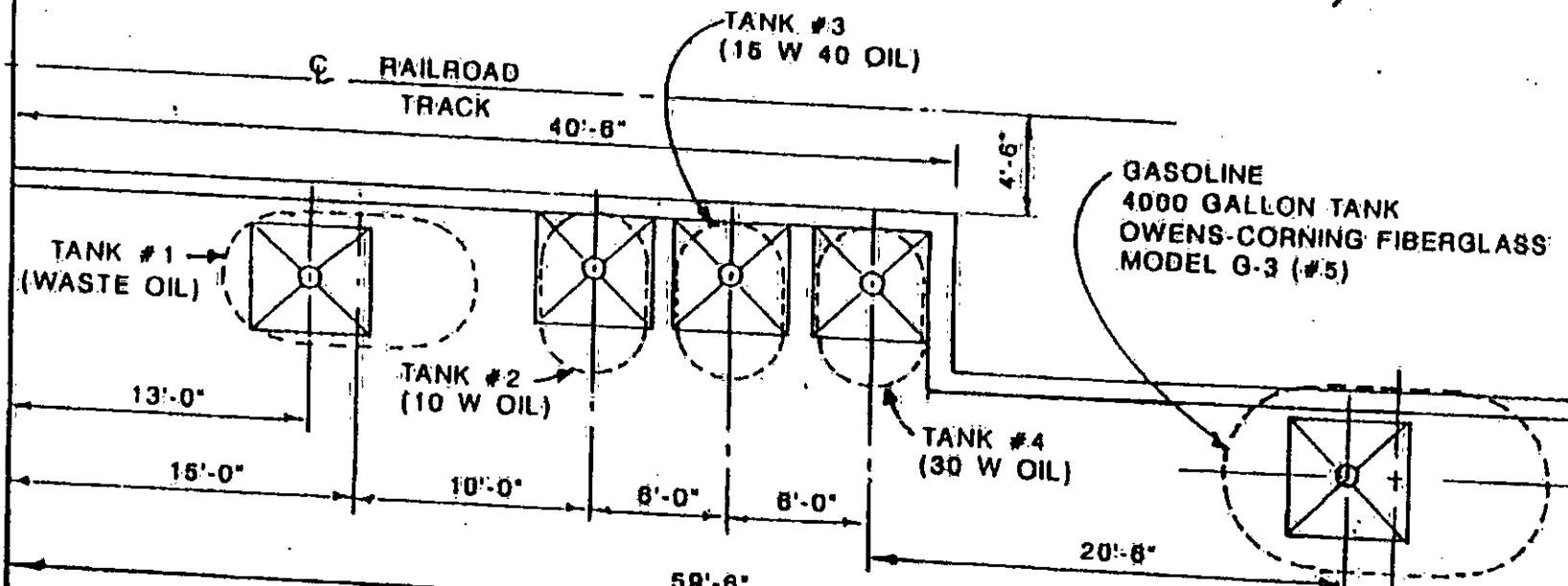
PIER IX TERMINAL FIGURE 6
SPILL PREVENTION CONTROL AND
COUNTERMEASURES PLAN UPDATE
SKETCH SHOWING OIL STORAGE TANKS
NO. 3 AND NO. 4



HALLMARK
CONSULTANTS, P.C.
VIRGINIA BEACH, VA
SKETCH BY WWF
DECEMBER 1992

PIER IX TERMINAL FIGURE 7
SPILL PREVENTION CONTROL AND
COUNTERMEASURES PLAN UPDATE
SKETCH SHOWING LOCATION OF UNDER-
GROUND STORAGE TANKS NOS. 1, 2, 3 AND 4

REPAIR AND
MAINTENANCE BUILDING

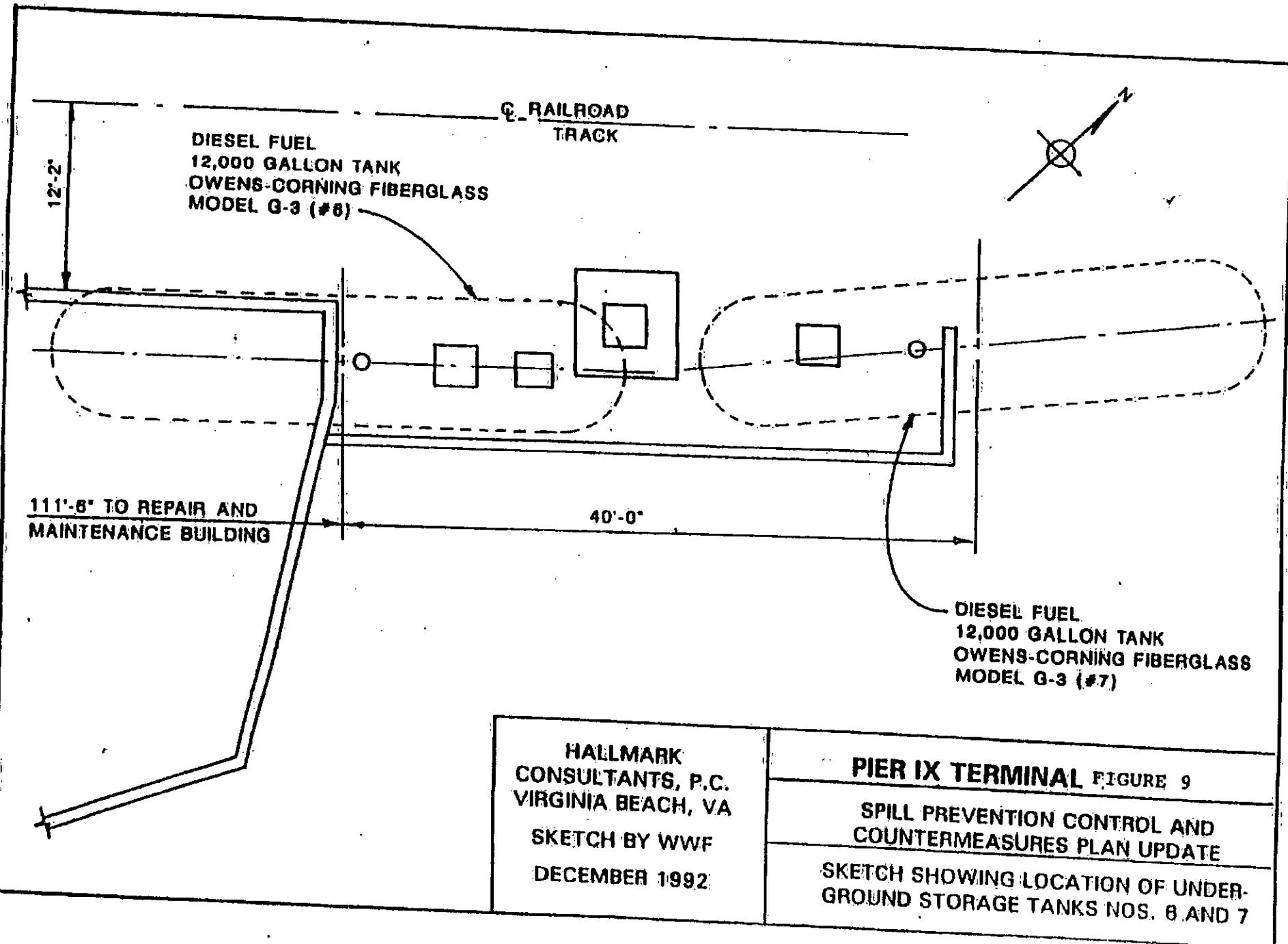


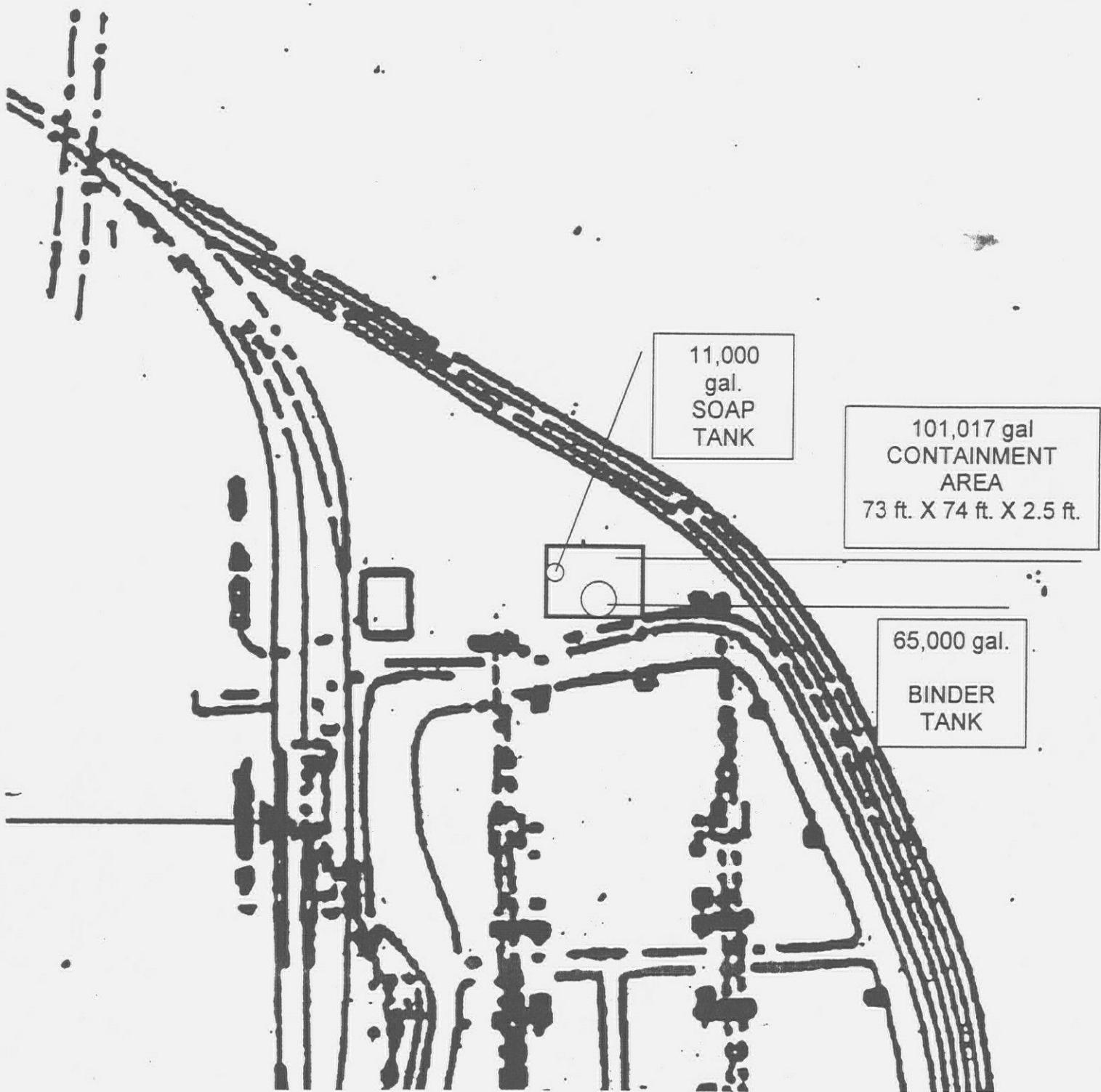
HALLMARK
CONSULTANTS, P.C.
VIRGINIA BEACH, VA
SKETCH BY WWF
DECEMBER 1992

PIER IX TERMINAL FIGURE 8

SPILL PREVENTION CONTROL AND
COUNTERMEASURES PLAN UPDATE

SKETCH SHOWING LOCATION OF
UNDERGROUND STORAGE TANK NO. 5





Note: Binder Tank contains TOSCO SE (Asphalt)
Soap Tank contains INDULIN SA-L (Anionic-emulsifier)

TANKS AND CONTAINMENT AREA FOR SYN-FUEL

Kinder Morgan Bulk Terminals, Inc.

February 2, 2001

**Richard Fox
5636 Southern Boulevard
Virginia Beach, VA**

Dear Mr. Fox,

Enclosed is a list of the lubricants stored in the oil retention area of the warehouse. In addition, we store the following materials in the same area.

Acetic Acid	130 lb container	on hand 1
Poly-glycol Anti-freeze	55 gal. drum	on hand 4
Used Anti-freeze	55 gal. drum	on hand 2
Aerosol Can Disposal	55 gal. drum	on hand 1
Used Oil Booms	55 gal. drum	on hand 1

We do not plan to add any new materials or change the types or amounts of these materials in the next 5 years.

Sincerely,

Robert Coffey
Environmental Manager



Plant Management Information System
 Bin Sequence Inventory List ACTIVE ITEMS ONLY

 02-Feb-01
 Page 1

BIN	NOS	INV. NO.	DESCRIPTION	MFG. PART NOS	ON HAND	ON ORDER	ON REPAIR	MINIMUM	MAXIMUM	UNITS	COUNT
Z3-00-00	125367		LUBE, TRANSC-50 DRYDEN TRANSC-50 U/O D10-N FINAL DRIVES	DRYDEN #39507	0	0	0	1	4	PL	_____
Z3-00-00	126633		OIL, DIESEL, HDX DRYDEN DIESELALL 50	DRYDEN #19157	1	0	0	0	2	5G. PAIL	_____
Z3-00-00	126766		LUBE, EP8 50F-125F, DRYDEN		2	0	0	0	5	5G. PAIL	_____
Z3-00-00	126767		LUBE, EP7 15F-60F, DRYDEN		5	0	0	0	5	5G. PAIL	_____
Z3-00-00	126772		COOLANT, I.RAND SOR, SSR ULTRA COOLANT, I/R 5GAL PAILS ONLY U/O I/R SCREW COMPRESSORS		2	0	0	0	5	5G. PAIL	_____
Z3-00-00	126773		LUBE, 100AW PARADENE, 100AW #40517		1	0	0	0	1	5G. PAIL	_____
Z3-00-00	126990		LUBE, EP1 16GAL/120LB KEG		0	0	0	0	2	16G. KEG	_____
Z3-00-00	127253		LUBE, UTF UNIVERSAL TRACTOR FLUID U/O CASE 580D	20169	1	0	0	0	1	55G. DRUM	_____
Z3-00-00	127254		LUBE, CS#1 CONTRACTORS SPECIAL #1 USED ON SIWERTELL 5 GAL PAIL	CASTROL # 5771-7	7	0	0	2	5	5G. PAIL	_____
Z3-00-00	127257		DEXRON III MERCON	OIL PD	2	0	0	0	2	5G. PAIL	_____

Plant Management Information System
 Bin Sequence Inventory List ACTIVE ITEMS ONLY

02-Feb-01

Page 2

BIN	NOS	INV. NO.	DESCRIPTION	MFG. PART NOS	ON HAND	ON ORDER	ON REPAIR	MINIMUM	MAXIMUM	UNITS	COUNT
Z3-00-00	127585		LUBE, EP6 EP 6 (320) DRYDEN TAMOLUBB #34827 MIN. ORDER=11 PAILS.	34829 5GAL. DRYDEN #34827	13	0	0	3	11	5G.PAIL	_____
Z3-00-00	127698		LUBE MOBILITH SHC460 REPLACES CONTRACTORS SP. U/O SIWERTELL		3	0	0	2	6	5G.PAIL	_____
Z3-02-00	126316		LUBE, 32AW HYD.OIL, 55GAL DRUM		1	0	0	0	1	55G.DRUM	_____
Z3-02-02 PHASE THREE	124834		LUBE, EP1 HD LITHIUM EP-1 FOR DUMPER & SHIPLOADER ALSO OTHER APPLICATION	HD LITHIUM EP-1 DRYDEN	0	0	0	0	1	DR	_____
Z3-02-03 PHASE THREE	124836		LUBE, EP2 HD LITHIUM EP-2 FOR CONVEYOR SYSTEMS ALSO SOME OTHER APPL.	HD LITHIUM EP-2 DRYDEN DRYDEN #53139	1	0	0	0	1	KG	_____
Z3-02-03 PHASE THREE	124912		LUBE, EP4 #150 EP-4 GEAR OIL #150 ISO GRADE 150 (EP-4) AGMA NO. 4-EP 55GAL DRUM	EP-4 #150 GEAR OIL	1	0	0	0	1	55G.DRUM	_____
Z3-02-03 PHASE THREE	125221		LUBE, EP000 HD LITHIUM EP-000 GREASE FOR DUMPER AUTOIMATIC LUBRICATION SYSTEM	EP-000 LITHIUM GREASE	2	0	0	1	2	DR	_____

ATTACHMENT 11

RECEIVING WATERS INFO./
TIER DETERMINATION/STORET DATA/
STREAM MODELING

MEMORANDUM
Department of Environmental Quality
Tidewater Regional Office

5636 Southern Boulevard**Virginia Beach, Virginia 23462**

Subject: VPDES Application Requests for Rivermile Determination

To: Michelle E. Fuks, TRO

From: Richard E. FoxDate: 01/23/01

Copies: P&PS Rivermile File, VPDES Facility File

Return Date Due: 2/6/01

Permit writers please supply the following information and maps for determination of river miles for the outfalls.

- Topo map with facility location and outfall locations clearly marked
- Site diagram for facilities with multiple outfalls
- Description or map showing effluent flow path if not apparent on topo map
- Complete the box below containing the facility information
- Complete the following columns/information in the table below: Topo Name, Outfall #, and Facility Lat/Long needed. Use an additional sheet if more outfall locations are needed
- Requests for STORET information – see Steve Cioccia for forms

Facility Name: Kinder Morgan Bulk Terminals - Pier IX VPDES #: VA0057142

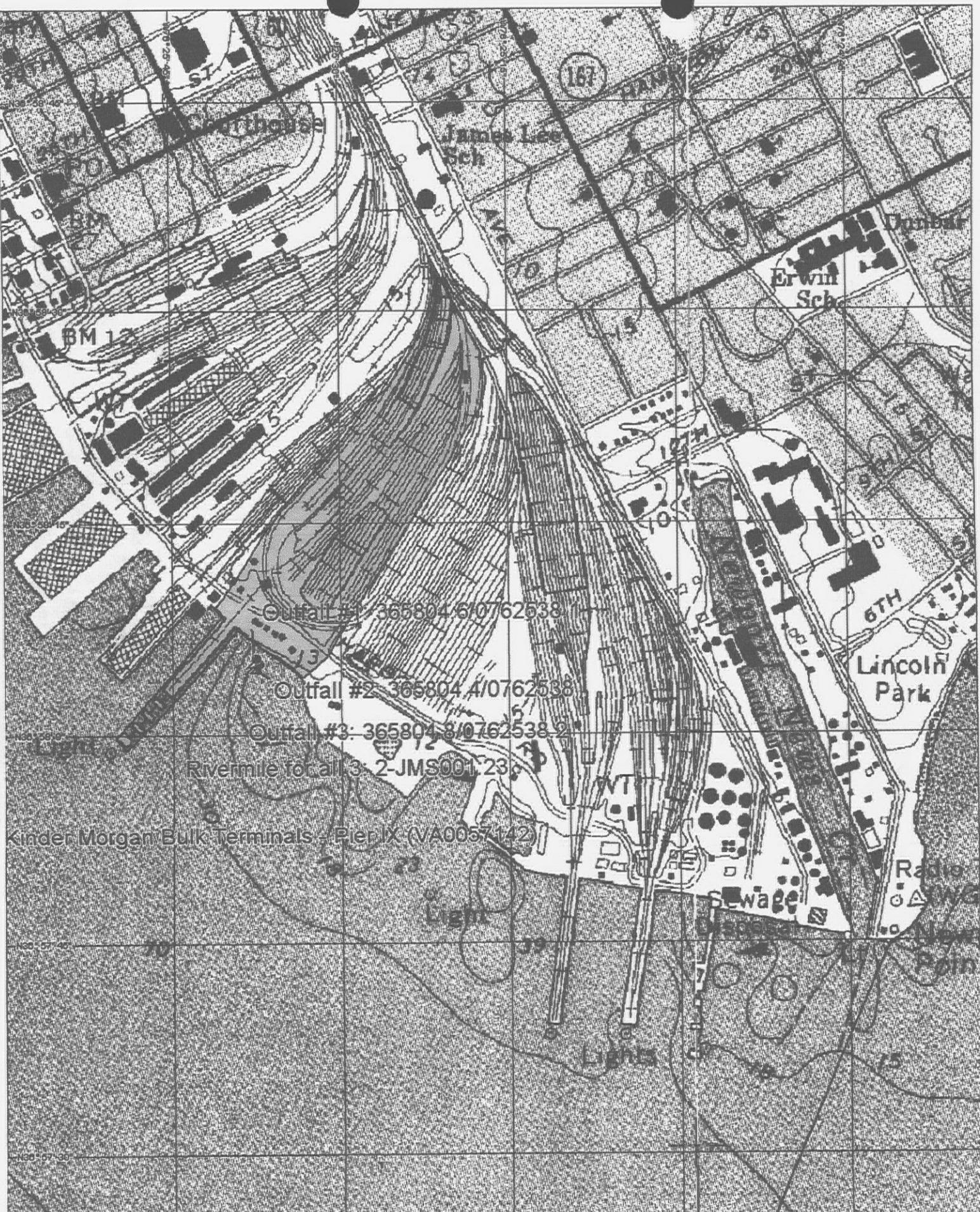
File #: 451 File Code: PPP

Receiving Stream: James River

Topo Name	Outfall #	Latitude/Longitude	River Mile	Waterbody Name	WBID #
Newport News South 35B	001	36°58'04.6" / 076°25'36.1"	2-JMS 001.23	James River	41112
	002	36°58'04.4" / 076°25'36"	2-JMS 001.23	James River	1
	003	36°58'04.9" / 076°25'38.2"	1	1	
Facility Lat/Long Needed?	Office	36°58'04.4" / 076°25'34.6"			
Yes or No		(Pd. Interseptn: 36°58'33.0" / 076°25'24.5")			
		Formerly: Dominion Terminal			

To be completed by P&PS

Received: _____ Completed: 2/1/01Map attached: File Name: VA0057142 GIS entry: _____



MEMORANDUM

Department of Environmental Quality
Tidewater Regional Office5636 Southern BoulevardVirginia Beach, VA 23462

SUBJECT: VPDES Application Requests

~~From~~ TO: Stephen Cioccia, TRO
~~To~~ FROM: Richard E. Fox, TRO
~~DATE:~~ 01/23/01
COPIES: TRO File - facility # 451, PPP

An application has been received for the following facility:

Kinder Morgan Bulk Terminals - Pier IX

Topo Map Name: Newport News South VPDES #: VA0057142

Receiving Stream: James River

Attached is a Topographic Map showing facility boundaries and outfall location(s).

Attached is a STORET Request Form if STORET data is requested.

We request the following information from you:

- Tier Determination. Tier: 2
Please include a basis for the tier determination. Attached 1
- STORET Data and STORET Station Location(s) Attached 2
Returned as Excel File
- Is this facility mentioned in a Management Plan? for 90% & 97%
and attachment 3
No _____ Yes No, but will be included
when the Plan is updated.

- Are limits contained in a Management Plan?

No _____ Yes (If Yes, Please include the basis
for the limits.)

- Does this discharge go to a 303(d) stream segment? Yes Attachment 2

Return Due Date: 2/6/01 Date Returned: 2/2/01

STORET Station: 2-JMS013.10

STORET Station: _____

DETERMINATION OF APPROPRIATE
ANTIDEGRADATION CATEGORIES FOR WATERBODIES

The sequence of steps to be completed by the Water Division in conducting an antidegradation review is presented in Figure 1. The first task that will be addressed by the Water Division is to determine to which tier the waters belong.

Tier 3

Staff should check VR680-21-01.3.C.3 to determine whether the water body in question is listed in this category. If it is not listed then it is not a tier 3 water.

Tier 2

If the waterbody is not listed in VR680-21-01.3.C.3, then staff must determine whether the waterbody is either a Tier 1 or Tier 2 category. This determination is based on a comparison of the available receiving stream data (collected in the stream outside of any mixing zones) to the table of numerical standards in VR680-21-01.14.B. If available water quality data indicate that all of the parameters measured in the water body are better than the standards in the table of numerical standards in VR680-21-01.14.B, then the waterbody falls into the Tier 2 category. Violation of the federal coliform standard is not to be sufficient justification to lower the water to tier 1. If accurate and technically sound receiving stream data are not available, the applicant/permittee may be required by DEQ staff to provide sufficient information for a determination of the appropriate tier to be made. If real in-stream data are not available at the time of the Division's antidegradation review of the water body, engineering judgment of DEQ staff may be substituted. Receiving stream information that may be used as a basis for this judgement include:

1. Modeling predictions (existing discharges and mixing zones) for the waters being considered.
2. Existing permit limits that were designed to just barely meet the standard in the waters being considered.
3. Biological data that demonstrate in-stream toxicity. This is true even if the numerical standards are met due to the independent application of biological and numerical criteria and standards.
4. Judgement based on the absence or presence of definitely identified sources of pollutants or a demonstrated use impairment. Such judgement must be completely justified and documented.

If sufficient information is not available, the default is to impose high quality VR680-21-01.3.B (Tier 3) waters requirements.

Basis
for Tier

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Water Division

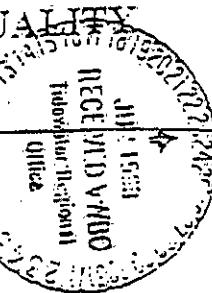
4900 Cox Road Glen Allen, Virginia 23060

MEMORANDUM

Amended by

94-008

in part



SUBJECT: OWRM Guidance Memo No. 93 - 015
Guidance on Preparing VPDES Permits Based on the Water Quality Standards for Toxics

TO: Regional Directors *AJA* *JVR*

FROM: *ML* Larry G. Lawson, Alan J. Anthony, and John V. Roland

DATE: June 22, 1993

COPIES: Bob Burnley, Dave Paylor, Martin Ferguson, Jean Gregory,
Regional Office Water Resource Managers, OWRM Permit Staff,
Fred Cunningham, Ron Gregory

The purpose of this guidance is to replace OWRM Guidance Memo No. 92 - 012A "Guidance on Preparing VPDES Permits Based on the Water Quality Standards for Toxics" issued on September 1, 1992. This guidance also replaces OWRM Guidance Memo No. 93 - 004.

This guidance presents significant revisions to 92 - 012A. These revisions are in response to the following concepts and concerns:

- Data (both effluent and in stream) should exist in the form that the water quality standards are expressed in before it is used to determine the need for a water quality based limit in a VPDES permit. All appropriate data should be used as reported but it should not be assumed, inferred, or modified to create data where none exist. This concept will have the most impact on metals where most of the current effluent data is expressed in the form of total recoverable while the water quality standards and the wasteload allocations (WLA), are based on dissolved metals. Since there is no general relationship in the stream or in the effluent between total recoverable and dissolved metals (other than what can be determined via a site specific chemical transitor study), we do not believe that total recoverable metals data should be used to establish a defacto representation of dissolved metals. The issue of metals is far too important and far reaching not to allow more precise science to determine the impacts, if any, on receiving streams, and consequently on permittees.
- Concerns have been expressed regarding the accuracy of historical dissolved metals data and the use of this data in establishing VPDES permit limits, e.g. the USGS does not believe that their historical data are accurate. In addition, use of "clean and "ultraclean" analytical protocols may have to be used to obtain and analyze samples to produce more representative or "true" results of concentrations of pollutants in water.

Attachment 1

ATTACHMENT 12

303(d) LISTED SEGMENTS

SAC COPY
12-1
VIRGINIA

303(D) TOTAL MAXIMUM DAILY LOAD
PRIORITY LIST AND REPORT

Revised June 1998



Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL AND RECREATIONAL RESOURCES

Prepared by the
Department of Environmental Quality
and the
Department of Conservation and Recreation
Richmond, Virginia

Attachment 2

12-2

PART I - IMPAIRED WATERS - SHELLFISH
VIRGINIA DEPARTMENT of ENVIRONMENTAL QUALITY
1998 303(d) TOTAL MAXIMUM DAILY LOAD PRIORITY LIST

JAMES RIVER BASIN

HUC and Watershed ID	Stream Name	Segment Size (sq - mi)	Parameter	Source of Impairment	City/County
02080206					
VAT-G10E	Upper James	3.00	VDH Shellfish Restriction	PS/NPS	Surry
VAT-G11E	River				
VAT-G11E	Chuckatuck Creek	0.73	VDH Shellfish Restriction	NPS	Suffolk
VAT-G11E	James River - Opposite Fort Eustis	4.32	VDH Shellfish Restriction	PS/NPS	Newport News
VAT-G11E	James River -	1.81	VDH Shellfish Restriction	PS/NPS	James City
VAT-G10E	Opposite Tribell Shoal Channel				
VAT-G11E	James River: Swash Hole	0.12	VDH Shellfish Restriction	NPS	Newport News
VAT-G11E	Kings and Ballard Marsh Creeks	0.07	VDH Shellfish Restriction	NPS	Isle of Wight
VAT-G11E	Pagan River and Jones Creek	2.58	VDH Shellfish Restriction	PS/NPS	Isle of Wight
VAT-G11E	Upper James River: Lawnes Cr	0.27	VDH Shellfish Restriction	NPS	Surry
VAT-G11E	Warwick and James Rivers	5.31	VDH Shellfish Restriction	PS/NPS	Newport News
02080208					
VAT-G13E	Nansemond River	4.28	VDH Shellfish Restriction	PS/NPS	Suffolk
VAT-G13E	Nansemond River: Bennett Creek	0.45	VDH Shellfish Restriction	NPS	Suffolk
VAT-G13E	Nansemond River: Bleakhorn Creek	0.05	VDH Shellfish Restriction	NPS	Suffolk
VAT-G13E	Nansemond River: Knotts Creek	0.14	VDH Shellfish Restriction	NPS	Suffolk
VAT-G15E	Hampton Roads	42.01	VDH Shellfish Restriction	NPS	Newport News
VAT-G15E	Hampton Roads -	7.95	VDH Shellfish Prohibition	NPS	Norfolk
VAT-G10E	Elizabeth River and Tidal Tributaries				

Attachment 2

12-3
601 603 P

56 57 64 65-66



COMMONWEALTH of VIRGINIA

ROBERT B. STROUSE, M.D., M.P.H.
STATE HEALTH COMMISSIONER

Department of Health
P. O. BOX 2446
RICHMOND, VA 23216

NOTICE AND DESCRIPTION OF SHELLFISH AREA CONDEMNATION NUMBER 7, HAMPTON ROADS

EFFECTIVE 8 OCTOBER 1993

Pursuant to Title 28.2, Chapter 8, §§28.2-803 through 28.2-808, §32.1-20, and §§-6.14:4.1 B16 of the Code of Virginia:

1. The "Notice and Description of Shellfish Area Condemnation Number 7, Hampton Roads," effective 27 April 1989 is cancelled effective 8 October 1993.
2. Condemned Shellfish Area Number 7, Hampton Roads, is established, effective 8 October 1993, and shall consist of areas A, B, C, D and E described below. As to area A, it shall be unlawful for any person, firm, or corporation to take shellfish from this area for any purpose, except by permit granted by the Marine Resources Commission, as provided in Section 28.2-810 of the Code of Virginia. As to areas B, C, D and E, it shall be unlawful for any person, firm, or corporation to take shellfish from these areas, for any purpose. The boundaries of the area are shown on map titled "Hampton Roads, Condemned Shellfish Area Number 7, 8 October 1993" which is part of this notice.
3. The Department of Health will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision of this order.

BOUNDARIES OF CONDEMNED AREA NUMBER 7

- A. The condemned area shall include all of Hampton Roads bounded by a line beginning at the upstream side of the large fishing pier on the southeast side of Old Point Comfort; thence upstream to the center of the James River Bridge; thence along the center of the bridge to the south tower; thence southeasterly through navigational aid yellow nun buoy "B" to the first overhead light structure on the I-664 Monitor Merrimac Memorial Bridge Tunnel north of the small boat channel bump; thence southerly along the upstream side of the bridge tunnel to the south line of Public Ground Number 1, Nansemond County; then easterly along the Public Ground to

Attachment 2

-2-

Craney Island Disposal Area; thence clockwise around the boundaries of the disposal area to its intersection with the shore; thence along the shore to the northeast corner of Craney Island; thence through navigational aid Fl G "21" to the point where it intersects a line drawn from the shoreward end of pier number 6 at Lamberts Point to the southeast corner of Tanner Point; thence along the shore to the point of intersection with the eastern side of the southern end of the westbound Hampton Roads Bridge-Tunnel on Willoughby Spit; thence northerly along the eastern side of this bridge to the point of intersection with the riprapped shoreline of the Hampton Roads Bridge-Tunnel island at Fort Wool; thence easterly around this island to its easternmost point; thence north northwesterly to the intersection of the shoreline and the upstream side of the large fishing pier on the east side of Old Point Comfort at the point of beginning.

- B. The condemned area shall include all of the James River and Newport News Creek (small boat harbor) enclosed by a line beginning at the offshore end of the first pier upstream of Newport News Point; thence to navigational aid Fl R "14"; thence to Fl G "13"; thence to Fl R "12"; thence through Fl R "4" to the shore.
- C. The condemned area shall include all of Hampton Roads enclosed by a circle of 500 yards radius around navigational aid N "E7."
- D. The condemned area shall include all of Hampton Roads enclosed by a line beginning at the northwest corner of pier number 2 (Norfolk International Terminals); thence to navigational aid Fl G "13"; thence to Fl G "11"; thence due east to the shore.
- E. The condemned area shall include all of the Elizabeth and Lafayette Rivers and their tributaries lying upstream of a line drawn from the northeast corner of Craney Island through navigational aid Fl G "21" to the point where it intersects a line drawn from the shoreward end of pier number 6 at Lamberts Point to the southeast corner of Tanner Point.

Recommended by:

Bob C. Gossenbach

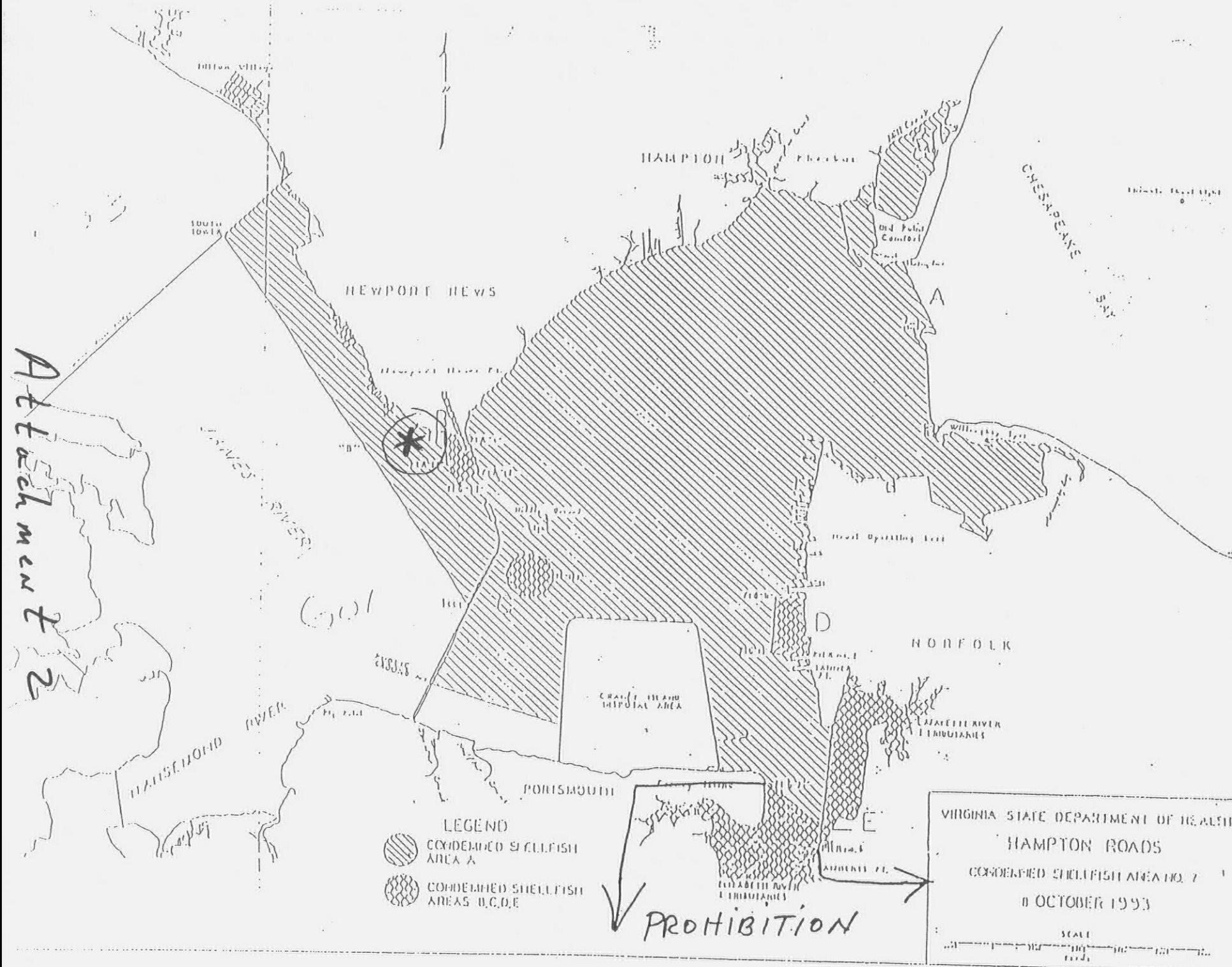
Director, Division of Shellfish Sanitation

Ordered by:

Suzanne Landry
Deputy State Health Commissioner9-27-73
Date

Attachment 2

Attachment 2



ATTACHMENT 13

TABLE III(a) AND TABLE III(b) -
CHANGE SHEETS

TABLE III(a)

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 changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001	Phosphorus - mass limits	1/3 months / not included	26 lbs/day / not included	No mass limits on storm water	3/14/01 (M)
001	Nitrogen - mass limits	1/3 months / not included	NL / not included	No mass limits on storm water	3/14/01 (M)
002, 003	TSS	1/6 months / 1/3 months	50 / NL	Increased frequency but removed limit to use TSS as an indicator of BMP effectiveness	3/19/01 (M)
001	Nickel	1/3 months / not included	NL / not included	Data indicated parameter not of concern	3/19/01 (M)
002, 003	Nickel, zinc	1/3 months / not included	NL / not included	Data indicated parameter not of concern	3/19/01 (M)
002, 003	Copper, Flow	1/6 months / 1/3 months	NL / NL	Storm water management evaluation for copper; frequency is 1/3 months	3/19/01 (M)

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
---------------------	-------------	----------------

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
Deleted special conditions 1. EPA Standard Reopener; Based on VPDES Regulations adopted 07/24/96 and Guidance Memo 96-004 dated 08/06/96. Since this facility is not on the list of Primary Industrial Categories from 40 CFR Part 122, Appendix A. 2. Water Quality Monitoring; Based on facility reported all the required monitoring and Best Professional Judgment (BPJ).	Added Total Maximum Daily Load Reopener.	
Updated Storm Water conditions		

TABLE III(b)

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 changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001					

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 14

NPDES INDUSTRIAL PERMIT RATING WORKSHEET

NPDES Permit Rating Work Sheet

NPDES NO: LV-A-0-0-5-7-1-4-2

Facility Name:

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

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LIXLITTLEIRIMLILNIALLILLILLILLIL

City: NEWPORT NEWS, VIRGINIA

Receiving Water: JAMES RIVER

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

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

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

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

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: 1111 Primary SIC Code: 4491

Industrial Subcategory Code: 0_0_0_0 (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
<u>X</u> 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: 9

Total Points Factor 1: 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	Wastewater Type (See Instructions)	Percent of Instream Wastewater Concentra- tion at Receiving Stream Low Flow	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 I/II:	< 10%	41	0
Type II: Flow < 1 MGD	21	10		> 10% to < 50%	42	10
Flow 1 to 5 MGD	22	20		> 50%	43	20
Flow > 5 to 10 MGD	23	30				
Flow > 10 MGD	24	50	Type II:	< 10%	51	0
Type III: Flow < 1 MGD	31	0		> 10% to < 50%	52	20
Flow 1 to 5 MGD	32	10				
Flow > 5 to 10 MGD	33	20		> 50%	53	30
Flow > 10 MGD	34	30				

Code Checked from Section A or B: 5 1

Total Points Factor 2: 0 0

NPDES Permit Rating Work Sheet

14-2

NPDES No.: V L A 0 0 5 7 1 4 2**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
<u> </u>	< 100 lbs/day	1	0
<u> </u>	100 to 1000 lbs/day	2	5
<u> </u>	>1000 to 3000 lbs/day	3	15
<u> </u>	>3000 lbs/day	4	20

Code Checked: Points Scored:

B. Total Suspended Solids (TSS)

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

Code Checked: 1Points Scored: 0 5C. Nitrogen Pollutant: (check one) Ammonia Other: _____

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

Code Checked: Points Scored: Total Points Factor 3: 0 0**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
<u> </u> No process waste streams	0	0	<u> </u> 3.	3	0	<u> </u> 7.	7	15
<u> </u> 1.	1	0	<u> </u> 4.	4	0	<u> </u> 8.	8	20
<u> </u> 2.	2	0	<u> </u> 5.	5	5	<u> </u> 9.	9	25
			<u> </u> 6.	6	10	<u> </u> 10.	10	30

Code Number Checked: Total Points Factor 4:

14-7

NPDES Permit Rating Work Sheet

NPDES No.: LV I A 0 0 5 7 1 4 2

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
<u>Yes</u>	1 10
<u>X</u> <u>No</u>	2 0

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

Code	Points
<u>X</u> <u>Yes</u>	1 0
<u>No</u>	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
<u>Yes</u>	1 10
<u>X</u> <u>No</u>	2 0

Code Number Checked: A 2 B 1 C 2

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

FACTOR 6: Proximity to Near Coastal Waters

- A. *Base Score: Enter flow code here (from Factor 2): 5 1 Enter the multiplication factor that corresponds to the flow code: 1 0*

Check appropriate facility HPRI Code (from PCS):

HPRI #	Code	HPRI Score	Flow Code	Multiplication Factor
<u>1</u>	1	20	11, 31, or 41	0.00
<u>2</u>	2	0	12, 32, or 42	0.05
<u>X</u> <u>3</u>	3	30	13, 33, or 43	0.10
<u>4</u>	4	0	14 or 34	0.15
<u>5</u>	5	20	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) 0.10 = 3 (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
<u>X</u> <u>Yes</u>	1 10
<u>No</u>	2 0

Code	Points
<u>Yes</u>	1 10
<u>X</u> <u>No</u>	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 Number Checked: A 3 B 1 C 2

Points Factor 6: A 1 3 + B 1 0 + C 1 0 = 1 3 TOTAL

NPDES Permit Rating Work Sheet

NPDES NO: LV|A|0|0|5|7|1|4|2|

SCORE SUMMARY

Factor	Description	Total Points
1	Toxic Pollutant Potential	0
2	Flow/Stream flow Volume	0
3	Conventional Pollutants	5
4	Public Health Impacts	0
5	Water Quality Factors	0
6	Proximity to Near Coastal Waters	13
TOTAL (Factors 1-6)		18

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

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

 No Yes (add 500 points to the above score and provide reason below:

Reason:

NEW SCORE: 18OLD SCORE: 39Richard E. Fox, Jr.
Permit Reviewer's Name(757) 518-2129
Phone Number02/16/01
Date

ATTACHMENT 15

CHRONOLOGY SHEET

VPDES PERMIT PROGRAM

15-1

CHRONOLOGY OF EVENTS

APPLICATION RECEIVED	APPLICATION RETURNED	ADDITIONAL INFO REQUESTED	APPLICATION/ADD INFO DUE BACK IN RO	APPLICATION/ADD. INFO RECEIVED
01/19/01		01/25/01	02/08/01	02/01/01

APPLICATION TO VDH: 01/22/01

VDH COMMENTS RECEIVED: 02/06/01

APPLICATION TO OWPS:

OWPS COMMENTS RECEIVED:

APPLICATION ADMIN. COMPLETE: 01/22/01

APPLICATION TECH. COMPLETE: 02/06/01

DATE FORWARDED TO ADMIN:

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



VPDES Individual Permit

 Application
 Active

Permit No: VA0057142

Facility:

Kinder Morgan Bulk Terminals - Pier IX

Owner: Pier IX Terminal Company

Permit Writer: Fox Richard E

[General Information](#) [Events](#) [Special Conditions--Permit](#) [Outfall Information/Limits](#) [Land Application](#) [GIS Information](#)

Events

Code	Description	Date Anticipated	Date Completed	Comments
APDU	DATE OWNER REISSUANCE APPLICA		01/21/2001	
APRD	DATE APPLICATION RECEIVED AT R.O		01/19/2001	
DTMIF	APP. SENT TO DCR,VDH,VDACS,DGIF,		01/22/2001	
APRET1	App returned/Additional info requested 1		01/25/2001	
APRD2	Application/Additional Info received at		02/01/2001	
APRET2	DATE APPLICATION RETURNED TO A			
APRD3	DATE APPLICATION RECEIVED AT R.O			
APRET3	DATE APPLICATION RETURNED TO A			
APRD4	DATE APPLICATION RECEIVED AT R.O			
ROAPCP	DATE: APPLICATION COMPLETE AT R		02/06/2001	
DT1VDH	DATE: APPLICATION SENT TO VDH		01/22/2001	
DTC1VDH	DATE: COMMENTS RCVD FROM VDH O		02/06/2001	

Record: 2/50

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VPDES Individual Permit

Permit No: VA0057142

 Application
 Active

Facility: Kinder Morgan Bulk Terminals - Pier IX



Owner: Pier IX Terminal Company

Permit Writer: Fox Richard E



General Information

Events

Special Conditions--Permit

Outfall Information/Limits

Land Application

GIS Information

Events

Code	Description	Date Anticipated	Date Completed	Comments
DTCDSS	DATE: CONFIRMATION FROM DIV. OF			
DT10WRM	DATE: APPLICATION SENT TO DWPS			
DTC10WRM	DATE: COMMENTS RECEIVED FROM O			
DTSITE	DATE SITE VISIT	01/18/2001	01/18/2001	
DTSITERP	DATE: SITE INSPECTION REPORT			
APCP	DATE APPLICATION COMPLETE		02/06/2001	
DTDDP	DATE: DRAFT PERMIT DEVELOPED		03/21/2001	
DTPLAN	DATE: PLANNING CONCURRENCE RCV		03/23/2001	
DTPKOWRM	DATE: FS/SOB DRAFT SENT TO DWPS			
DTC20WRM	DATE: DWPS CONCURRENCE ON DRA			
DTPKVDH	DATE: FS/SOB DRAFT SENT TO VDH		03/22/2001	
DTC2VDH	DATE: VDH CONCURRENCE ON DRAF		04/11/2001	

Record: 14/50

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VPDES Individual Permit

Permit No: VA0057142

 Application
 Active

Facility:

Kinder Morgan Bulk Terminals - Pier IX



Owner: Pier IX Terminal Company

Permit Writer: Fox Richard E



General Information

Events

Special Conditions—Permit

Outfall Information/Limits

Land Application

GIS Information

Events

Code	Description	Date Anticipated	Date Completed	Comments
DTEPA	DATE: FS/SOB DRAFT PERMIT SENT			
DTC2EPA	DATE: EPA CONCURRENCE RECEIVED			
DTOWN1	DATE: FS/SOB DRAFT SENT TO OWN		03/22/2001	
DTOBJ1	FIRST TIME COMMENTS RECEIVED FR		03/30/2001	
DTOWN2	DATE: FS/SOB DRAFT SENT TO OWN		04/13/2001	
DTOWNC2	SECOND TIME COMMENTS RECEIVED		04/05/2001	
DTOWN3	DATE: FS/SOB DRAFT SENT TO OWN			
DTOWNC3	OWNER COMMENTS ON DRAFT PERMI			
DTOWN4	DATE: FS/SOB DRAFT SENT TO OWN			
DTOWNC4	DATE OWNER CONCURRENCE			
DTPNAUT	DATE: PUBLIC NOTICE AUTHORIZATI		04/02/2001	
DTNEWS	DATE: PUBLIC NOTICE LETTER SENT		04/13/2001	

Record: 26/50

<OSC> <DBG>



VPDES Individual Permit

Permit No: VA0057142

 Application
 Active

Facility:

Kinder Morgan Bulk Terminals - Pier IX

Owner: Pier IX Terminal Company

Permit Writer: Fox Richard E

[General Information](#) [Events](#) [Special Conditions—Permit](#) [Outfall Information/Limits](#) [Land Application](#) [GIS Information](#)

Events

Code	Description	Date Anticipated	Date Completed	Comments
DT1VMRC	DATE: FS/SOB/DRAFT PERMIT SENT			
DT1VIMS	DATE: VMRC CONCURRENCE ON DRA			
DTADJ	DATE: FS/SOB/DRAFT PERMIT SENT			
PNOT	DATE OF PUBLIC NOTICE: APP+ & MD			
PNHEAR	PUBLIC HEARING DATE			
DTDWRDUE	DATE 1st DMR DUE		09/10/2001	
DTSIGN	DATE: ISSUANCE/REISSUANCE/MOD			
DTEFF	DATE REISS/ISS/MOD/TERM EFFCTV			
FLED	DATE PERMIT EXPIRES: (DOES NOT A			
PREVFLED	OLD EXP. DATE : TO CALCULATE ZM		07/20/2001	
DEPFE	DATE APPLICATION FEE DEPOSITED		01/25/2001	
MISC	MISCELLANEOUS			

Enter value for Eve Completed Date

Record: 47/50

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ATTACHMENT 16

GENERAL CORRESPONDENCE



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

5636 Southern Boulevard
Virginia Beach, VA 23462
Tel# (757) 518-2000
<http://www.deq.state.va.us>

Dennis H. Treacy
Director

Francis L. Daniel
Tidewater Regional Director

March 22, 2001

Mr. Robert Coffey
Senior Facility Manager
Kinder Morgan Pier IX Terminal
P.O. Box 38
Newport News, VA 23607

Re: VPDES Permit Number VA0057142; Pier IX Terminal
Newport News, VA

Dear Mr. Coffey;

Enclosed is a copy of the draft VPDES permit and the supporting fact sheet for the Pier IX terminal. The original, official copy was sent to Mr. Jason Brown in Sorrento, LA. This copy is being sent to you as a courtesy copy to allow you to expedite the review of the draft permit. During your review, or after you have completed your review, if you have any questions, or would like a meeting to discuss the draft permit, please contact me.

If you have any other questions or need additional information, please contact me at the above address, or by telephone at (757) 518-2105.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark H. Sauer".

Mark H. Sauer
Permit Engineer

Cc: TRO file



Kinder Morgan Bulk Terminals, Inc.

UPS OVERNIGHT

March 30, 2001

Mr. Mark H. Sauer
Permit Engineer
Virginia Department of Environmental Quality
5636 Southern Boulevard
Virginia Beach, Virginia 23462



**RE: PIER IX TERMINAL
KINDER MORGAN BULK TERMINALS (KMBT)
PRELIMINARY RESPONSE TO DRAFT PERMIT
AUTHORIZATION TO BILL APPLICANT FOR PUBLIC NOTICE**

Dear Mr. Sauer:

Enclosed is the completed and signed authorization form for billing of the public notice costs associated with our renewed permit.

At this time, we would like to point out that the Pier IX Terminal is a transportation facility, SIC code 4491, and that Outfalls 002 and 003 do not constitute "storm water associated with industrial activity" as that term is defined for such facilities in applicable regulations. As described in our application, the facility has made changes to storm water flow patterns to assure that no "storm water associated with industrial activity" enters these two outfalls. Accordingly, we do not believe that monitoring, in particular toxicity testing, should be required at these outfalls. We plan to submit full technical comments in response to the public notice.

We also wish to request at this time that 1.) the "facility contact" be changed to "Mr. Robert Coffey" not Marie E. Krien-Schmidt (Mr. Coffey is the contact at both the "facility" and the "location address"), and 2.) the "owner contact" be changed to "Ms. Marie E. Krien-Schmidt" not Mr. Jaeson M. Brown.

If there are any questions, please do not hesitate to contact Mr. Robert Coffey at the facility (757-928-1548) or me at 800-535-8170.

Sincerely yours,

KINDER MORGAN BULK TERMINALS, INC.

Marie E. Krien-Schmidt

Marie E. Krien-Schmidt
Director, Environmental Affairs

Enclosures

cc: D. Starrett
R. Coffey
R. Polino, Malcolm Pirnie

7116 Hwy. 22

P.O. Box 625

Sorrento, LA 70778-0625

800/535-8170

Fax 225/675-5923

AUTHORIZATION TO BILL APPLICANT FOR
A PUBLIC NOTICE

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department as shown below. The public notice will be published once a week for two consecutive weeks, seven days apart, in the:

DAILY PRESS

Agent/Department to be billed: Kinder Morgan Bulk Terminals

Attn: Environmental Affairs

Applicant's Address: 7116 Hwy. 22

Sorrento, LA 70778

Agent's Telephone No: 225-675-5387

Authorizing Agent: Marie E. Krien-Schmidt

Print Name

Authorizing Agent's:
Signature

Marie E. Krien-Schmidt

RETURN TO: DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 SOUTHERN BOULEVARD
VIRGINIA BEACH, VA 23462

ATTN: C. E. PUTNAM
RE: Permit No. VA0057142/Kinder Morgan Bulk Terminals - Pier IX



Kinder Morgan Bulk Terminals, Inc.

UPS OVERNIGHT

April 4, 2001

Mr. Mark H. Sauer
Water Permits Section
Virginia Department of Environmental Quality
5636 Southern Boulevard
Virginia Beach, Virginia 23462



**RE: PIER IX TERMINAL
KINDER MORGAN BULK TERMINALS (KMBT)
RESPONSE TO DRAFT PERMIT NO. VA00057142**

Dear Mr. Sauer:

We are submitting this letter in response to the draft VPDES permit issued on March 22, 2001 for our Pier IX Terminal facility located in Newport News. We would like to comment on the effluent monitoring and toxicity screening requirements for Outfalls 002 and 003 and propose an alternative approach.

As described in our application for renewal of this permit, Kinder Morgan made modifications to the storm water conveyance system at Pier IX Terminal to prevent storm water runoff from the coal storage and handling areas from entering these outfalls. With these modifications in place, the drainage area for Outfall 002 consists only of a portion of South Harbor Road between the Administration Building parking lot and Dominion Terminals. This access road is located entirely outside of the coal storage and handling area. The drainage area for Outfall 003 now consists of the Administration Building parking lot which is also entirely outside of the coal storage and handling area. As a result of these modifications, the drainage areas that contribute to Outfalls 002 and 003 are not "associated with industrial activity" as that term is defined in applicable regulations.

Based on information provided to us by our consultant, it is our understanding that effluent monitoring and toxicity screening requirements were included in the draft permit to *confirm that the storm water contributing to Outfalls 002 and 003 is not associated with industrial activity*. Based on our review of the applicable regulations, it is also our understanding that the status of being "associated with industrial activity" is to be determined not by monitoring and screening but rather by identification of the applicable SIC code and activities that take place at a facility and contribute to the storm water discharge. In this case, the facility is a 4491 Transportation Facility at which the storm water drainage system has been specifically modified to isolated potentially contaminated storm water from a.) material handling activities, b.) vehicle maintenance shops, and c.) equipment cleaning operations. Storm water from these areas is clearly "associated with industrial activity" and has been diverted to prevent it from entering Outfalls 002 and 003.

The modifications made to the two outfall drainage areas have physically eliminated the drainage of "storm water associated with industrial activity" to Outfalls 002 and 003. Accordingly, we believe that the monitoring requirements in the draft permit a.) are not necessary to confirm that these outfalls are free of industrial contaminants; and b.) represent a cost burden to the facility without comparable benefit. Nonetheless, to assure that Outfalls 002 and 003 are consistently free of industrial contaminants, we propose to implement thorough Best Management Practices (BMPs) in lieu of effluent monitoring and toxicity screening. Such BMPs would consist of regular visual inspection and thorough, routine cleaning

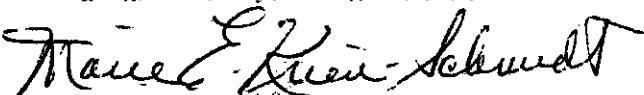
(e.g., sweeping, vacuuming, etc. as appropriate) of the drainage areas. These BMPs would be integrated into our Storm Water Pollution Prevention Plan (SWPPP) and Standard Operating Procedures. We believe this approach, in combination with the physical segregation of storm water associated with industrial activity that has been implemented at the facility, will assure that the storm water discharges at Outfalls 002 and 003 are not affected by industrial activity.

We appreciate DEQ's consideration of these comments and our proposal. We would be pleased to meet with DEQ personnel to discuss this issue in person if that would be helpful.

If there are questions, or if further information is required, please do not hesitate to contact either Mr. Robert C. Coffey, Environmental Coordinator at Pier IX Terminal, at 757-928-1548, or me at 1-800-535-8170.

Sincerely yours,

KINDER MORGAN BULK TERMINALS, INC.



Marie E. Krien-Schmidt
Director, Environmental Affairs

cc: J.M. Brown
 D. Starrett
 R. Coffey
 R. Polino, Malcom Pirnie



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

5636 Southern Boulevard
Virginia Beach, VA 23462
Tel# (757) 518-2000
<http://www.deq.state.va.us>

Dennis H. Treacy
Director

Francis L. Daniel
Tidewater Regional Director

April 12, 2001

Ms. Marie E. Krien-Schmidt
Director, Environmental Affairs
Kinder Morgan Bulk Terminals, Inc.
P.O. Box 625
Sorrento, LA 70778-0625

Re: VPDES Permit Number VA0057142; Pier IX Terminal
Newport News, VA
Draft Permit Comments

Dear Ms. Krien-Schmidt:

We have received your March 30 and April 4, 2001 letters, and have reviewed your comments on the draft VPDES permit for the Kinder Morgan Pier IX facility in Newport News, VA.

In response to your comments on facility and owner contact, we will change the facility contact to Mr. Robert Coffey. In accordance with Virginia Regulation 9 VAC 25-31-110, the owner contact must be a responsible corporate officer, meaning president, vice-president, secretary or treasurer, or other person who performs policy-making decisions, or a person who is authorized by one of the corporate officers. Since Mr. Brown signed the application, we designated him as the owner representative. If Kinder Morgan would like to authorize you to be the owner representative, we would need a letter signed by a corporate officer saying such, and we would then change the owner contact to your name.

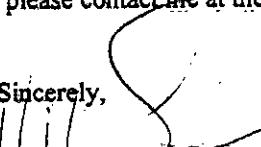
In response to your comments concerning effluent monitoring and toxicity testing at outfalls 002 and 003, we will remove the toxicity testing requirements for these outfalls, but will leave parameter-specific monitoring in the permit as it currently exists. The effluent monitoring requirements were discussed at our meeting on October 12, 2000, and at the site visit on January 18, 2001. As discussed at our meeting, we have removed the TSS limitation for outfalls 002 and 003; but we have kept monitoring for this parameter, copper and TPH as indicators of the effectiveness of the BMP's at these drainage areas. At the site visit on January 18, 2001, we discussed the possibility of removing monitoring from outfall 002 or 003, but decided that monitoring was to remain on these outfalls due to the heavy volume of truck traffic on Harbor Road and the large amount of coal fines near the drop inlets in the 002 and 003 drainage areas.

We feel that with the removal of toxicity testing at outfalls 002 and 003, we have addressed your comments to the greatest extent possible, and intend to send the public notice to the newspaper by April 16, 2001. I have enclosed the revised draft permit and fact sheet pages with this letter. Once we receive written authorization from a corporate officer designating either you specifically, or your position as the owner contact for the Kinder Morgan Pier IX facility, we will revise the fact sheet accordingly. If you would like to further discuss the draft permit during the public comment period, or would like to have a meeting to discuss the draft permit, please feel free to contact me in writing or by telephone.

Ms. Marie E. Krien-Schmidt
April 13, 2001
Page Two

If you have any other questions or need additional information, please contact me at the above address, or
by telephone at (757) 518-2105.

Sincerely,


Mark H. Sauer
Permit Engineer

Cc: TRO file



Kinder Morgan Bulk Terminals, Inc.

CERTIFIED MAIL 7099 3400 0015 0962 5527

Return Receipt Requested

April 20, 2001

Mr. Mark H. Sauer
Water Permit Engineer
Department of Environmental Quality
5636 Southern Boulevard
Virginia Beach, VA 23462

**RE: VPDES PERMIT NO. VA0057142
PIER IX TERMINAL, NEWPORT NEWS, VA
OWNER CONTACT AUTHORIZATION**

Dear Mr. Sauer:

In response to your letter of April 12, 2001, we are submitting a Signatory Authorization Form authorizing me, as Director, Environmental Affairs, to serve as the owner representative and owner contact for Kinder Morgan Bulk Terminals with regard to water permit issues. The form has been signed by Mr. Jaeson M. Brown, our Vice President of Operations.

We trust this letter and the attached form is sufficient to meet the requirements of Virginia regulations. If there are questions, please do not hesitate to contact me at 1-800-535-8170 or 225-675-0341.

Sincerely,

Marie E. Krien-Schmidt
Director, Environmental Affairs

cc: R. Coffey/Water Permit Files



KINDER MORGAN BULK TERMINALS, INC.

AUTHORIZATION

This is to certify that the person holding the following position title is authorized to serve as representative and contact for Kinder Morgan Bulk Terminals with respect to all applicable environmental requirements:

Director, Environmental Affairs

The person currently holding that position is: Marie E. Krien-Schmidt

Signed: Jaeson M. Brown

Name: Jaeson M. Brown

Title: Vice President, Operations

Date: April 19, 2001

ATTACHMENT 17

PUBLIC PARTICIPATION

KINDER MORGAN

ENERGY PARTNERS, L.P.

Kinder Morgan Bulk Terminals, Inc.

CERTIFIED MAIL 7099 3400 0015 0962 5527
Return Receipt Requested

April 20, 2001

Mr. Mark H. Sauer
Water Permit Engineer
Department of Environmental Quality
5636 Southern Boulevard
Virginia Beach, VA 23462

**RE: VPDES PERMIT NO. VA0057142
PIER IX TERMINAL, NEWPORT NEWS, VA
OWNER CONTACT AUTHORIZATION**

Dear Mr. Sauer:

In response to your letter of April 12, 2001, we are submitting a Signatory Authorization Form authorizing me, as Director, Environmental Affairs, to serve as the owner representative and owner contact for Kinder Morgan Bulk Terminals with regard to water permit issues. The form has been signed by Mr. Jason M. Brown, our Vice President of Operations.

We trust this letter and the attached form is sufficient to meet the requirements of Virginia regulations. If there are questions, please do not hesitate to contact me at 1-800-535-8170 or 225-675-0341.

Sincerely,

Marie E. Krien-Schmidt

Marie E. Krien-Schmidt
Director, Environmental Affairs

cc: R. Coffey/Water Permit Files



KINDER MORGAN BULK TERMINALS, INC.

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This is to certify that the person holding the following position title is authorized to serve as representative and contact for Kinder Morgan Bulk Terminals with respect to all applicable environmental requirements:

Director, Environmental Affairs

The person currently holding that position is: Marie E. Krien-Schmidt

Signed: Jaeson M. Brown

Name: Jaeson M. Brown

Title: Vice President, Operations

Date: April 19, 2001