VPDES PERMIT PROGRAM FACT SHEET
FILE NO: VA0057142@ECM

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

1. **PERMIT NUMBER:** VA0057142 **EXPIRATION DATE:** July 20, 2011

2. **FACILITY NAME/LOCAL MAILING ADDRESS**

Kinder Morgan Bulk Terminals - Pier IX
P. O. Box 38
Newport News, Virginia 23607

FACILITY LOCATION ADDRESS (IF DIFFERENT)

21st Street and Terminal Avenue
Newport News, Virginia 23607

CONTACT AT FACILITY:

NAME: Mr. Joseph P. DeMatteo
TITLE: Terminal Manager
PHONE: (757) 928-1520
EMAIL: Joseph DeMatteo@kindermorgan.com

CONTACT AT LOCATION ADDRESS:

Mr. Cory Steil
Environmental Technician
(757) 928-1520
Cory Steil@kindermorgan.com

3. **OWNER CONTACT:** (TO RECEIVE PERMIT)

NAME: Mr. Joseph P. DeMatteo
TITLE: Terminal Manager
COMPANY NAME: (IF DIFFERENT)
ADDRESS: P. O. Box 38
Newport News, Virginia 23607
PHONE: (757) 928-1520
EMAIL: Joseph_DeMatteo@kindermorgan.com

CONSULTANT CONTACT:

NONE

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

Permit Writer(s): C. Thomas Date(s): 12/2010 - 05/2011
Reviewed By: M. Sauer Date(s): 5/5/11

5. **PERMIT ACTION:**

( ) Issuance (X) **Reissuance** ( ) Revoke & Reissue ( ) Owner Modification
( ) Board Modification ( ) Change of Ownership/Name [Effective Date: N/A]

6. **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	Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding
Attachment	7	Special Conditions Rationale
Attachment	8	Toxics Monitoring/Toxics Reduction/WET Limit Rationale
Attachment	9	Material Stored
Attachment	10	Receiving Waters Info./Tier Determination/STORET Data/Stream Modeling
Attachment	11	303(d) Listed Segments
Attachment	12	TABLE III(a) and TABLE III(b) - Change Sheets
Attachment	13	NPDES Industrial Permit Rating Wrksht & EPA Permit Chklst
Attachment	14	Chronology Sheet
Attachment		Public Participation

APPLICATION COMPLETE: March 17, 2011 (upon receipt of VDH/DW comments)

7. **PERMIT CHARACTERIZATION:** (Check as many as appropriate)

(X) Existing Discharge	(X) Effluent Limited
( ) Proposed Discharge	( ) Water Quality Limited
( ) Municipal	( ) WET Limit
SIC Code(s)	( ) Interim Limits in Permit
(X) Industrial	( ) Interim Limits in Other Document
SIC Codes 4491, 5052	( ) Compliance Schedule Required
( ) POTW	( ) Site Specific WQ Criteria
( ) PVOTW	( ) Variance to WQ Standards
(X) Private	( ) Water Effects Ratio
( ) Federal	(X) Discharge to 303(d) Listed Segment
( ) State	(X) Toxics Management Program Required
( ) Publicly-Owned Industrial	( ) Toxics Reduction Evaluation
( ) Pretreatment Program Req'd	(X) Storm Water Management Plan
( ) Possible Interstate Effect	( ) CBP Significant Dischargers List

8. **RECEIVING WATERS CLASSIFICATION:** River basin information.

Outfall No(s): 001, 002, 003

Receiving Stream:	James River
River Mile:	2-JMS007.89 (based on 03/2011 determination of TRO Planning)
Basin:	James River (Lower)
Subbasin:	N/A
Section:	1
Class:	II
Special Standard(s):	a
Tidal:	YES
7-Day/10-Year Low Flow:	N/A
1-Day/10-Year Low Flow:	N/A
30-Day/5-Year Low Flow:	N/A
Harmonic Mean Flow:	N/A

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

Existing industrial discharge resulting from the applicant's operation of an industrial waterfront facility specializing in the receipt, storage, and loading of coal onto ocean-going self-propelled vessels and barges from two dedicated piers for shipment to local, domestic, and international markets. The facility also receives bulk quantities of Portland cement for storage and distribution to regional clients. Whereas coal is stored and handled in exposed locations and methods, Portland cement is stored in enclosed silos near the waterfront.

10. **LICENSED OPERATOR REQUIREMENTS:** (X) No

11. **RELIABILITY CLASS:** Industrial Facility - NA

12. **SITE INSPECTION DATE:** 1) July 17, 2008 **REPORT DATE:** July 24, 2008
2) April 6, 2011 April 7, 2011

Performed By: 1) M. Kidd
2) C. Thomas

SEE ATTACHMENT: 1

13. **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.: 035B

SEE ATTACHMENT: 2

14. **ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S):** 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.

Narrative: The applicant relies on the use of best management practices (BMP) typical for the industry to control pollutants at their source and prior to their loss to the environment and surface waters. The applicant diverts all storm water runoff, dust suppression wastewaters and other wastewaters associated with the industrial activity to a perimeter ditch leading to a large volume settling pond. Waters from the pond are reused for dust suppression activities.

SEE ATTACHMENT: 3

15. **DISCHARGE DESCRIPTION:** Describe each discharge originating from this facility.

SEE ATTACHMENT: 4

16. **COMBINED TOTAL FLOW:**

TOTAL: 1.97 MGD (aggregate of all outfalls' storm water flows)

PROCESS FLOW: 1.54 MGD (LTA based on 79 data points of 001 average flow)

RAINFALL DEPENDENT FLOW: 0.43 MG (Est. of 41 data points of 002/003 max. flows)

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

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

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

SEE ATTACHMENT 5

19. **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.

SUITABLE DATA: 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 1; therefore, no further review is needed. Permit limits have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

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 122.44 (l).

In this regard, two elements of the allowable exceptions (information not available at the time, mistaken interpretations of law) are currently present and were also present at the time of previous reissuances.

Based on the terms of the regulations and guidance, and information in the form of site specific effluent phosphorus data that was not available at the time that the permit limitation for total phosphorus, it has been determined that removal of the total phosphorus limitation is allowable backsliding.

SEE ATTACHMENT: 6

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

SEE ATTACHMENT: 7

21. **TOXICS MONITORING/TOXICS REDUCTION & WET LIMIT SPECIAL CONDITIONS RATIONALE**: Provide the justification for any toxics monitoring program and/or toxics reduction program and WET limit.

SEE ATTACHMENT: 8

22. **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

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

SEE ATTACHMENT: 9

24. **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: 10

25. **305(b)/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 at river mile 2-JMS007.89. This receiving stream segment has been listed in Category 5 of the 305(b)/303(d) list for non-attainment of PCB in fish tissue, chlorophyll-a, estuarine bioassessments, and dissolved oxygen. A TMDL has not been prepared or approved for this stream segment. The permit contains a TMDL reopener clause which will allow the it to be modified, in compliance with Section 303(d)(4) of the Act once a TMDL is approved.

SEE ATTACHMENT: 11

26. **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: 12

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

TOTAL SCORE: 58

SEE ATTACHMENT: 13

28. **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.

29. **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 the Div. of Shellfish Sanitation and noted how resolved.

The VDH reviewed the application and waived their right to comment and/or object on the adequacy of the draft permit.

The DSS has no comments on the application/draft permit.

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 adequacy of 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 May 27, 2011

End Date June 27, 2011

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 public hearing and brief explanation how the requestor's interests would be directly and adversely affected by the permit action.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Carl D. Thomas at: Department of Environmental Quality (DEQ), Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, Virginia 23462. Telephone: (757) 518-2161 e-Mail: carl.thomas@deq.virginia.gov .

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.

30. **ADDITIONAL FACT SHEET COMMENTS/PERTINENT INFORMATION:**

During the 30 period of public notice, no comments were received pertaining to the issuance, or content, of the proposed permit.

Browse Categories

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- Electronics
- Furniture
- Games & Toys
- Health & Beauty
- Household Items
- Jewelry
- Motorcycles & Scooters
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- Outdoor & Garden
- Pets
  Powered by Gadzoo.com
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- Recreational Vehicles
- Sporting Goods
- Tickets
- Tools
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Services

Announcements

Events

Public Notice Of An Environmental Permit

PUBLIC NOTICE OF AN ENVIRONMENTAL PERMIT Citizens are invited to comment on a proposed permit that will allow the release of treated wastewater and storm water from a regulated industrial activity into a waterway in Newport News, Virginia PUBLIC COMMENT PERIOD: Until 4:30 PM 30 days from the first date of this public notice (Friday, May 27, 2011) PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit. Owners or operators of facilities that discharge into Virginia waterways from a set location called a point source must apply for this permit. NAME ADDRESS AND PERMIT NUMBER OF APPLICANT: Kinder Morgan Bulk Terminals, Incorporated; P.O. Box 38, Newport News, Virginia 23607; VA0057142 NAME AND ADDRESS OF FACILITY: Kinder Morgan Bulk Terminals - Pier IX Terminal; 21st Street and Terminal Avenue, Newport News, Virginia 23607 DISCHARGE LOCATION/RECEIVING STREAM/WATERSHED: Newport News; James River, Lower James River Basin PROJECT DESCRIPTION: Kinder Morgan Bulk Terminals - Pier IX Terminal has applied to the Department of Environmental Quality (DEQ) for the reissuance of a permit for treated industrial waste water and storm water runoff from industrial activities associated with a bulk coal and Portland cement receipt and storage facility. Coal is stored in exposed piles and loaded onto vessels. Portland cement is stored in engineered silos and loaded into transport vehicles. The applicant proposes to discharge at a rate commensurate with the duration and intensity of storm events that may exceed their ability to retain or reuse storm water for dust suppression purposes. The permit will limit the following pollutants to amounts that protect water quality – total suspended solids and pH. Coal sludge reclaimed from the perimeter ditch and the settling lagoon are returned to existing coal piles. TO COMMENT TO DEQ: Via e-mail, fax or postal mail. You must include your name, address and telephone number plus the names and telephone numbers of any people you represent. DEQ must receive your comments during the comment period. The public may review permit documents at the Tidewater Regional Office every work day by appointment. You may request a public hearing via e-mail, fax or postal mail during the comment period. Requests for hearings must include the reason for the hearing request, the nature of the issue(s) to be raised in the public hearing, your interest and how the facility affects you. DEQ may hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit. CONTACT: Carl D. Thomas, DEQ Tidewater Regional Office, 5636 Southern Blvd., Virginia Beach 23462. Tel: 757-518-2161; Fax: 757-518-2009. E-mail: carl.thomas@deq.virginia.gov

Additional Information
Posted: 13 hours ago
Category: Public Notice

Daily Press

CLASSIFIED ADVERTISING **PROOF/QUOTE**

Printed by: cynpow
at: 11:19 am
on: Thursday, May 26, 2011

Ad #: 7626717

7505 Warwick Blvd.
Classified Advertising MP1109
Newport News, VA. 23607-0746
757-247-4700
Classified 757-928-0354 (fax)
Real Estate 757-247-7473 (fax)

Advertiser Name: KINDER MORGAN BULK TERMINALS
Account #
Ad Size 2 x 4.000

Amount Due: **$ 942.40**

Ad Copy (please note that ad is enlarged 25%):

PUBLIC NOTICE OF AN ENVIRONMENTAL PERMIT

Citizens are invited to comment on a proposed permit that will allow the release of treated wastewater and storm water from a regulated industrial activity into a waterway in Newport News, Virginia

PUBLIC COMMENT PERIOD: Until 4:30 PM 30 days from the first date of this public notice **(Friday, May 27, 2011)**

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit. Owners or operators of facilities that discharge into Virginia waterways from a set location called a point source must apply for this permit.

NAME ADDRESS AND PERMIT NUMBER OF APPLICANT: Kinder Morgan Bulk Terminals, Incorporated; P.O. Box 38, Newport News, Virginia 23607; VA0057142

NAME AND ADDRESS OF FACILITY: Kinder Morgan Bulk Terminals - Pier IX Terminal; 21st Street and Terminal Avenue, Newport News, Virginia 23607

DISCHARGE LOCATION/RECEIVING STREAM/WATERSHED: Newport News; James River, Lower James River Basin

PROJECT DESCRIPTION: Kinder Morgan Bulk Terminals - Pier IX Terminal has applied to the Department of Environmental Quality (DEQ) for the reissuance of a permit for treated industrial waste water and storm water runoff from industrial activities associated with a bulk coal and Portland cement receipt and storage facility. Coal is stored in exposed piles and loaded onto vessels. Portland cement is stored in engineered silos and loaded into transport vehicles. The applicant proposes to discharge at a rate commensurate with the duration and intensity of storm events that may exceed their ability to retain or reuse storm water for dust suppression purposes. The permit will limit the following pollutants to amounts that protect water quality û total suspended solids and pH. Coal sludge reclaimed from the perimeter ditch and the settling lagoon are returned to existing coal piles.

TO COMMENT TO DEQ: Via e-mail, fax or postal mail. You must include your name, address and telephone number plus the names and telephone numbers of any people you represent. DEQ must receive your comments during the comment period. The public may review permit documents at the Tidewater Regional Office every work day by appointment. You may request a public hearing via e-mail, fax or postal mail during the comment period. Requests for hearings must include the reason for the hearing request, the nature of the issue(s) to be raised in the public hearing, your interest and how the facility affects you. DEQ may hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit.

CONTACT: Carl D. Thomas, DEQ Tidewater Regional Office, 5636 Southern Blvd., Virginia Beach 23462. Tel: 757-518-2161; Fax: 757-518-2009. E-mail: carl.thomas@deq.virginia.gov

ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM

MEMORANDUM
DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE

Water Permits Section
5636 Southern Boulevard
Virginia Beach, Virginia 23462

SUBJECT: Reissuance of VPDES Permit No. VA0057142
Kinder Morgan Bulk Terminals – Pier IX
Newport News, Virginia

TO: Fact Sheet

FROM: C. Thomas

DATE: April 19, 2011

COPIES: N/A

1. On April 6, 2001, a site visit to the subject facility was performed to verify information presented in the permit application submitted for reissuance of VPDES Permit No. VA0057142. Upon arrival at the site and following review and acknowledgement of facility safety procedures and practices, the terminal manager (Mr. DeMatteo) and environmental technician (Mr. Cory Steil) arrived and introduced themselves. Following a brief site overview and discussion related to the permit and its development, a tour of the facility began.

2. The site's two storm water discharges (outfalls 002, 003) located in proximity to the main office were viewed first. The sources of runoff into these conveyances are limited to nearby terminal access roadways for Pier IX and neighboring industrial activities, rail sidings associated with a nearby industrial activity, and parking lots associated with Pier IX. Although the applicant has fitted the entrances to office parking with slight asphalt berms to prevent on-flow of potentially contaminated runoff from the nearby roadway, during significant storm events considerable runoff flows past the collection point leading to outfall 002 and into drainage leading to outfall 003. Each outfalls' collection point(s) are fitted with fabric filtration custom-fabricated by the site's environmental technician, on an as needed basis. Each structure's filter device is cleaned on a regular basis, or as they become fouled with noticeable debris.

3. Crossing over the coal hopper-car occupied rail-siding via an elevated walkway, the site's storm water collection pond was viewed and plans for upgrading discussed at length. The pond had considerable freeboard available and appeared to be in good material condition. No discharge was occurring from the pond or outfall 001. From the pond, the site's perimeter ditch was walked from east to west. It was readily apparent that previously approved site improvements were well underway with respect to the lining of the perimeter ditch with reinforced concrete. This effort was intense and construction of the formed concrete lining was commensurate with the anticipated heavy industrial use at the site. It is estimated that the ditch lining project was about 30% complete. The terminal manager noted that the project will continue until completed depending on funding provided during the term of the reissued permit. Once complete, the lining of the perimeter ditch should increase the volumes of reclaimed storm water and dust suppression wastewaters entering the final pond for eventual reuse at the site.

4. Continuing around the ditch, it was verified that a former co-located industrial activity had been removed from the site. That activity blended coal fines and latex material into a synthetic fuel blend. The site's coal car unloading activity and coal car thaw shed were viewed. Water from the pond is used for dust suppression in the coal dump shed, but no waters are utilized in the thaw shed. Wasted waters from the dump shed are diverted to the perimeter ditch to return to the pond.

5. The site appeared well managed for a facility of its size and scope of industrial activity. Heavy equipment/vehicles at the site are fueled and maintained on-site, and those activities appeared to comply with the terms and conditions of the current permit. Based on observations during the site visit, review of photographs taken, discussions with the applicant and support staff, and other contributing factors, the application received at the TRO accurately reflects the ongoing industrial activities and expected sources of contaminants that may be conveyed to surface waters of the James River.

Facility:	KINDER MORGAN - PIER IX
County/city:	Newport News

VPDES NO.	VA0057142

DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTEWATER FACILITY
INSPECTION REPORT
PART 1

Inspection date:	**July 17, 2008**	Date form completed:	**July 24, 2008**
Inspection by:	**Mark R. Kidd**	Inspection agency:	**DEQ/TRO**
Time spent:	**6 hours**	Announced Inspection:	[ ] Yes [X] No
Reviewed by: **Kenneth T. Raum**		Photographs taken at site?	[X] Yes [ ] No
Present at inspection:	**Chris Holt, Randy Thomas, Joseph DeMatteo**		

FACILITY TYPE:	FACILITY CLASS:
( ) Municipal	( ) Major
(X) Industrial	(X) Minor
( ) Federal	( ) Small
( ) VPA/NDC	( ) High Priority ( ) Low Priority

TYPE OF INSPECTION

Routine	X	Reinspection		Compliance/assistance/complaint	
Date of previous inspection:	**12/19/2005**	Agency:	**DEQ/TRO**		

Population Served:		Connections Served	

Average Effluent Outfall 002 – March 2008	pH (SU)	**7.6**	TSS (mg/l)	**243**	Flow (MGD)			
	Other:							
Average Effluent Outfall 001 – March 2008	pH (SU)	**8.2**	TSS (mg/l)	**9.1**	Flow (MGD)	**0.84**	NH_3 (mg/l)	
	Other:							
Average Effluent Outfall 003 – March 2008	pH (SU)	**7.8**	TSS (mg/l)	**137**	Flow (MGD)		NH_3 (mg/l)	
	Other:							

Data verified in preface:	Updated?		NO CHANGES?	X
Has there been any new construction?		YES	NO	X
If yes, were the plans and specifications approved?		YES	NO	NA
DEQ approval date:	NA			

COPIES TO: (x) DEQ/TRO; (x) DEQ/OWCP; (x) OWNER; ( ) OPERATOR; ( ) EPA-Region III; ( ) Other:

	PROBLEMS IDENTIFIED AT LAST INSPECTION:	CORRECTED	NOT CORRECTED
	Document all aspects of the Quarterly Visual Examination of Stormwater Quality and provide for corrective actions when poor quality is found.	X	
	The Comprehensive Site Compliance Evaluations need to include the certification statement as required in Part II.K.	X	
	Review the copper and zinc results in reference to the screening criteria values and provide for any corrective actions warranted by these results. Document this information and actions within the Stormwater Management Evaluation annual report.	Cu and Zn are no longer monitored	

SUMMARY

	INSPECTION COMMENTS:
	Arrived on site and met with Chris Holt and Randy Thomas. After a short video on facility safety, the Storm Water Pollution Prevention Plan (SWP3) and associated documents were reviewed with the following noted: 1.The SWP3 was updated in April 2008 and signed in June 2008. 2.Facility inspections are performed daily and monthly with the inspections documented in the environmental log. Rainfall data and discharge pump hours are also recorded in the log. 3.Employee training was last performed on May 1, 2008 and included a review of the SWP3. 4.Quarterly Visual Examinations of Storm Water Quality are performed and documented. The documentation is submitted with the Storm Water Annual Report. The Comprehensive Site Compliance Evaluation is also submitted with the Annual Report.
	A site survey was conducted with the assistance of Mr. Holt. Storm water on the northern section of the facility collects in a shallow basin (Photo 1) and is pumped to the perimeter drainage ditch. Drop inlets adjacent to the warehouse and shop discharge to the perimeter ditch. The perimeter ditch (Photos 2-4) utilizes absorbent booms at crossings and other locations. The pipe connecting the ditch to the settling pond (Photo 5) is currently blocked to prevent flow to the pond during scheduled maintenance on the pond. Accumulated coal fines (Photos 6-8) will be removed and stored on site for drying. The maintenance procedure for the pond will be added to the O&M manual per discussions between Kinder Morgan and DEQ representatives. Drop inlets in the parking lot (Photo 9) contain filter cloth to prevent the discharge of coal lines with storm water. Outfall 003 (Photo 10) appeared clean with no accumulation of sediment. Lubricants are stored inside (photo 11) a building with a bermed floor. The equipment fueling platform (Photo 12) employs a valved collection device to store the fuel nozzle.
	Typically, water from the settling pond is used for dust suppression and wetting of stored coal. Municipal water is being used as needed during the pond maintenance activities.
	No compliance issues were noted during the site survey. Mr. Holt is thanked for his assistance and cooperation.

	COMPLIANCE RECOMMENDATIONS FOR ACTION
	None at this time.

Photo 1.Storm water collection basin.

Photo 2.Drainage ditch along western perimeter of coal storage.

Photo 3. Drainage ditch along eastern perimeter of coal storage.

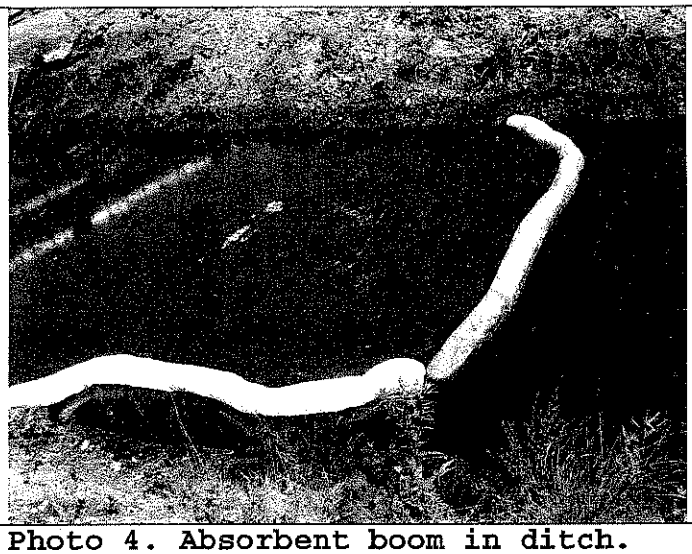


Photo 4. Absorbent boom in ditch.

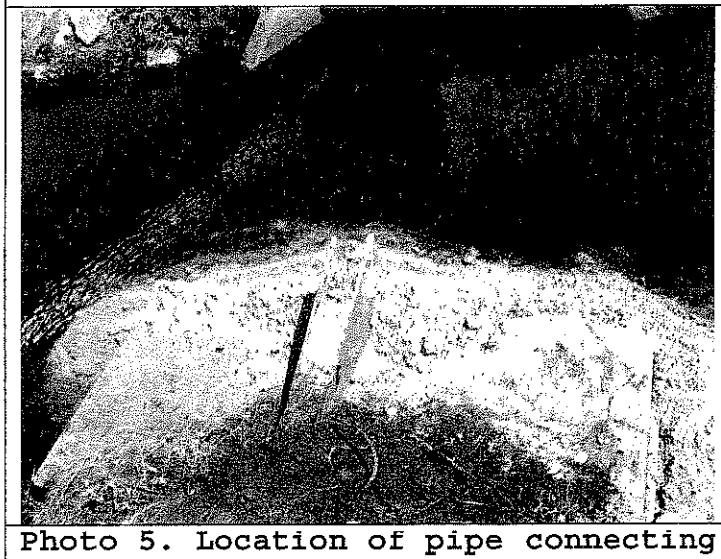


Photo 5. Location of pipe connecting ditch and pond.

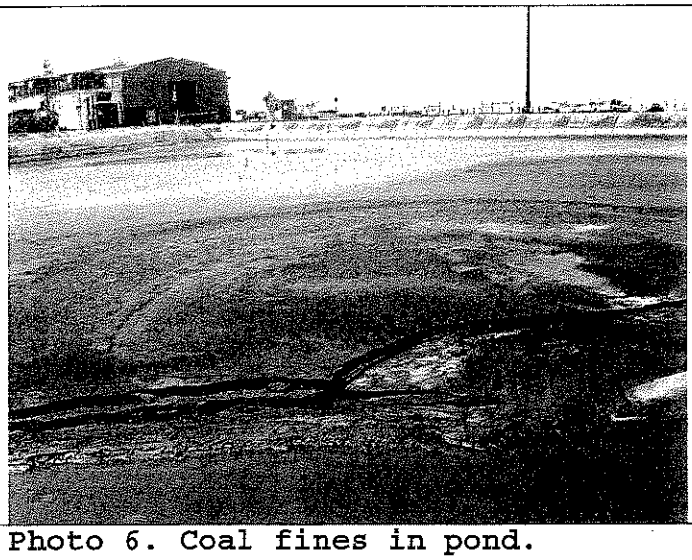


Photo 6. Coal fines in pond.

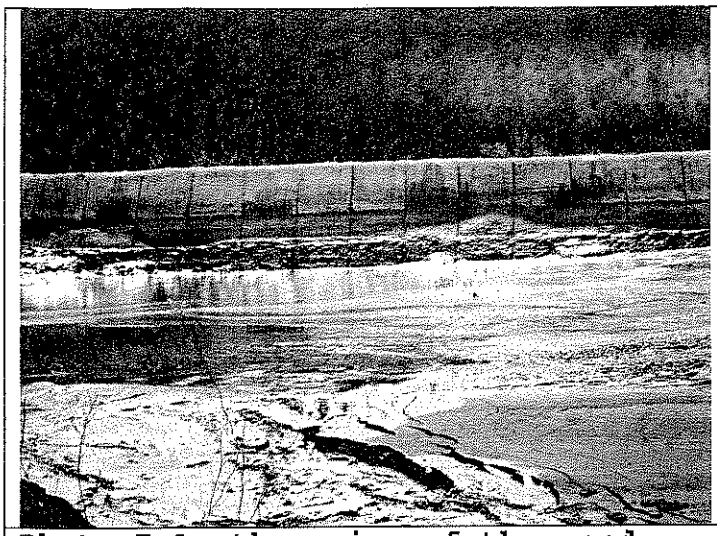


Photo 7.Another view of the pond.

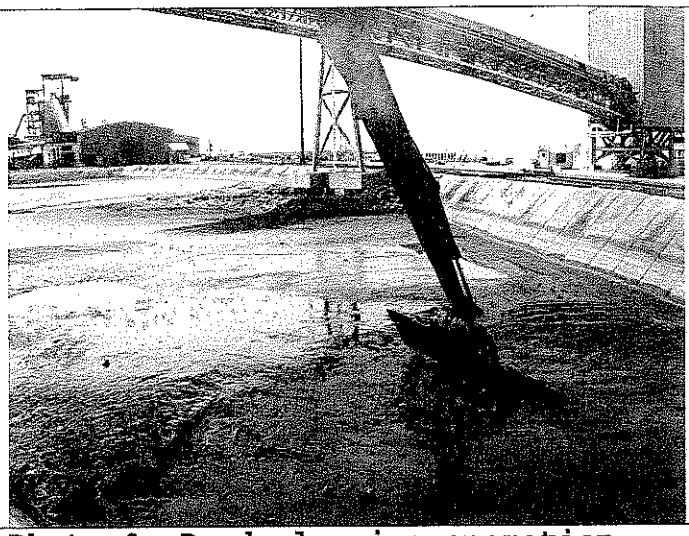


Photo 8. Pond clearing operation.

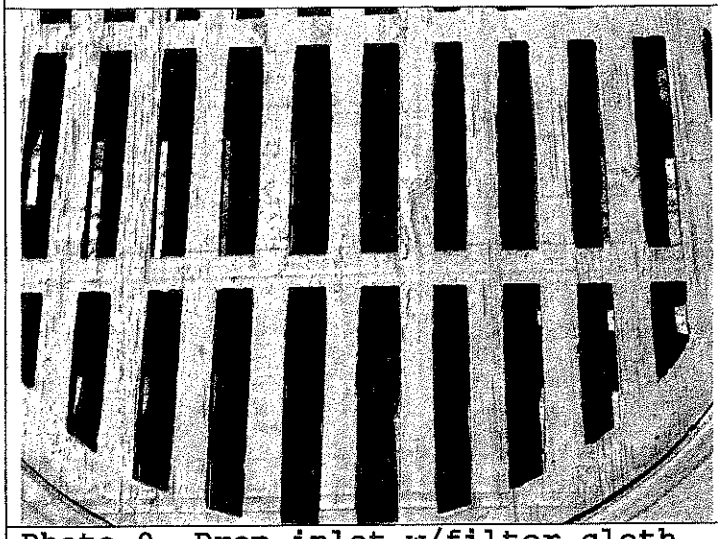


Photo 9. Drop inlet w/filter cloth in parking lot.

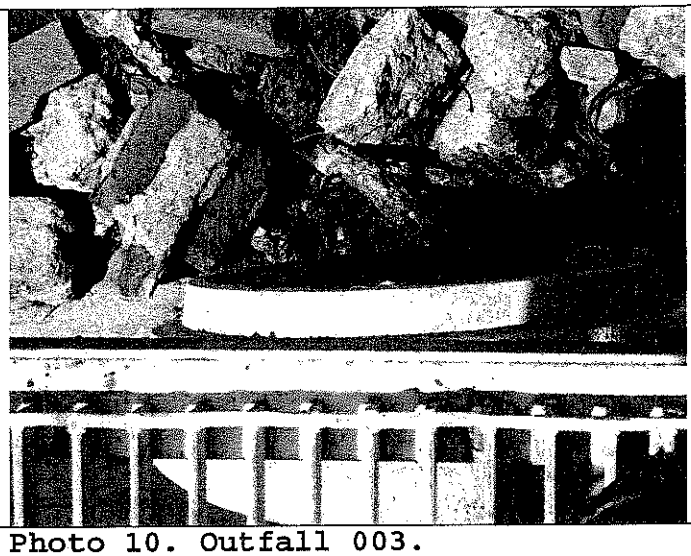


Photo 10. Outfall 003.

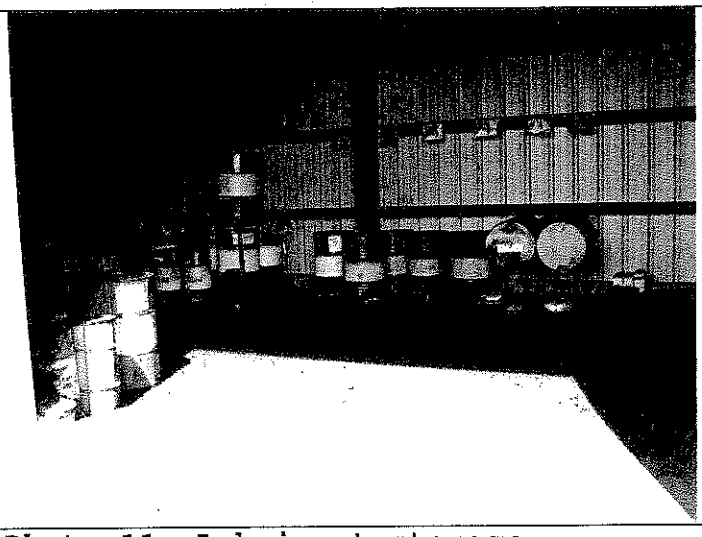


Photo 11. Lubricant storage.

Photo 12.Equipment fueling station.

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
LABORATORY INSPECTION REPORT

10/01

FACILITY NO:	INSPECTION DATE:	PREVIOUS INSP. DATE:	PREVIOUS EVALUATION:	TIME SPENT:
VA0057142	July 17, 2008	December 19, 2005	Deficiencies	5 hours

NAME/ADDRESS OF FACILITY:	FACILITY CLASS:	FACILITY TYPE:	UNANNOUNCED INSPECTION?
Kinder Morgan Bulk Terminals – Pier IX 21st Street and Terminal Ave. Newport News, VA 23607	( ) MAJOR (X) MINOR () SMALL ( ) HIGH PRIORITY ( ) LOW PRIORITY	( ) MUNICIPAL (X) INDUSTRIAL ( ) FEDERAL ( ) COMMERCIAL LAB ( ) VPA/NDC	(X) YES () NO **FY-SCHEDULED INSPECTION?** (X) YES ( ) NO

INSPECTOR(S):	REVIEWERS:	PRESENT AT INSPECTION:
Mark R. Kidd	Kenneth T. Raum KTR	

LABORATORY EVALUATION	DEFICIENCIES? Yes	No
LABORATORY RECORDS	X*	
GENERAL SAMPLING & ANALYSIS		X
LABORATORY EQUIPMENT		NA
Laboratory inspection consisted of a records review. All testing is performed by a commercial lab.		

QUALITY ASSURANCE/QUALITY CONTROL

Y/N	QUALITY ASSURANCE METHOD	PARAMETERS	FREQUENCY
	REPLICATE SAMPLES		
	SPIKED SAMPLES		
	STANDARD SAMPLES		
	SPLIT SAMPLES		
	SAMPLE BLANKS		
	OTHER		
	EPA-DMR QA DATA?	RATING: ( ) No Deficiency ( ) Deficiency (X) NA	
	QC SAMPLES PROVIDED?	RATING: ( ) No Deficiency ( ) Deficiency (X) NA	

COPIES TO: (x) DEQ/TRO; (x) DEQ/OWCP; (x) OWNER; ( ) EPA-Region III; ( ) Other:

* SEE LABORATORY INSPECTION REPORT SUMMARY PAGE FOR DETAILS REGARDING ASTERISKED ITEMS

FACILITY #: VA0057142

LABORATORY RECORDS SECTION

LABORATORY RECORDS INCLUDE THE FOLLOWING:

X	SAMPLING DATE	X	ANALYSIS DATE		CONT MONITORING CHART
X	SAMPLING TIME	X	ANALYSIS TIME		INSTRUMENT CALIBRATION
	SAMPLE LOCATION	x	TEST METHOD		INSTRUMENT MAINTENANCE
				x	CERTIFICATE OF ANALYSIS

WRITTEN INSTRUCTIONS INCLUDE THE FOLLOWING:

	SAMPLING SCHEDULES		CALCULATIONS		ANALYSIS PROCEDURES

	YES	NO	N/A
DO ALL ANALYSTS INITIAL THEIR WORK?	X		
DO BENCH SHEETS INCLUDE ALL INFORMATION NECESSARY TO DETERMINE RESULTS?			X
IS THE DMR COMPLETE AND CORRECT? MONTH(S) REVIEWED: **January 2008, March 2008**		X	
ARE ALL MONITORING VALUES REQUIRED BY THE PERMIT REPORTED?	X		

GENERAL SAMPLING AND ANALYSIS SECTION

	YES	NO	N/A
ARE SAMPLE LOCATION(S) ACCORDING TO PERMIT REQUIREMENTS?	X		
ARE SAMPLE COLLECTION PROCEDURES APPROPRIATE?			X
IS SAMPLE EQUIPMENT CONDITION ADEQUATE?			X
IS FLOW MEASUREMENT ACCORDING TO PERMIT REQUIREMENTS?	X		
ARE COMPOSITE SAMPLES REPRESENTATIVE OF FLOW?			X
ARE SAMPLE HOLDING TIMES AND PRESERVATION ADEQUATE?	X		
IF ANALYSIS IS PERFORMED AT ANOTHER LOCATION, ARE SHIPPING PROCEDURES ADEQUATE? LIST PARAMETERS AND NAME & ADDRESS OF LAB: **Universal Labs, Hampton, VA**			

LABORATORY EQUIPMENT SECTION

	YES	NO	N/A
IS LABORATORY EQUIPMENT IN PROPER OPERATING RANGE?			X
ARE ANNUAL THERMOMETER CALIBRATION(S) ADEQUATE?			X
IS THE LABORATORY GRADE WATER SUPPLY ADEQUATE?			X
ARE ANALYTICAL BALANCE(S) ADEQUATE?			X

*** SEE LABORATORY INSPECTION REPORT SUMMARY PAGE FOR DETAILS REGARDING ASTERISKED ITEMS**

LABORATORY INSPECTION REPORT SUMMARY

10/01

FACILITY NAME:	Kinder Morgan Bulk Terminals – Pier IX	VPDES NO:	VA0057142	INSP. DATE:	July 17, 2008

LABORATORY RATING		
		NO DEFICIENCIES
	X	DEFICIENCIES

LABORATORY RECORDS

The Laboratory Records section has the following deficiencies:

Total Petroleum Hydrocarbons (TPH) was reported incorrectly for Outfall 001 on the DMR submitted for January 2008. The DMR reports "0" for TPH while "<1.0" should have been reported.

Total Petroleum Hydrocarbons (TPH) was reported incorrectly for Outfall 002 on the DMR submitted for the 1st quarter of 2008. The DMR reports "<0.5" for TPH while "1.0" should have been reported.

Total Petroleum Hydrocarbons (TPH) was reported incorrectly for Outfall 003 on the DMR submitted for the 1st quarter of 2008. The DMR reports "0.5" for TPH while "0.6" should have been reported.

The following is the current data handling guidelines from DEQ for reporting Total Petroleum Hydrocarbons (TPH) when the analysis is performed by analyzing Diesel Range Organics (DRO) and Gasoline Range Organics (GRO):

a. If there is a hit on one fraction and a "less than" value on the other, treat the "less than" as zero, and report the concentration of the hit. Example: If the value for DRO was 1.1 ppm and the GRO was <0.5 ppm. The reported value for TPH should be 1.1 ppm.
b. If there are hits on both fractions (DRO and GRO) add them together and report the sum. Example: DRO is 0.9 ppm and GRO is 0.7 ppm, then TPH is reported as 1.6 ppm.
c. If both are "less thans", then report the TPH as less than the sum of the two reporting limits (QLs). Example: GRO is <0.5 ppm and DRO is <0.5 ppm, TPH would be <1.0 ppm.

TPH, Total Nitrogen (TN), and Total Phosphorus (TP) were incorrectly reported as "0" on the March 2008 DMR submission for Outfall 001. TPH, TN and TP are required to be reported once per year. For DMR's submitted for months when these parameters are not sampled, "NA" should be reported.

GENERAL SAMPLING AND ANALYSIS

The General Sampling and Analysis section has no deficiencies at this time.

LABORATORY EQUIPMENT

The Laboratory Equipment section was not evaluated.

PARAMETER SUMMARY

All testing is performed by Universal Labs.

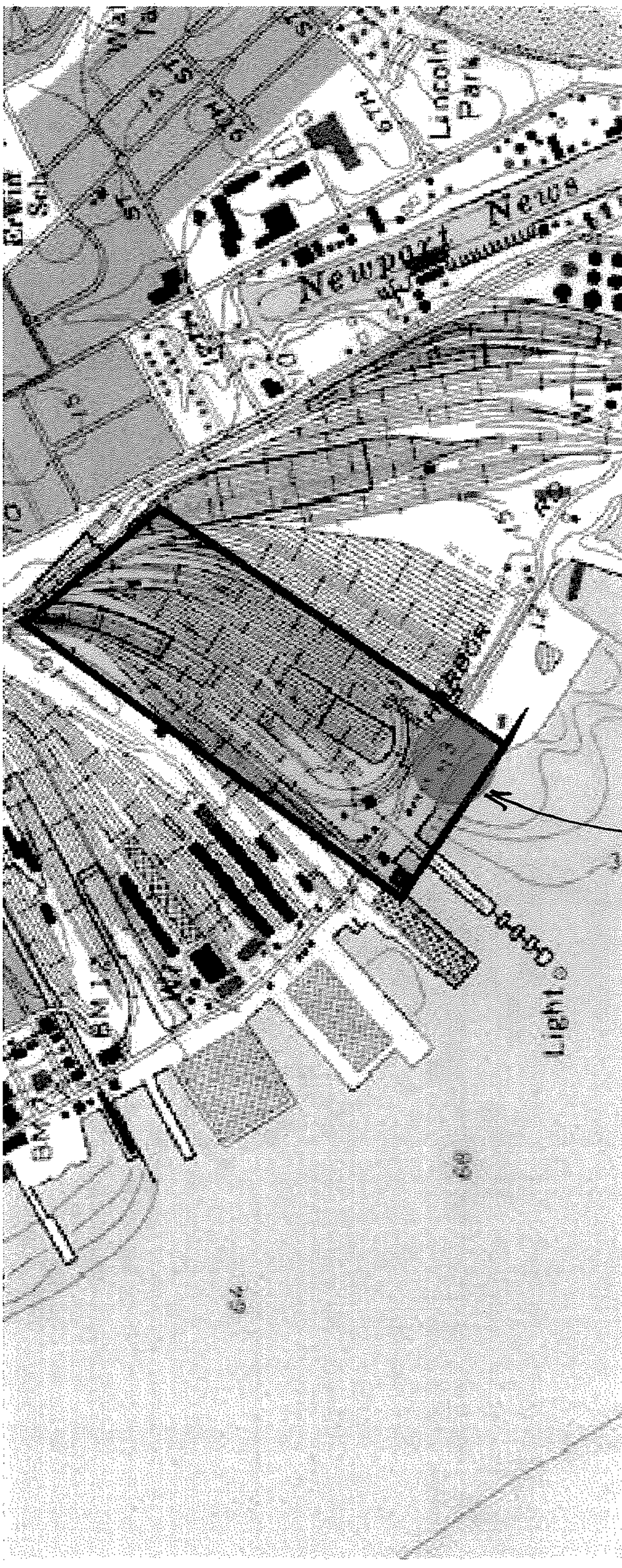
DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
SAMPLE ANALYSIS HOLDING TIME/CONTAINER/PRESERVATION CHECK SHEET
Revised 7/05 [40 CFR, Part 136.3, Table II]

FACILITY NAME:	Kinder Morgan Bulk Terminals – Pier IX	VPDES NO	VA0057142	DATE:	**July 17, 2008**

HOLDING TIMES						SAMPLE CONTAINER				PRESERVATION				
PARAMETER	APPROVED	MET?		LOGGED?		ADEQ. VOLUME		APPROP. TYPE		APPROVED	MET?		CHECKED?	
		Y	N	Y	N	Y	N	Y	N		Y	N	Y	N
TSS	7 DAYS	X		X						6° C	X		X	
pH	15 MIN.	X		X						N/A				
PROBLEMS:										PROBLEMS:				

ATTACHMENT 2

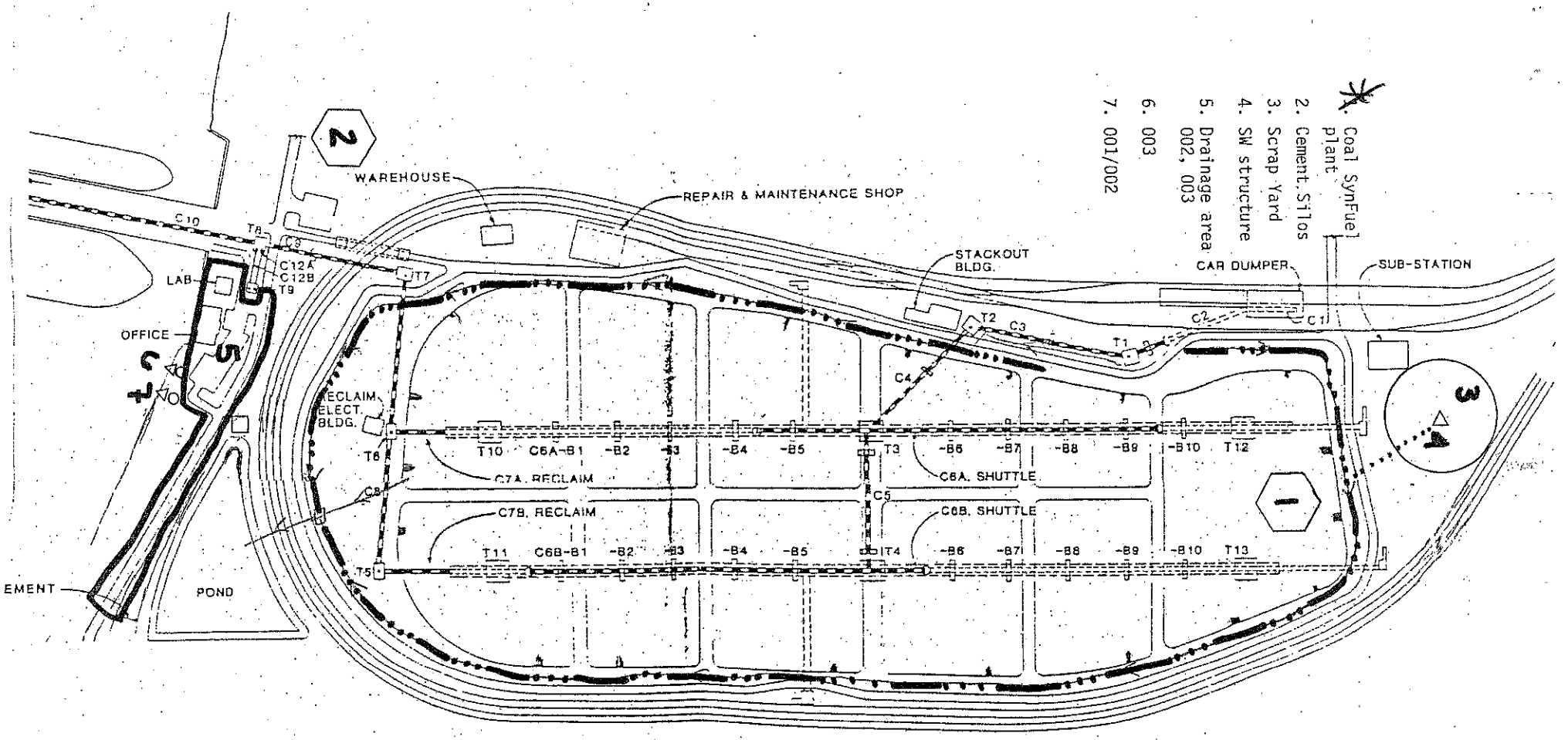
DISCHARGE LOCATION/TOPOGRAPHIC MAP



OUTFALLS
001, 002, 003

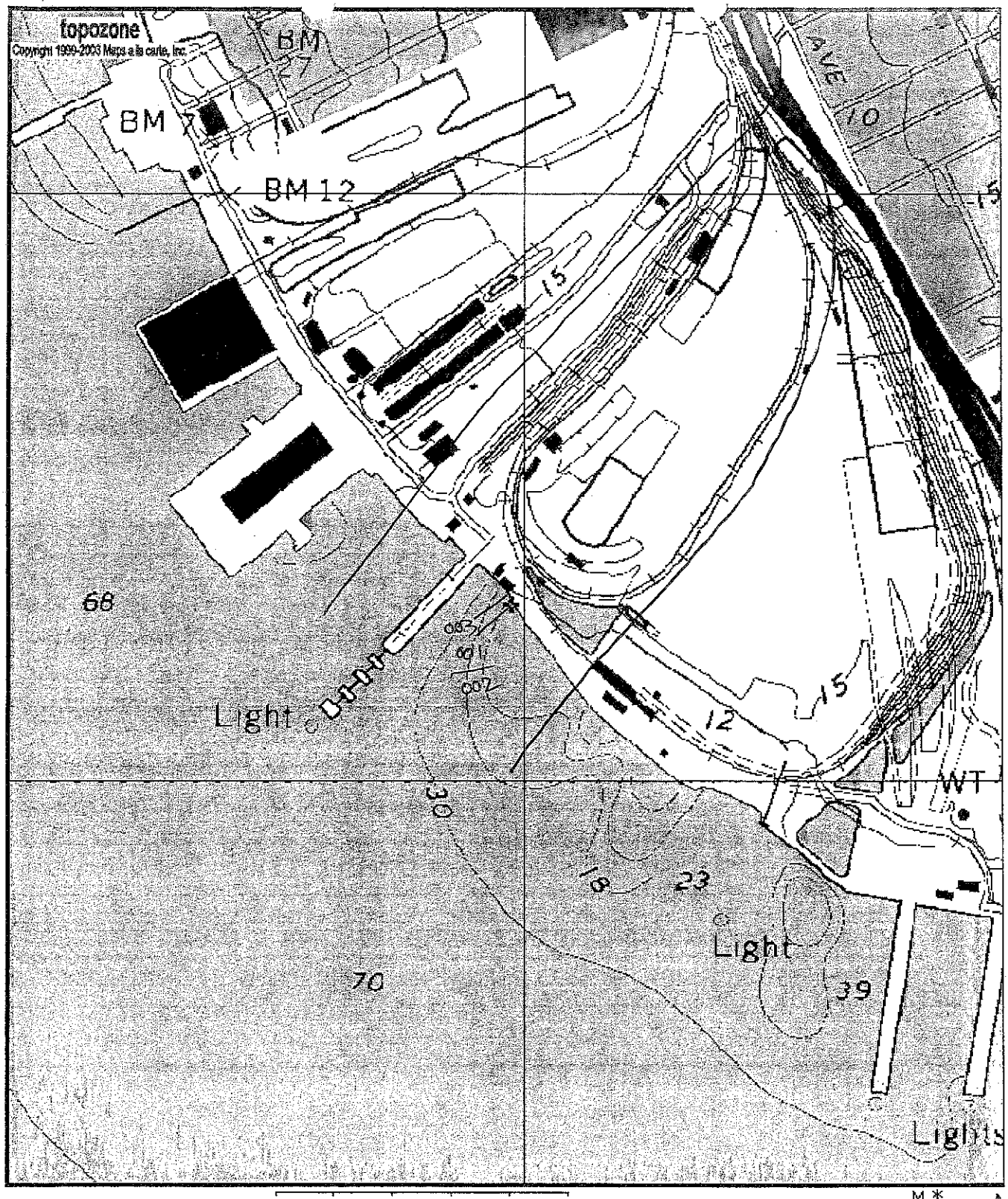
ATTACHMENT 3

SCHEMATIC/PLANS & SPECS/SITE MAP/ WATER BALANCE



SITE PLAN

SynFuel Site Layout Activities Covered



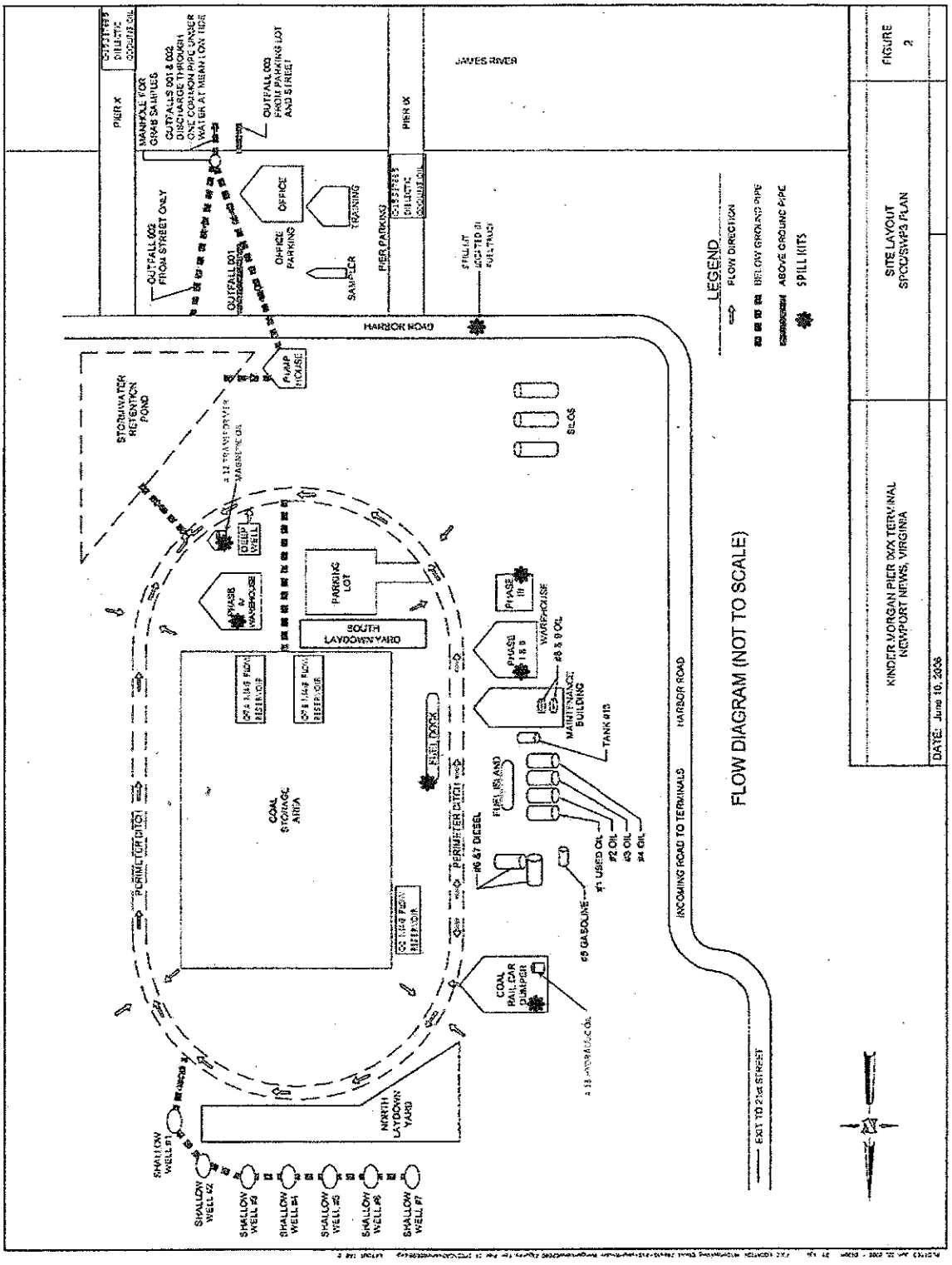
0 0.1 0.2 0.3 0.4 0.5 km

0 0.09 0.18 0.27 0.36 0.45 mi

M * G N

M=-10.701
G=-0.858

Map center is 36° 58' 06"N, 76° 25' 37"W (WGS84/NAD83)
Newport News South quadrangle
Projection is UTM Zone 18 NAD83 Datum

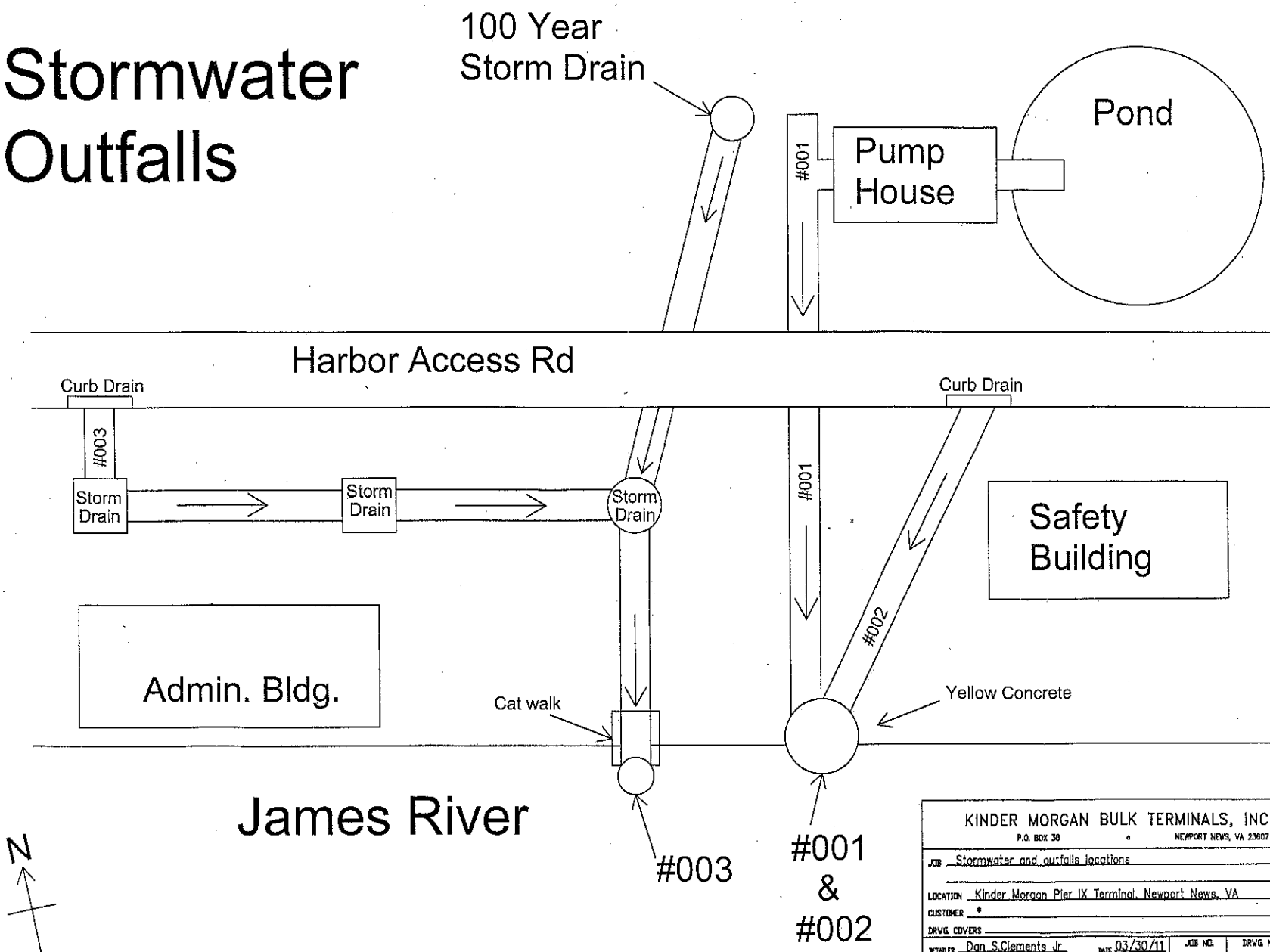


Kinder Morgan Bulk Terminals Inc.
Pier IX/X Terminal – Site Plan and Drainage Map

Figure 2

Notes: Outfall 001 includes drainage from all areas of the property within the property boundaries, except roadway and parking areas adjacent to lab/office area. All drainage discharge through outfall 001 is first collected in the retention pond prior to discharge. Outfalls 001 and 002 discharge through one common pipe. The road and parking areas drain to outfalls 002 and 003. Outfall 002 includes discharge from road only. Outfall 003 discharge from road and parking area.

Stormwater Outfalls



KINDER MORGAN BULK TERMINALS, INC.
P.O. BOX 38 • NEWPORT NEWS, VA 23607

JOB Stormwater and outfalls locations

LOCATION Kinder Morgan Pier IX Terminal, Newport News, VA

CUSTOMER *

DRWG. COVERS

DETAILER Dan S.Clements Jr DATE 03/30/11

CHECKER Dan S. Clements Jr. DATE 03/30/11

IN CHARGE OF

JOB NO. ********

DRWG. NO. **********

ATTACHMENT 4

TABLE I - DISCHARGE/OUTFALL DESCRIPTION

ATTACHMENT 4

TABLE I - NUMBER AND DESCRIPTION OF OUTFALLS

OUTFALL NO.	DISCHARGE LOCATION	DISCHARGE SOURCE (1)	TREATMENT (2)	FLOW (3)
001	36°58′ 05″ N 076°25′ 38″ W 2-JMS007.89	Storm water runoff, minor volumes of equipment washwaters, coal pile dust suppression wastewaters from interior areas of coal pile storage and handling activities into perimeter ditch leading to a settling pond designed and constructed for this purpose.	Best management practices, frequent clean-up of excessive coal fine accumulations from perimeter ditch and periodic maintenance and clean-out of fines accumulated in settling pond	4.2 MGD (max., 79 pts.) 1.5 MGD (avg., 79 pts.)
002	36°58′ 05″ N 076°25′ 38″ W 2-JMS007.89	Storm water runoff from roadways, parking lots and facility access points along the waterfront	Best management practices, frequent clean-up of accumulated solids, use of filter-fabric inserts in storm water collection structures.	0.33 MG (max., 41 pts.) 0.02 MGD (avg., 41 pts.)
003	36°58′ 05″ N 076°25′ 38″ W 2-JMS007.89	Storm water runoff from roadways, parking lots and facility access points along the waterfront	Best management practices, frequent clean-up of accumulated solids, use of filter-fabric inserts in storm water collection structures.	0.1 MG (max., 41 pts.) 0.02 MGD (avg., 41 pts.)

(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

MEMORANDUM
DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE

Water Permits Section
5636 Southern Boulevard

Virginia Beach,
Virginia 23462

River-Mile Determination Request for VPDES Applications

To: Jennifer Howell, TRO Water Planning 3/24/11

From: C. Thomas, TRO Water Permits

Date Requested: February 10, 2011

Date Needed: Open

Permit Writers please provide the information needed below:

1. Complete the box containing the facility information
2. Topo map with facility location and outfall location(s) clearly marked
3. Show effluent path, if not clearly apparent on map.
4. Information from applicant with outfall lat/long to verify.

Facility Name: Kinder Morgan Bulk Terminals - Pier IX
VPDES Permit Number: VA0057142
Receiving Stream(s): James River
Facility Latitude/Longitude Confirmation Needed? X YES ___ NO

Topo Map Name/Number: Newport News South

Site maps and material: attached

Outfall Numbers: 001, 002, 003

Latitude: Provide as attachment Longitude: Provide as attachment

Receiving Stream: Provide as attachment

Waterbody: _____ WBID _____

Rivermile: Provide as attachment

SCANNED
with EEM 8/25/11

VA0057142 Kinder Morgan Bulk Terminals - Pier IX

OUTFALL	LAT			LONG			RECEIVING STREAM	RIVERMILE	WBID
001	36	58	4.6	76	25	38.1	James River	2-JMS007.89	VAT-G11E
002	36	58	4.4	76	25	38.0	James River	2-JMS007.89	VAT-G11E
003	36	58	4.8	76	25	38.2	James River	2-JMS007.89	VAT-G11E
Facility Lat/Long	36	58	7.3	76	25	35.8			

ATTACHMENT 5

TABLE II - EFFLUENT MONITORING/LIMITATIONS

ATTACHMENT 5

TABLE II – INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL NUMBER: 001

Outfall Description: Storm water runoff associated with regulated industrial activities and non-storm water discharges from coal-pile dust suppression wastewaters, vehicle and equipment washwaters and other ancillary wastewater flows

SIC CODES: 4491, 5052

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

PARAMETER & UNITS	BASIS FOR LIMITS	MULTIPLIER OR PRODUCTION	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
			MONTHLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD)	3		NA	NA	NL	1/Month	Estimate
pH (S.U.)	3		NA	6.0	9.0	1/Month	Grab
Total Suspended Solids (mg/l) [a] [b]	3		NA	NA	50	1/Month	Grab
Total Recoverable Iron (mg/l) [a]	3		NA	NA	NL	1/3 Months	Grab

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

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)

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

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

[b] Any overflow from facilities designed, constructed and operated to treat the coal pile runoff which results from a 10-year 24-hour rainfall event shall not be subject to the limitation of 50 mg/l for total suspended solids.

The basis 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

ATTACHMENT 5

TABLE II - STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL NUMBER(S): 002

Outfall Description: Storm water runoff from roadways, railroad siding(s) and areas adjacent to industrial activities

SIC CODE: 4491, 5052

PARAMETER & UNITS	STORM CATEGORY 1-29 or BPJ	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS [a]	
		MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MG)		NA	NL	1/Year	Estimate [b]
pH (S.U.)		NL	NL	1/Year	Grab
Total Suspended Solids (mg/l) [c]		NA	NL	1/Year	Grab
Total Recoverable Iron (mg/l) [c]		NA	NL	1/Year	Grab
Total Petroleum Hydrocarbons (mg/l) [c] [d]		NA	NL	1/Year	Grab

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

1/Year = Between January 1 and December 31

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the period, then "no discharge" shall be reported on the DMR.

[a] See Part I.D.1. for storm water sampling and reporting requirements. Storm event sampling for this outfall shall not be subject to the specified storm event monitoring requirements (measureable storm event; 72 hours separation; storm event duration; rainfall measurements), or quarterly visual monitoring of discharge quality. All other requirements specified under Part I.D. shall apply.

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

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

[d] TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007). If the combination of Methods 8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.

The basis 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

ATTACHMENT 5

TABLE II - STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL NUMBER(S): 003

Outfall Description: Storm water runoff from roadways, railroad siding(s) and areas adjacent to industrial activities

SIC CODE: 4491, 5052

PARAMETER & UNITS	STORM CATEGORY 1-29 or BPJ	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS [a]	
		MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MG)		NA	NL	1/3 Months	Estimate [b]
pH (S.U.)		NL	NL	1/3 Months	Grab
Total Suspended Solids (mg/l) [c] [d]		NA	NL	1/3 Months	Grab
Total Recoverable Iron (mg/l) [c]		NA	NL	1/3 Months	Grab
Total Petroleum Hydrocarbons (mg/l) [c] [e]		NA	NL	1/Year	Grab

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

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/Year = Between January 1 and December 31

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the period, then "no discharge" shall be reported on the DMR.

[a] See Part I.D.1. for storm water sampling and reporting requirements. Storm event sampling for this outfall shall not be subject to the specified storm event monitoring requirements (measureable storm event; 72 hours separation; storm event duration; rainfall measurements). Quarterly visual monitoring of discharge quality is required as detailed in Part I.D.1.f. All other requirements specified under Part I.D. shall apply.

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

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

[d] See Part I.D.2. for information regarding the Storm Water Management Evaluation.

[e] TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007). If the combination of Methods 8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.

The basis 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

ATTACHMENT 6

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

ATTACHMENT 6
Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

Permit History:

1. On or about January 12, 1981, Massey Coal Terminal Corporation filed an application with the State Water Control Board (now Va. Department of Environmental Quality [DEQ]) for the issuance of a VPDES permit authorizing point source storm water discharges from a coal receipt (rail cars), handling (static piles, conveyors, heavy equipment), and export load-out facility (to ocean going vessels). Although an application was not found in the permitting files, the permit approval memorandum noted that the application was submitted for a proposed discharge from an industrial facility that had not yet been constructed. At the time of application, the site operated two lined retention basins into which storm water runoff was directed for the purpose of solids settlement prior to release to surface waters. The permit was issued on July 20, 1981, as VPDES Permit No. VA0057142 with expiration July 20, 1986. The single discharge point (outfall 001) was effluent limited for pH (6.0 - 8.5 standard units) and total suspended solids (50 mg/l as daily maximum concentration). The limitation for TSS was derived from the Federal Effluent Guidelines for Steam Electric Power subcategory, specifically limitations upon storm water runoff from coal piles. In addition, the applicant was required to monitor the runoff semiannually for several metals that were expected to be present based on EPA guidance documents pertaining to coal influenced runoff.

2. Correspondence, from a consultant engineering firm working on behalf of the permittee, received at the Tidewater Regional Office (TRO) on August 2, 1982, described re-engineering of the proposed two cell settling basin arrangement into one large settling basin with a redesigned point of final wastewater discharge to surface waters. This change in treatment system design did not necessitate a modification of the permit. This letter has been incorporated into this fact sheet (Attachment 14) for continuity of information specific to the current design and arrangement of the existing storm water retention basin in use at the facility.

3. A permit application was received at the TRO on February 12, 1986. Based on information (data from semi-annual metals monitoring) presented in the fact sheet, it appeared that the facility had only been in full operation as a coal loading terminal for approximately two years, or so. The permit was reissued July 20, 1986, with expiration July 20, 1991. Monitoring and limitations remained with the pH limitation changing from 6.0-8.5 SU, to 6.0-9.0 SU based on a change in the water quality standards. Monitoring for metals remained unchanged insofar as parameters and frequency. The permit was public noticed twice prior to reissuance. This was necessary since the DEQ decided to impose a permit requirement for the company's self-development of a Toxics Screening and Management Program (TMP) during the first period of notice.

4. In accordance with a memorandum from the former SWCB Office of Environmental Research and Standards dated April 7, 1987, the Board initiated a formal permit modification to incorporate a more detailed TMP permit special condition developed by staff of the OERS following a detailed review of available metals data and other factors. In addition to the revised TMP, monitoring for flow, pH and TSS changed from twice per month to once per month. The change in monitoring frequency was appropriate since the settling pond is drained in a batch manner by manually operated pumps.

ATTACHMENT 6
Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

Permit History: (continued)

5. Concurrent with the board initiated actions described in paragraph 4. above, the permit modification also recognized a new facility owner/operator. By correspondence dated October 20, 1987, Massey Coal Terminal relinquished ownership of the property and responsibilities under the permit, and Pier IX Terminal Company assumed the property and responsibilities under VA0057142. The permit modification became effective on March 18, 1988, with expiration remaining July 20, 1991.

6. Based on adoption of the Policy for Nutrient Enriched Waters (VR680-14-02) and the average flow from outfall 001 being greater than 1 MGD, the SWCB chose to open the permit for modification to add monitoring and a numeric limitation for total phosphorus (2.0 mg/l) and monitoring for total nitrogen. A mass loading limitation for phosphorus was also added based on the reported flow from outfall 001 over the terms of the facility's permit. This modification became effective March 10, 1989, with expiration remaining July 20, 1991.

7. A permit application was submitted to the TRO on October 24, 1990, with additional information provided on November 15, and December 12, 1990. The applicant identified an additional 4 points (002, 003, 004, 005) where storm water runoff from the facility is collected and directed to surface waters. The upland sources of new storm water flows originated from roadways and other areas associated with or located near points where coal is handled. Based on monitoring performed at the new storm water discharges, TSS was being release from those outfalls at concentrations greater than 100 mg/l.

   The application also provided information regarding the retrofitting of the load-out pier in a manner that would allow for the collection of storm water runoff potentially contaminated by coal fines and other solids. The pier would be fitted with a perimeter curb that would contain storm water and direct it to a group of tanks designed into the pier system and near shore locations. Runoff collected in the tanks are eventually removed and pumped into the site's main settling basin for treatment prior to discharge to surface waters from outfall 001. Sediments in the pier's collection system are removed and returned to existing stockpiles of coal. The conceptual engineering report for this new collection and treatment system received approval from the Board on January 16, 1991. The permit was reissued on July 20, 1991, with expiration July 20, 1996. This permit contained outfall 001 and 4 additional discharges (002, 003, 004, 005) associated with the facility's operations. The additional outfalls were to be monitored once per three months for a reduced set of unlimited parameters (flow, pH, TSS).

8. The applicant, on January 24, and February 23, 1996, submitted a permit application package to the TRO. The applicant continued to identify outfall 001 along with the additional 4 points of storm water runoff from the site to surface waters. The applicant also used EPA Form 2F for the first time, this form specific to storm water runoff associated with industrial activities. Wastewater activities at outfall 001 were also characterized on EPA Form 2C since non-storm water discharges (washdown and dust suppression wastewaters, etc.) were known to be present, at that location. A permit processing fee payment of $3400.00 was paid based on requirements of the Board at that time.

ATTACHMENT 6
Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

Permit History: (continued)

8. The permit was reissued July 20, 1996, with expiration July 20, 2001. Changes to this permit included the removal of outfall 004, the imposition of a TSS limitation of 50 mg/l at outfalls 002, 003 and 005 along with a reduction of monitoring from once per three months to once per six months. Other changes included the removal of the listing of metals to be monitored at outfall 001 in favor of using a standardized permit condition and reporting form to obtain chemical data to verify compliance with the State's water quality standards. For outfalls 001, 002, 003 and 005, it was determined that monitoring for dissolved copper, dissolved nickel, dissolved zinc and oil and grease was necessary based on DEQ guidance document 93-010A. Further changes to the permit included adding a water quality reopener, monitoring quantification levels, and a storm water management condition and requirement to development and implement a storm water management plan specific to the facility and industrial activity.

9. Correspondence from Kinder Morgan Bulk Terminals, Incorporated, received at the TRO March 1, 1999, informed the Board that the facility had been sold to Kinder Morgan effective December 18, 1998. Based on receipt of the completed change of ownership forms, the permit was modified to reflect a change of facility owner/operator. The modification became effective May 14, 1999, with expiration remaining July 20, 2001. At some point during the term of this permit, outfall 005 was removed from the permit.

10. On February 14, 2001, a permit application package was submitted to the TRO by Kinder Morgan Bulk Terminals, Incorporated for their Pier IX Terminal. A permit processing fee of $3400 was submitted as part of the application package. The applicant identified a new material (bulk cement) being handled at the facility in above ground silos along the western boundary of the site. The application contained information for three outfalls, 001, 002 and 003. The permit was reissued July 20, 2001, with expiration July 20, 2006. This permit continued with the limited parameters pH (6.0-9.0 SU), TSS (50 mg/l), and total phosphorus (2 mg/l), at outfall 001. Since the discharge is intermittent and comprised mainly of storm water runoff, the mass limitation for phosphorus was removed. Monitoring frequency at 001 was reduced to once per three months for all parameters. Monitoring frequency at outfalls 002, 003 was increased from once per six months to once per three months to obtain additional chemical data for contaminants targeted by the permit's storm water management evaluation.

11. To incorporate necessary but omitted permit content into the storm water section of VA0057142 subsequent to reissuance, the Board opened the permit for a minor modification The permit was modified on October 31, 2001, with expiration remaining July 20, 2006.

12. Kinder Morgan Bulk Terminals, Incorporated, submitted letters dated May 13, 2005, and April 13, 2006, identifying a new product for the terminal and upgrades to the coal handling equipment upon the pier, respectively. On February 2, 2006, the company submitted the application for reissuance of VA0057142. Discrepancies in that application were corrected by information received on March 7, 2006. The permit was reissued July 21, 2006, with expiration July 20, 2011. With this reissuance, the dates of effectiveness and expiration were set one day apart based on DEQ guidance in-place at that time.

ATTACHMENT 6
Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

Permit History: (continued)

12. Changes to the permit included increasing monitoring frequency (once per month) for flow, pH and TSS at outfall 001 to better track an apparent increase in the concentration of TSS documented at the final outfall under the former permit's once per three month monitoring protocols. Monitoring for nitrogen and TPH was reduced from once per three months to once per year. Phosphorus monitoring was also reduced similarly, but the limitation of 2 mg/l was retained. Although the concentrations of TSS were increasing over the term of the current permit, the concentrations of copper and zinc were decreasing to the point where continued monitoring was believed unnecessary as part of the reissued permit, under the storm water management evaluation, for outfall 001. For outfalls 002 and 003, monitoring for flow, pH and TSS was set at once per three months, whereas monitoring for copper was removed from the permit. Storm water discharges from outfalls 002 and 003 remained under the permit's storm water management evaluation for targeted reduction of TSS from those point source discharges into surface waters.

13. On or about September 2008, this permitted facility became a participant in the DEQ's e-DMR program and has been filing regular discharge monitoring reports and other permit required submittals electronically via a system maintained for this purpose by the DEQ.

14. By e-mail of January 12, 2011, the applicant submitted a permit reissuance application package to the TRO. Upon review, this initial submission was deemed incomplete in TRO correspondence to the company dated February 2, 2011. A revised application was submitted on February 11, 2011. Point source sampling of storm water from outfalls 002, 002 and 003, with resulting chemical data necessary to complete the application forms, had not yet been performed by the company's laboratory, but will follow the applications as the sampling is performed and the data are available. Based on a change in legislation regarding the payment of permit fees, it was not necessary for the application to pay an up-front permit processing fee as permit fees are now paid as a permit maintenance fee, billed annually in September.

ATTACHMENT 6
Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

GENERAL DISCUSSION:

The applicant operates a marine cargo terminal where the primary products transshipped through the facility being coal and Portland cement. Various types of coal from East Coast sources are delivered to the facility by rail hopper car, and Portland cement is delivered to the site by vessel, truck, or railcar.

Upon receipt, the coal-hauling hopper cars are secured to a mechanism where they are inverted and the coal released onto a system of conveyors leading to exposed piles for storage until loaded onto vessels. From the exposed storage piles, coal is loaded onto vessels by a separate but interconnected series of conveyor belts leading onto the pier and through specialized vessel loaders. The pier is fitted with certain management features that reduce the potential for storm water and runoff to convey solids and other particulates from the coal handling and loading activities to surface waters. Coal is stockpiled on approximately 60 acres exposed to the weather and wind. The total storage capacity is 1.2 million tons with a permitted storage capacity of 1 million tons.

Portland cement is transferred by conveyor to three enclosed storage silos with an aggregate capacity of 35,000 tons, located upon the facility's property. This material is loaded into trucks via enclosed air slides for local distribution.

Wastewaters from this facility include:

- minor quantities of vehicle and equipment wash water,
- potentially contaminated storm water runoff,
- runoff associated with the wetting of coal piles, and
- dust suppression activities conducted throughout the facility and upon vessel loading pier.

For the most part, limited quantities of facility generated wastewaters and potentially contaminated storm water runoff are collected in a perimeter ditch and directed to a large surface impoundment until reused in the process activities, or released to nearby surface waters in accordance with the permit. Storm water runoff and entrained materials are collected from the pier(s) in a system of curbing and collection chambers, and pumped over to the surface impoundment for settling prior to reuse or release to surface waters. Upon need, discharges from the impoundment are visually observed for contaminants, controlled by one or both of two pumps, and the discharge duration documented in facility logs and records.

Other discharges from the facility include storm water runoff from access roadways, parking lots, offices, and structures (pier, loading equipment, etc.) associated with the industrial activities. Since the site shares a common roadway with an adjoining coal terminal and other waterfront industrial activities, it should be expected that some contaminants documented in samples of runoff from outfalls 002 and 003 may have been contributed by passing vehicles and adjoining industrial activities.

Vessels visiting the facility may also generate point source discharges of wastewaters from ballast tanks, cargo areas, and other sources while in the process of loading coal to ensure vessel stability and trim. Discharges from vessels greater than 79 feet are now addressed by the Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels (VGP), with an effective date of December 19, 2008. Those discharges will not be addressed by VA0057142.

ATTACHMENT 6
Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

SPECIFIC DISCUSSION:

The second commodity handled in bulk at the facility is Portland cement. The storage silos and enclosed vehicle delivery equipment allow for the handling of this material in a controlled manner. Management of storm water runoff from this aspect of the facility's operation should be addressed in the site's storm water management plan and operational plans specific to this material and handling and storage equipment.

Based on information presented in the application and verified during a site inspection on April 06, 2011, there have been no significant changes in the industrial activities or nature of the wastewaters discharged under authority of the current permit.

Sanitary wastewaters are collected and diverted to the local municipality for complete treatment at a nearby facility owned and operated by the Hampton Roads Sanitation District (HRSD). The site utilizes a number of deep and shallow wells as supplemental sources of water flowing to the wastewater impoundment during dry months for necessary dust suppression activities at the facility. Potable water is supplied by the nearby municipality.

During the term of the current permit, the applicant has undertaken a project to line the bottom of the perimeter ditch with concrete to facilitate more thorough cleaning of coal fines and other solids from the ditch prior to their entry in to the final surface impoundment. Due to the length of the ditch and ongoing industrial activities at the site that may conflict with this action, it is expected that the project will continue for some amount of time.

Excess solids and coal fines are periodically removed from the surface impoundment and perimeter ditch and placed back onto the piles of coal, as appropriate based on the expected nature and source(s) of those residues.

ATTACHMENT 6
Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

NUTRIENTS:

In March 1989, the permit was modified by the Department to address the issue of nutrients, per the Policy for Nutrient Enriched Waters, VR 680-14-02, effective May 25, 1988.

At that time, discharges from outfall 001 under VA0057142 exceeded 1 MGD, the threshold action value in the Policy for existing dischargers which required imposition of the Policy and its requirements. The permit was reopened to address the Policy even though phosphorus or nitrogen were not reasonably expected to be in final discharges from the storm water retention lagoon which received primarily storm water runoff and non-storm water discharges from coal handling, storage, and dust suppression activities.

As part of the current permit application, it was indicated that phosphorus, or substances that may contain a phosphorus based product, are not known to be used at the facility in a manner that would allow its presence in wastewater discharges from outfall 001.

In the interim since first applying the limitation of 2.0 mg/l upon total phosphorus in VA0057142, the DEQ has promulgated a Regulation for Nutrient Enriched Waters and Discharges within the Chesapeake Bay Watershed (9 VAC 25-40-10) and staff guidance necessary to apply the provisions of the regulation in VPDES permits (GM07-2008). Within those documents there are defined terms that apply to this evaluation regarding nutrients, the Chesapeake Bay, and the need to continue the monitoring and limitations for total phosphorus (TP) or total nitrogen (TN).

Per 9 VAC 25-40-25:

"*Point source dischargers*" or "*dischargers*" do not include permitted discharges of noncontact cooling water or storm water.

Discharges under VA0057142 consist nearly entirely of storm water runoff or storm water collected for reuse without use of additives or chemicals to enhance use for on-site dust suppression

"*Equivalent load*" means 2,300 pounds per year of TN and 300 pounds per year of TP at a flow volume of 40,000 gallons per day; 5,700 pounds per year of TN and 760 pounds per year of TP at a flow volume of 100,000 gallon per day; and 28,500 pounds per year of TN and 3,800 pounds per year of TP at a flow volume of 500,00 gallons per day.

For the purpose of evaluating the *equivalent load* of TP for VA0057142, and since the long term average flow from *existing* outfall 001 is greater than 100,000 gallons per day into tidal waters, the equivalent TP load of 760 pounds/day will be used for further determinations to determine if the facility is a significant discharger of TP to a tributary of the Chesapeake Bay.

Evaluation of total phosphorus loadings since January 2000.

A summary of the facility's phosphorus values follows, as characterized via regular Part I.A. monitoring over current and past permit terms. Since January 2000, there are 43 data points for TP available for review and calculations performed in this regard. The maximum TP concentration observed was 0.5 mg/l.

ATTACHMENT 6
Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

NUTRIENTS: (continued)

Evaluation of total phosphorus loadings since January 2000 (continued)

January 2000 through June 2001 (18 data points):

Monitoring for total phosphorus (TP) occurred monthly with a maximum concentration of 0.5 mg/l and an average concentration of approximately 0.08 considering those data points reported as less than the quantification level (QL) required by the permit. The long term average maximum flow over the same period was 0.958 MGD.

Loading TP = 0.08 mg/l x 8.34 lb/G_{H2O} x 0.958 x $365_{D/CY}$ = 233.3 pounds TP/CY

That loading value is less than the stipulated equivalent loading of 760 lbs/yr set forth in current and relevant guidance.

Third QTR 2001 through Second QTR 2005 (20 data points):

Upon permit reissuance, TP monitoring occurred quarterly for the term of the permit. The maximum TP concentration over the period of evaluation was 0.31 mg/l with a long term average value of 0.09 mg/l considering those data reported as less than the QL set by the permit. The long term average maximum flow over the period was 1.21 MGD

Loading TP = 0.09 mg/l x 8.34 lb/G_{H2O} x 1.21 MGD x $365_{D/CY}$ = 331.5 pounds TP/CY

That loading is less than the equivalent loading of 760 lbs/yr.

September 2006 through January 2011 (41 points for flow, 5 points for TP):

Upon reissuance and based on observations of TP concentrations over past permit terms, it was determined that monitoring be reduced to once per year. The maximum TP concentration over this period was 0.07 mg/l and the average concentration was 0.04 mg/l considering those data reported as less than the permit's QL. The long term average maximum flow value was 1.43 MGD, with 12 months without report of flow from outfall 001.

Loading TP = 0.04 mg/l x 8.34 lb/G_{H2O} x 1.43 MGD x $365_{D/CY}$ = 174.1 pounds TP/CY

That loading is less than the equivalent loading of 760 lbs/yr.

January 2000 through January 2011 (79 data points for average maximum flow, 43 points for TP):

As noted above, over the period of time under consideration, the monitoring frequencies for TP ranged from once per month, to quarterly, to once per year under the current permit. The maximum TP concentration over this period was 0.5 mg/l and the average concentration was 0.14 mg/l, considering those data reported as less than the permit's QL (0.02 mg/l). The long term average maximum flow value was 1.265 MGD, with 12 months without report of flow from outfall 001.

Loading TP = 0.14 mg/l x 8.34 lb/G_{H2O} x 1.26 MGD x $365_{D/CY}$ = 537 pounds TP/CY

That calculated loading of total phosphorus since 2000 also appears to be less than the equivalent TP loading value of 760 lbs/yr identified in 9 VAC 25-40-25, for qualifying as a significant discharger for existing discharge sources.

ATTACHMENT 6
Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

NUTRIENTS: (continued)

On page 15 of DEQ Guidance Memorandum No. 07-2008, Amendment No. 2 (10/23/2007), there exists a means by which nutrient limitations and monitoring requirements placed upon existing wastewater discharges impacted by the Policy for Nutrient Enriched Waters, VR 680-14-02, May 1988, can be removed from the permit without invoking anti-backsliding concerns. This action can be taken only if the following aspects of the guidance are satisfied during permit preparation.

Is the current limitation technology-based?:

Yes. The monthly average limitation of 2 mg/l in the 1988 policy was a technology-based numeric limitation imposed upon outfall 001 under VA0057142 for no other reason than the existing final discharge from outfall 001 averaged greater than 1.0 million gallons per day (MGD), not because phosphorus was a known component of the discharge.

Did the facility install treatment in order to comply with the limit?

No. The facility is a coal storage and handling facility receiving coal by rail and loading stockpiled coal onto vessels for shipment. The permittee maintains that no products or materials containing phosphorus are used or stored at the facility. The permittee has not provided or installed any wastewater treatment technologies or practices specific to the treatment or removal of total phosphorus from the final discharge from outfall 001.

Has the facility undertaken any process or site management changes in order to comply with the limit?

No. Active participants in the individual VPDES permit program are expected to continually evaluate process operations and activities to seek out and impose suitable and appropriate best management practices to improve the overall status of the facilities and any point source discharges from those sites. In this case, the permittee is taking appropriate actions to improve the overall quality of storm water runoff from the site, but those actions are not specifically focused upon total phosphorus or meeting the limitation of 2 mg/l.

Have calculations using existing effluent data show that the facility is not a significant discharger?

Yes. Calculations using the facility's long term average maximum flow values and documented monthly average total phosphorus concentrations have been performed for the period of time from January 2000 through January 2011, and within that time frame - on a permit term basis. In all cases, the annual loading of total phosphorus from outfall 001 remained below the threshold value of 760 pounds/day total phosphorus as promoted in regulation and guidance as being a significant discharger of nutrients to impaired waters based on "*equivalent load*" basis.

Are discharges from outfall 001 storm water runoff?

Yes. Storm water falling upon the site is collected to the extent practicable in a perimeter ditch system leading to a large settling/retention basin for reuse on-site for dust suppression. Accumulated storm water is drawn from the settling pond and pumped to a system of overhead sprinklers from which dust suppression control water is applied to exposed coal during storage and handling. Additives are not applied to the pond's water before application in that manner. Runoff from that activity is also diverted to the retention pond via the perimeter ditch. Sanitary wastewaters are diverted to the HRSD and non-storm water discharges are minimal as described in the application.

ATTACHMENT 6
Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

NUTRIENTS - DETERMINATIONS:

1. It has been determined that discharges from outfall 001 are comprised primarily of storm water runoff associated with regulated industrial activities. The source water for dust suppression activities is the on-site storm water retention pond. During periods of dry weather, the permittee maintains the capability to supplement the pond with waters drawn from shallow and deep wells released to the perimeter ditch to flow to the pond.

2. It has been determined that the applicant does not introduce chemical solutions containing phosphorus into dust suppression waters prior to use in that manner.

3. By using actual TP and long term flow data from outfall 001 generated by the applicant since 2000, it has been determined that the point source discharge of storm water runoff and commingled dust suppression wastewaters from outfall 001 is not a significant contributor of total phosphorus based on calculations performed.

4. Based on discussions in the field on the date of recent site visit, it was learned that the ultimate intent of ongoing site storm water management improvements is to retain as much storm water as possible for reuse opportunities and achieve a zero discharge status from outfall 001 during periods of normal operations.

5. As a result of the above considerations and findings, it has been determined that the relevant provisions of DEQ guidance related to nutrient issues have been addressed and satisfied and that the total phosphorus limitation and monitoring requirements will be removed from the permit at reissuance. Further, this determination also applies to monitoring requirements for total nitrogen, which will also be removed from the proposed permit.

ATTACHMENT 6

Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding

PROPOSED PART I.A. EFFLUENT MONITORING - Outfall 001:

The following parameters are proposed for the reissued permit. The proposed frequency of monitoring at outfall 001 is monthly.

FLOW (MGD)	An unlimited parameter that is standard for most VPDES permits where wastewater discharges exist and Part I.A. effluent monitoring is required. The volume of flow during any representative period shall be estimated based on pump rate or other reliable means of data collection. This parameter shall be quantified and reported monthly.
pH (SU)	A water quality standard based and effluent limited parameter. Based on a past BPJ determination, the effluent's pH was limited to the range of 6.0 SU - 9.0 SU. It is proposed that this parameter's limitations be continued with the permit's reissuance. The permittee has the capability to adjust the pH of the final discharge if necessary to comply with the permit's limitations in this regard. This parameter shall be quantified and reported monthly.
Total Suspended Solids (mg/l)	This parameter is limited to a maximum daily concentration of 50 mg/l. The source of this limitation originates from the first issuance of this permit and was based on the EPA's proposed new source performance standards for the Steam Electric Power Generating Point Source Category effluent limitations [40CFR423.15(k)] for discharges associated with coal pile runoff. The original basis for the limitation, as well as the limitation itself, has not changed since originally imposed. In addition, the EPA's proposed multi-sector general permit for storm water from industrial activities (2008) contains a 50 mg/l TSS limitation for storm water discharges associated with coal pile storage, regardless of the industrial sector or industrial activity. Allowable exceedance of TSS limit per 40 CFR 423.15(l): Any untreated overflow from facilities designed, constructed, and operated to treat the coal pile runoff which results from a 10-year, 24-hour rainfall event shall not be subject to the limitations in 40 CFR 423.15(k).
Total Recoverable Iron: (mg/l)	In accordance with the VPDES general permit for industrial storm water discharges, this parameter is monitored at water transportation facilities and those that may handle coal on a regular basis depending on SIC code. Tracking of this parameter along with TSS should provide a more refined basis to evaluate the applicant's successes in dealing with sediments and other industrially related contaminants from the site. This parameter shall be reported as parts per million (mg/l) and sampled on a quarterly basis, for the term of the permit.

ATTACHMENT 6
EFFLUENT LIMITATIONS/MONITORING RATIONALE/SUITABLE DATA/ANTIDEGRADATION/ANTIBACKSLIDING

PROPOSED PART I.A. EFFLUENT MONITORING - **Outfall 001**: (continued)

Total Petroleum Hydrocarbons (mg/l)

It is proposed that monitoring for TPH be removed from the permit at reissuance.

During a subsequent permit reissuance, and based on relevant staff guidance at the time (2001), TPH was used to replace oil and grease where the expected source of pollutants are believe to originate from petroleum hydrocarbons and not from animal or other natural sources. Since 2001, detectable concentrations of TPH have not been reported since monitoring switched from oil and grease to TPH in 2001. During the term of the current permit, petroleum hydrocarbons have not been detected in the final discharge. Further, the applicant acts promptly under provisions of the site's storm water pollution prevention plan to respond to spills, sheens and incidences involving petroleum products to keep those materials out of the final storm water collection system and settling pond.

This action is based on BPJ, reflects current site conditions and operational oversight, and is consistent with actions taken at other similarly permitted industrial facilities when the situation warrants.

SUMMARY OF ALL AVAILABLE DMR DATA 2000 - 2011
OUTFALL 001 - VA0057142

DMR PERIOD (1/QTR, 1/MO)	Q AVERAGE (MGD)	Q MAXIMUM (MGD)	pH (SU)	TSS (mg/l)	O&G or TPH (mg/l)	Total Phos (mg/l)	Total Nitrog (mg/l)	DIS Zn (ug/l)	DIS Cu (ug/l)	COMMENTS
JAN 2000	0.060	1.020	7.5	24	<1	0.5	2.1			O&G; current permit 1/month
FEB	0.016	0.300	6.9	5	<1	<0.1	0.9			
MAR	0.046	1.430	8.5	10	<1	0.1	1.1			
APR	0.039	1.180	8.5	18	<1	0.1	1.1			
MAY	0.119	1.440	8.4	5	<1	<0.1	<0.5			
JUN	0.237	1.440	6.9	16	<1	0.1	1.5	<2.5	<2	
JUL	0.144	1.440	8.2	4	1	<0.1	1			
AUG	0.049	1.530	7.9	8	<1	<0.1	<0.5			
SEP	0.540	1.170	6.1	7	1	<0.1	<1			
OCT	0.318	0.480	7.2	2	no data	0.03	0.7			
NOV	0.376	0.500	7.8	9	<5	0.02	0.5	<30	3	
DEC	0.311	0.480	7.8	4	<5	0.09	0.4			
JAN 2001	0.450	0.900	6.9	3	12	0.02	0.8			
FEB	0.300	0.570	7.1	4	<5	0.02	0.6			
MAR	0.624	1.200	7.7	2	<5	0.04	0.6			
APR	0.360	0.360	6.3	2	<5	0.07	0.5			
MAY	0.345	0.690	7.7	8	7	0.04	0.6			
JUN 2001	0.573	1.110	8.3	4	<5	0.08	0.5	53	<15	
3^{d} QTR 2001	0.574	1.170	7.7	13	0.5	<0.02	0.7	391	<1	O&G now TPH; permit reissue 1/3 month
4th QTR	0.018	0.020	8.0	5	<1	0.31	0.7	<15	<1	TPH
1st QTR 2002	0.436	0.660	6.9	3	<1	0.03	0.7	168	6	
2nd QTR	0.574	1.140	7.1	8	<1	0.09	0.8	197	1	
3^{d} QTR	0.796	2.150	7.2	26	<1	0.17	2.4	15	2	
4th QTR	0.651	1.440	7.4	14	<1	0.07	1.7	<15	3	
1st QTR 2003	0.564	0.920	6.9	15	<1	0.04	3.1	160	2	
2nd QTR	0.762	2.210	7.2	11	<1	0.11	1.4	71	2	
3^{d} QTR	0.904	2.520	7.9	4	<1	<0.02	0.9	467	5	
4th QTR	0.734	2.250	7.4	9	<1	0.05	2.8	29	<1	
1st QTR 2004	0.357	0.560	7.8	5	<1	0.02	3.7	341	<1	
2nd QTR	0.348	1.040	8.0	36	<1	0.22	2.2	33	<15	
3^{d} QTR	0.580	1.970	8.0	18	<1	0.08	1.4	37	1	
4th QTR	0.435	0.780	7.9	11	<1	0.05	3.4	28	5	
1st QTR 2005	0.366	0.690	7.8	8	<1	0.02	2.4	160	4	
2nd QTR	0.353	0.740	8.2	23	<1	0.16	3	5	7	
3^{d} QTR	0.136	0.270	7.4	16	<1	0.12	2.7	40	1	
4th QTR	0.748	1.120	8.1	20	<1	0.07	9.9	92	<1	
1st QTR 2006	0.075	0.090	6.8	8	<1	0.08	6.8	1158	124	

SUMMARY OF ALL AVAILABLE DMR DATA 2000 - 2011
OUTFALL 001 - VA0057142

DMR PERIOD (1/QTR, 1/MO)	Q AVERAGE (MGD)	Q MAXIMUM (MGD)	pH (SU)	TSS (mg/l)	TPH (mg/l)	Total Phos (mg/l)	Total Nitrog (mg/l)	DIS Zn (ug/l)	DIS Cu (ug/l)	COMMENTS
2nd QTR	0.954	2.406	6.7	10	<1	0.03	8	2718	79	Cu, Zn monitoring ends with permit reissuance
SEP 2006	1.344	3.463	7.0	6	<1	0.02	7			Permit reissue, 1/month resumes for Q, pH, TSS
OCT	0.633	1.314	7.7	8	<1	ns	ns			
NOV	0.894	2.436	7.6	15	ns	ns	ns			
DEC	0.510	0.900	7.2	7	ns	ns	ns			
JAN 2007	0.420	0.420	7.4	8	<1	0.07	5.5			
FEB	0.495	0.495	6.7	10	ns	ns	ns			
MAR	0									No discharge
APR	0.260	0.600	8.0	27	<1	ns	ns			
MAY	0									No discharge
JUN	0.233	0.270	8.2	10	ns	ns	ns			
JUL	0.590	0.915	7.5	24	ns	ns	ns			
AUG	0.630	0.900	7.7	11	ns	ns	ns			
SEP	0									No discharge
OCT	0.564	0.915	8.0	9.2	ns	ns	ns			
NOV	0.390	0.420	8.1	9.2	ns	ns	ns			
DEC	0.980	2.292	7.1	16	ns	ns	ns			
JAN 2008	0.474	0.990	7.1	2.5	ns	ns	ns			
FEB	0.474	0.990	8.2	30	ns	ns	ns			
MAR	0.560	0.840	8.2	9.1	ns	ns	ns			
APR	0.413	0.905	8.3	18	ns	ns	ns			
MAY	0									No discharge
JUN	0									No discharge
JUL	0.135	0.135	7.8	6.2	<1	ns	ns			
AUG	0.026	0.026	8.0	15.0	ns	ns	ns			
SEP	1.241	1.941	7.0	20.0	<1	<0.02	0.7			
OCT	0									No discharge
NOV	0									No discharge
DEC	0.359	0.903	6.4	7.6	ns	ns	ns			
JAN 2009	0									No discharge
FEB	0									No discharge
MAR	0.410	0.600	7.7	9.8	ns	ns	ns			
APR	0									
MAY	0.308	0.660	8.2	16.0	ns	ns	ns			
JUN	0.270	0.600	7.1	3.3	ns	ns	ns			
JUL	0.060	0.060	8.3	5.4	ns	ns	ns			
AUG	0.575	2.190	8.3	5.4	ns	ns	ns			
SEP	0.698	1.368	7.0	5.5	ns	ns	ns			

SUMMARY OF ALL AVAILABLE DMR DATA 2000 - 2011
OUTFALL 001 - VA0057142

DMR PERIOD (1/QTR, 1/MO)	Q AVERAGE (MGD)	Q MAXIMUM (MGD)	pH (SU)	TSS (mg/l)	TPH (mg/l)	Total Phos (mg/l)	Total Nitrog (mg/l)	DIS Zn (ug/l)	DIS Cu (ug/l)	COMMENTS
OCT	0.254	0.479	7.5	3.3	ns	ns	ns			
NOV	0.373	4.176	8.5	684	ns	ns	ns			Nor'ester, 10 yr, 48-hour storm, 11" rain
DEC	0.544	2.694	7.5	155	<1 / <1	<0.02 / 0.04	0.7 / 0.9			
JAN 2010	0.295	2.694	7.0	146	<1	ns	ns			
FEB	0.945	3.321	6.3	6.2	ns	ns	ns			
MAR	0.528	3.321	7.3	2.8	ns	ns	ns			
APR	0									No discharge
MAY	1.539	1.629	7.8	13	ns	ns	ns			
JUN	0									No discharge
JUL	0.641	2.565	7.8	19	ns	ns	ns			
AUG	0.130	0.300	6.5	14	ns	ns	ns			
SEP	0.809	4.176	8.3	24	ns	ns	ns			
OCT	0.818	4.176	7.5	1.1	ns	ns	ns			
NOV	0.188	0.195	7.8	3.8	ns	ns	ns			
DEC	0.270	0.480	8.2	7.5	<1	0.04	1.1			
JAN 2011	0.396	0.765	7.3	3.3	ns	ns	ns			
FEB										
MAR										
MAXIMUM	1.539	4.176	8.5	684	12	0.5	9.9	2718	124	
MINIMUM	0.016	0.020	6.1	1.1	(0.5)	(0.01)	(0.4)	(1.25)	(0.5)	
AVERAGE	0.429	1.358	7.6	27.5	1.2	0.13	2.1	269	11.5	
COUNT	79	79	79	79						

CHEMICAL DATA FROM PERMIT APPLICATION - EPA Form 2C

PARAMETER	CONC.	PARAMETER	CONC.	PARAMETER	CONC.
T Phosphorus	<0.02 mg/l	T Aluminium	68 ug/l		
Sulfate	937.7 mg/l	T Copper	1 ug/l		
NO2-NO3	0.33 mg/l	T Iron	350 ug/l		
T Nitrogen	0.9 mg/l	T Manganese	1709 ug/l		
Oil and Grease	<5 mg/l	T Nickel	55 ug/l		
ChemODemand	60 mg/l	T Selenium	<5 ug/l		
pH	6.8 SU	T Zinc	276 ug/l		
TSS	6.1 mg/l				
BOD5	18 mg/l				
TOrganicCarb	13 mg/l				

ATTACHMENT 6
EFFLUENT LIMITATIONS/MONITORING RATIONALE/SUITABLE DATA/ANTIDEGRADATION/ANTIBACKSLIDING

PROPOSED PART I.A. EFFLUENT MONITORING - Outfalls 002 & 003:

The following parameters are proposed based on effluent data and information submitted in the application.

It has been determined that the parameter total suspended solids has been routinely detected in the effluent from each outfall at concentrations that exceed the EPA's benchmark monitoring concentration used to establish if an industrial facility's precipitation runoff has the reasonable potential to impart an adverse impact on the receiving stream.

STORM WATER MANAGEMENT EVALUATION REVIEW:

During the term of the current permit, the application was required to screen the discharges from outfalls 002 and 003 for the presence of total suspended solids via regular monitoring at these two locations. Each outfall receives storm water runoff from roadways and rail sidings located in proximity to the collection systems of each outfall. Based on their physical location, these outfalls do not receive storm water runoff or dust suppression wastewaters directly from the applicant's process operations of coal handling, storage or transshipment.

The required annual storm water management evaluation (SWME) reports were received as follows: CY 2006 received February 9, 2007;

CY 2007 received February 11, 2008;

CY 2008 received January 13, 2009;

CY 2009 received February 16, 2010, and

CY 2010 received January 6, 2011.

A summary of facility actions under the SWME over the term of the current permit follows. Facility inspections of areas of potential environmental concern occur on a daily basis. Deficiencies noted during regular inspections are documented for follow-up corrective actions by the responsible organization of the company. Filter fabric or other materials are placed in each of the storm water collection structures associated with outfalls 002 and 003. Over time, the filter material(s) deployed in the collection structures and their method of fabrication have changed based on experiences learned from their use and reviews of chemical data from year to year.

The applicant also uses a computerized maintenance management system (CMMS) that tracks selected equipment and systems related to environmental management of storm water runoff from the piers and other areas where, by design, residual coal may accumulate prior to scheduled removal for reuse or disposal.

A second coal reception, storage and handling facility (DTA) lies adjacent to Pier IX Terminal and shares the common access roadway along with other industrial users. That facility also maintains a separate rail siding for loaded coal hopper-cars in an upgradient location, in proximity to the roadway. This results in the best efforts of the applicant to control fugitive coal residue from their specific activities being confounded by the neighboring facility's contribution of similar contaminants without a commensurate responsibility to clean their wastes from shared roadways and Pier IX's limited drainage systems at outfalls 002/003.

ATTACHMENT 6
EFFLUENT LIMITATIONS/MONITORING RATIONALE/SUITABLE DATA/ANTIDEGRADATION/ANTIBACKSLIDING

PROPOSED PART I.A. EFFLUENT MONITORING - Outfalls 002 & 003: (continued)

STORM WATER MANAGEMENT EVALUATION REVIEW:

When the TSS data are plotted on the log-scale, there are slight changes in the long-term concentrations at both outfalls, although the plot for 002 depicts a slight decrease over time and 003 a slight increase over the same time period.

Based on observations of the drainage area associated with these outfalls and discussions with the applicant while viewing the watershed, outfall 002 receives contaminants directly from the adjacent facility's (DTA) industrial activities and truck traffic. This situation exists since the roadway is sloped from DTA (up-gradient) toward Pier IX, along the water front. In addition and during significant storm events, potentially contaminated runoff from the elevated rail-siding leading into DTA flows over and around structural containment supporting the siding and onto the shared roadway. Other than incidental deposition of coal residues from mostly enclosed overhead conveyors and similar sources operated solely by the applicant, there appears to be limited sources of contaminants from the Pier IX operation into discharges from outfall 002 and its single point of storm water collection from the shared roadway.

During significant, intense, or prolonged storm events, flow down the shared roadway may bypass the protected single curb drain leading to outfall 002 and flow to the second entrance of Pier IX's office parking lot, around the slight asphalt berm and into one of four storm water drop inlets leading directly to outfall 003.

DETERMINATION - STORM WATER MANAGEMENT EVALUATION (SWME)

Based on a review of available TSS data, it has been determined that the SWME should remain in-place as part of the reissued permit. Of 41 observed discharges at outfall 002, 28 events yielded TSS data greater than 100 mg/l, the threshold value for TSS identified in federal and state storm water general permits for industrial activities. For outfall 003, 27 events out of 41 observed discharges exhibited TSS greater than 100 mg/l.

Since outfall 002 receives runoff from upgradient sources of storm water runoff from a neighboring industrial facility (Dominion Terminal Associates) in a single drop inlet in the road's curbing, it has been determined that monitoring will be reduced to once per year. This proposed monitoring frequency would allow the applicant to mechanically close-off the drop inlet, as noted in the application cover letter, but retain a capability to by-pass the mechanical device to allow discharges of off-site roadway storm water from unusual, or significant and prolonged storm events should the need arise during the term of the reissued permit.

For outfall 003, the proposed permit will continue monitoring at its current frequency of once per three months. In addition, this outfall will remain part of the permit's storm water management evaluation to continue observations of TSS concentrations at this discharge point and track efforts and achievements of the applicant to further reduce loadings of sediments to surface waters.

ATTACHMENT 6
EFFLUENT LIMITATIONS/MONITORING RATIONALE/SUITABLE DATA/ANTIDEGRADATION/ANTIBACKSLIDING

PROPOSED PART I.A. EFFLUENT MONITORING - Outfalls 002 & 003: (continued)

FLOW (MG)	An unlimited parameter that is standard for most VPDES permits where wastewater discharges exist and Part I.A. effluent monitoring is required. The volume of flow, in millions of gallons per storm event shall be estimated based on the size of area(s) drained and the amount of precipitation during the storm event sampled. This parameter shall be quantified and reported quarterly for outfall 003 and once per year at outfall 002, as defined by the permit during a representative storm event.
pH (SU)	A water quality standard based and effluent limited parameter. Based on a past BPJ determination, the effluent's pH was limited to the range of 6.0 SU - 9.0 SU. It is proposed that this parameter's limitations be continued with permit reissuance. This parameter shall be quantified and reported quarterly for outfall 003 and once per year at outfall 002, as defined by the permit during a representative storm event.
Total Suspended Solids (mg/l)	This parameter is not limited with this permit's reissuance. Continued monitoring is believed necessary to provide the permittee with sufficient information regarding the loading of solids from these discharges. As part of this effluent monitoring program, the permittee will also be required to perform an annual Storm Water Management Evaluation. This parameter shall be quantified and reported quarterly for outfall 003 and once per year at outfall 002, as defined by the permit during a representative storm event.
Total Recoverable Iron: (mg/l)	In accordance with the VPDES general permit for industrial storm water discharges, this parameter is monitored at water transportation facilities and those that may handle coal on a regular basis depending on SIC code. Tracking of this parameter along with TSS should provide a more refined basis to evaluate the applicant's successes in dealing with sediments and other industrially related contaminants from the site. This parameter shall be reported as parts per million (mg/l) and sampled on a quarterly basis, for the term of the permit.
Total Petroleum Hydrocarbons (mg/l)	An unlimited parameter believed necessary to track the presence of this class of possible pollutants in sources of storm water runoff associated with industrial activities. It is proposed that this parameter be quantified and reported for each outfall at a common frequency of once per year.

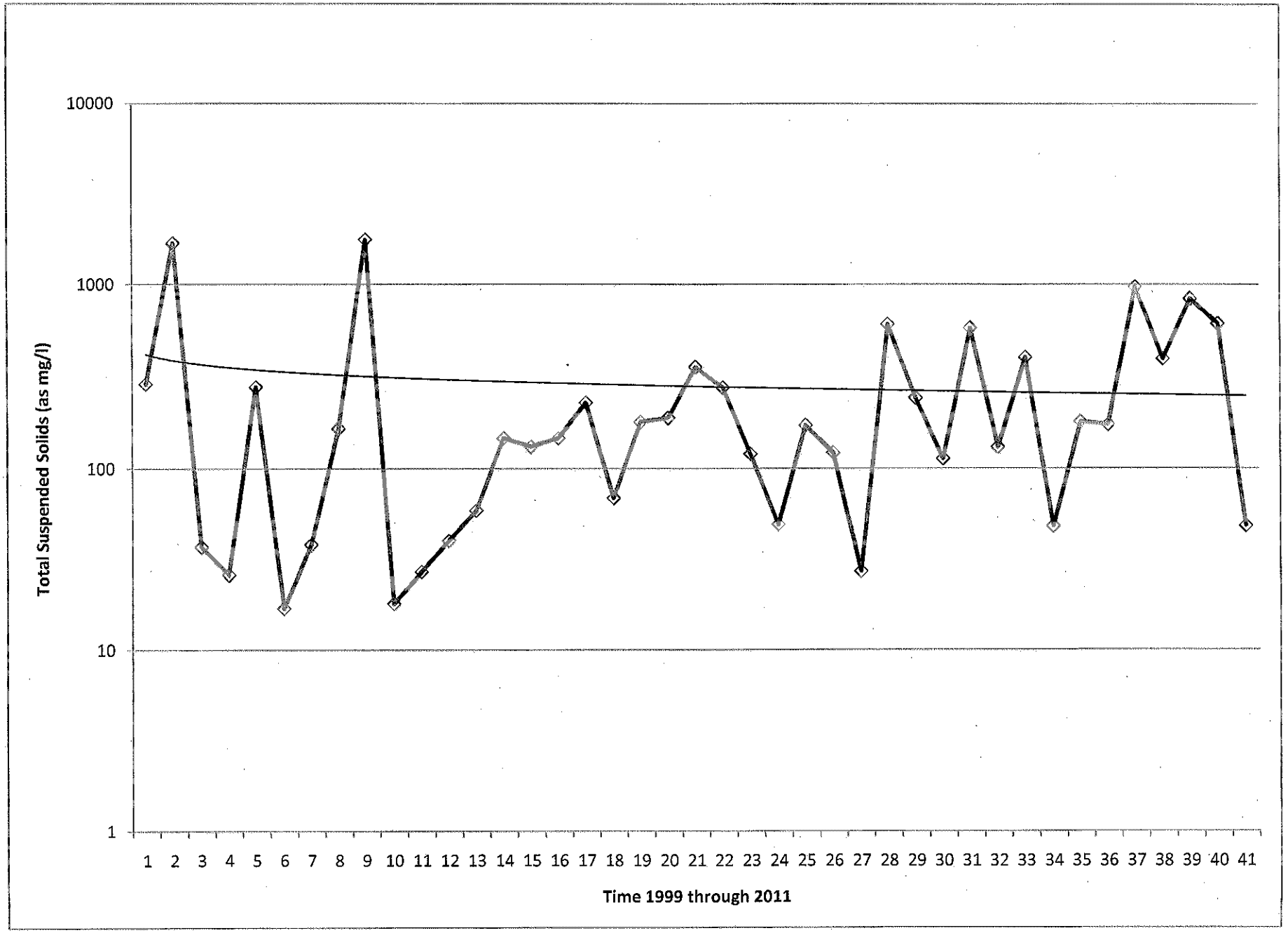
SUMMARY OF AVAILABLE DMR DATA
OUTFALL 002 - VA0057142

DMR PERIOD (1/QTR)	Q MAXIMUM (MG)	pH (SU)	TSS (mg/l)	O&G or TPH (mg/l)	DIS Cu (ug/l)	COMMENTS
2ND HALF 99	0.0022	8.2	290	2	<50	
1ST HALF 00	0.0004	6.2	1681	3	<50	
2ND HALF	0.0796	8.1	37	<5	<30	
1ST HALF 01	0.3284	8.0	26	<5	<15	PERMIT REISSUED MONITORING 1/3 MONTHS; O&G now TPH
3D QTR 2001	0.0396	6.7	279	<1	7	
4TH	0.0067	6.4	17	<1	6	
1ST 2002	0.0012	6.6	38	<1	6	
2ND	0.0046	6.9	166	0.5	6	
3D	0.0302	6.7	1760	1.5	5	
4TH	0.0051	6.9	18	<1	4	
1ST 2003	0.0022	8.3	27	<1	1	
2ND	0.0039	6.6	40	<1	<1	
3D	0.0118	7.1	59	<1	<5	
4TH	0.0095	8.8	147	0.6	<1	
1ST 2004	0.0017	6.9	132	<1	<1	
2ND	0.0009	7.4	147	<1	23	
3D	0.0067	7.7	230	<1	7	
4TH	0.0007	8.6	69	2.1	18	
1ST 2005	0.0035	6.7	180	<1	<1	
2ND	0.0054	7.2	189	<1	<1	
3D	0.0054	8.3	359	<1	9	
4TH	0.0054	8.3	277	<1	<1	
1ST 2006	0.0015	7.9	120	<1	13	
2ND	0.0022	8.0	49	<1	<1	
3D	ns					PERMIT REISSUED; COPPER MONITORING CEASED
4TH	ns					
1ST 2007	0.0135	8.5	172	<1		
2ND	0.0031	8.2	122	1.6		
3D	0.0011	8.0	27	<1		
4TH	0.0116	8.2	611	<1		
1ST 2008	0.0020	7.6	243	<1		
2ND	0.0064	7.6	113	<1		
3D	0.0019	7.8	584	<1		
4TH	0.0158	7.5	131			
1ST 2009	0.0031	7.5	406			
2ND	0.0037	7.9	48			
3D	0.0069	7.8	180			
4TH	0.0021	6.9	174	1		
1ST 2010	0.0645	7.9	969	<1		
2ND	0.0173	8.0	398			
3D	0.0009	8.3	843			
4TH	0.0012	7.8	616			
1ST 2011	0.0037	7.9	48	<1		
2ND						
MAXIMUM	0.3284	8.8	1760	3	(25) / 23	
MINIMUM	0.0004	6.2	17	(0.5)	(1)	
AVERAGE	0.0175	7.6	293	(1.2)	(7.8)	
COUNT	41	41	41	34	24	

EPA FORM 2F DATA BELOW (02/05/2011):

Total Phosphorus	0.33 mg/l
NO2-NO3	0.83 mg/l
TKN	3.4 mg/l
Total Nitrogen	4.2 mg/l
Oil and Grease	<5 mg/l
Total Iron	8.64 mg/l (8640 ug/l)
COD	720 mg/l
pH	8.1 SU
TSS	338 mg/l
BOD5	<2 mg/l

LOG-PLOT SUMMARY AND LONG TERM TREND ANALYSIS OF AVAILABLE TSS DATA
OUTFALL 002 - VA0057142



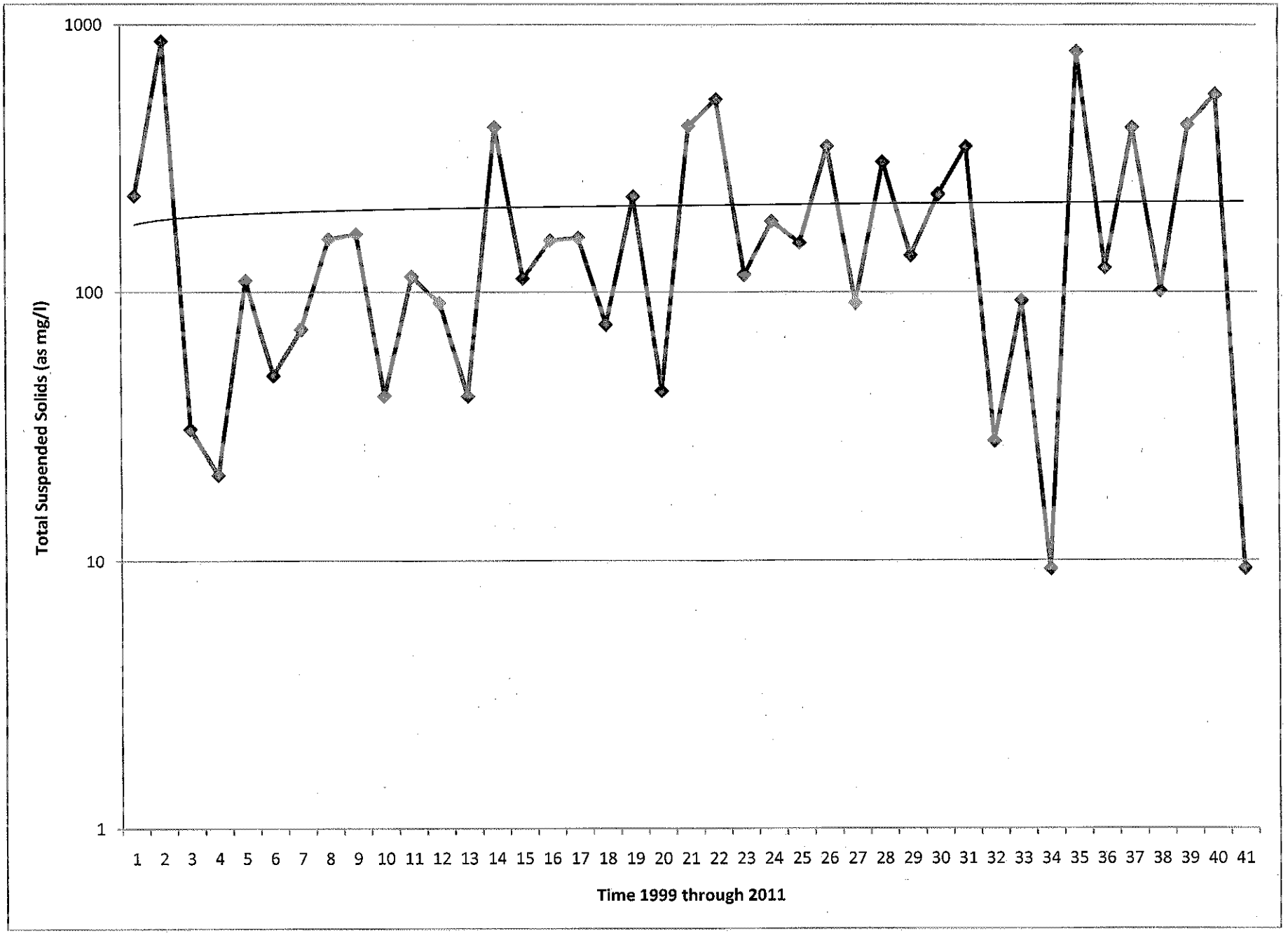
SUMMARY OF AVAILABLE DMR DATA
OUTFALL 003 - VA0057142

DMR PERIOD (1/QTR)	Q MAXIMUM (MG)	pH (SU)	TSS (mg/l)	O&G or TPH (mg/l)	DIS Cu (ug/l)	COMMENTS
2ND HALF 99	0.0041	8.1	230	1	<50	
1ST HALF 00	0.0008	6.7	867	2	425	
2ND HALF	0.0796	8.0	31	<5	<30	
1ST HALF 01	0.0631	7.9	21	<5	28	PERMIT REISSUED MONITORING 1/3 MONTHS; O&G now TPH
3D QTR 2001	0.0595	7.7	110	<1	39	
4TH	0.0100	6.8	49	<1	<1	
1ST 2002	0.0018	7.4	73	0.5	6	
2ND	0.0069	6.6	158	0.5	4	
3D	0.0453	6.7	165	0.5	5	
4TH	0.0077	6.0	41	<1	3	
1ST 2003	0.0034	7.3	114	<1	4	
2ND	0.0059	6.6	91	<1	<1	
3D	0.0178	7.8	41	<1	<5	
4TH	0.0143	8.8	414	<1	<1	
1ST 2004	0.0018	6.7	112	2.1	3	
2ND	0.0014	8.2	156	<1	5	
3D	0.0100	8.0	160	3.8	<1	
4TH	0.0010	9.0	76	1.5	10	
1ST 2005	0.0052	7.0	228	<1	<1	
2ND	0.0094	7.5	43	<1	6	
3D	0.0094	8.2	418	<1	<1	
4TH	0.0094	8.4	524	<1	<1	
1ST 2006	0.0024	7.4	116	<1	6	
2ND	0.0034	8.1	185	<1	<1	
3D	ns					
4TH	ns					PERMIT REISSUED; COPPER MONITORING CEASED
1ST 2007	0.0202	8.6	153	1.1		
2ND	0.0009	7.3	351	<1		
3D	0.0017	7.7	91	<1		
4TH	0.0174	8.1	307	<1		
1ST 2008	0.0030	7.8	137	0.6		
2ND	0.0095	7.7	233	<1		
3D	0.0027	8.6	351	<1		
4TH	0.0237	7.6	28			
1ST 2009	0.0046	7.7	93			
2ND	0.0056	8.0	9.3			
3D	0.0105	8.4	792			
4TH	0.0032	7.0	123	0.6		
1ST 2010	0.0968	8.0	412			
2ND	0.0260	8.1	101			
3D	0.0014	8.4	424			
4TH	0.0018	7.7	548			
1ST 2011	0.0056	8.0	9.3	<1		
2ND						
MAXIMUM	0.0968	9.0	867	3.8	425	
MINIMUM	0.0008	6.0	9.3	(0.5)	(1)	
AVERAGE	0.0148	7.7	209.4	(1.2)	(24.8)	
COUNT	41	41	41	31	24	

EPA FORM 2F DATA BELOW (02/05/2011):

Total Phosphorus	0.43 mg/l
NO2-NO3	0.73 mg/l
TKN	2.9 mg/l
Total Nitrogen	3.6 mg/l
Oil and Grease	<5 mg/l
Total Iron	5.60 mg/l (5600 ug/l)
COD	432 mg/l
pH	8.3 SU
TSS	257 mg/l
BOD5	<15 mg/l

LOG-PLOT SUMMARY AND LONG TERM TREND ANALYSIS OF AVAILABLE TSS DATA
OUTFALL 003 - VA0057142



APPLICABLE WATER QUALITY STANDARDS, ANTIDEGRADATION CALCULATIONS AND BASELINES

PARAMETER All values in ug/l unless otherwise noted.	SALTWATER CRITERIA (SW)		OTHER SURFACE WATERS CRITERIA	INSTREAM BACKGROUND DATA (Expected Value)	ANTIDEGRADATION BASELINE			WATER QUALITY WASTELOAD ALLOCATION (WQ-WLA)			ANTIDEGRADATION WASTELOAD ALLOCATION (AD-WLA)		
	ACUTE	CHRONIC			ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH
METALS													
Antimony	-	-	4,300	NA	-	-	430	-	-	NA			
Arsenic	69	36	-	NA	17.2	9	-	138	1800	NA			
Cadmium	40	8.8	-	NA	10	2.2	-	80	440	NA			
Chromium VI	1100	50	-	NA	275	12.5	-	2200	2500	NA			
Copper	9.3	6.0	-	NA	2.3	1.5	-	18.6	300	NA			
Lead	240	9.3	-	NA	60	2.3	-	480	465	NA			
Mercury	1.8	0.94	0.051	NA	0.4	0.23	0.005	3.6	47	NA			
Nickel	74	8.2	4,600	NA	18.5	2.1	460	148	410	NA			
Selenium	300	71	11,000	NA	75	17.7	1100	600	3550	NA			
Silver	2.0	-	-	NA	0.5	-	-	4	-	NA			
Zinc	90	81	69,000	NA	22.5	20.2	6900	180	4050	NA			
PESTICIDES/PCB'S													
Aldrin	1.3	-	0.0014	NA	0.33	-	0.0001	2.6	-	NA			
Chlordane	0.09	0.004	0.022	NA	0.02	0.001	0.002	0.18	-	NA			
Chlorpyrifos (Dursban)	0.011	0.0056	-	NA	0.003	0.001	-	0.022	-	NA			
DDD	-	-	0.0084	NA	-	-	0.0008	-	-	NA			
DDE	-	-	0.0059	NA	-	-	0.0006	-	-	NA			
DDT	0.13	0.001	0.0059	NA	0.03	0.0003	0.0006	0.26	-	NA			
Demeton	-	0.1	-	NA	-	0.03	-	-	-	NA			

APPLICABLE WATER QUALITY STANDARDS, ANTIDEGRADATION CALCULATIONS AND BASELINES

PARAMETER All values in ug/l unless otherwise noted.	SALTWATER CRITERIA (SW)		OTHER SURFACE WATERS CRITERIA	INSTREAM BACKGROUND DATA (Expected Value)	ANTIDEGRADATION BASELINE			WATER QUALITY WASTELOAD ALLOCATION (WQ-WLA)			ANTIDEGRADATION WASTELOAD ALLOCATION (AD-WLA)		
	ACUTE	CHRONIC			ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH
Dieldrin	0.71	0.0019	0.0014	NA	0.18	0.0005	0.0001	1.4	0.09	NA			
Alpha-Endosulfan	0.034	0.0087	240	NA	0.008	0.002	24	0.07	0.43	NA			
Beta-Endosulfan	0.034	0.0087	240	NA	0.008	0.002	24	0.07	0.43	NA			
Endosulfan-Sulfate	-	-	240	NA	-	-	24	-	-	NA			
Endrin	0.037	0.0023	0.81	NA	0.009	0.0006	0.08	0.07	0.11	NA			
Endrin Aldehyde	-	-	0.81	NA	-	-	0.08	-	-	NA			
Guthion	-	0.01	-	NA	-	0.003	-	-	-	NA			
Heptachlor	0.053	0.0036	0.0021	NA	0.013	0.0009	0.0002	0.11	0.18	NA			
Heptachlor Epoxide	0.053	0.0036	0.0011	NA	0.013	0.0009	0.0001	0.11	0.18	NA			
Hexachlorocyclo-hexane (Lindane)	0.16	-	0.63	NA	0.04	-	0.06	0.32	-	NA			
Hexachlorocyclo-hexane Alpha-BHC	-	-	0.13	NA	-	-	0.01	-	-	NA			
Hexachlorocyclo-hexane Beta-BHC	-	-	0.46	NA	-	-	0.05	-	-	NA			
Kepone	-	0	-	NA	-	0	-	-	0	NA			
Malathion	-	0.1	-	NA	-	0.003	-	-	5	NA			
Methoxychlor	-	0.03	-	NA	-	0.007	-	-	1.5	NA			
Mirex	-	0	-	NA	-	0	-	-	0	NA			
PCB-1242	-	0.03	-	NA	-	0.007	-	-	1.5	NA			
PCB-1254	-	0.03	-	NA	-	0.007	-	-	1.5	NA			
PCB-1221	-	0.03	-	NA	-	0.007	-	-	1.5	NA			
PCB-1232	-	0.03	-	NA	-	0.007	-	-	1.5	NA			
PCB-1248	-	0.03	-	NA	-	0.007	-	-	1.5	NA			
PCB-1260	-	0.03	-	NA	-	0.007	-	-	1.5	NA			

APPLICABLE WATER QUALITY STANDARDS, ANTIDEGRADATION CALCULATIONS AND BASELINES

PARAMETER All values in ug/l unless otherwise noted.	SALTWATER CRITERIA (SW)		OTHER SURFACE WATERS CRITERIA	INSTREAM BACKGROUND DATA (Expected Value)	ANTIDEGRADATION BASELINE			WATER QUALITY WASTELOAD ALLOCATION (WQ-WLA)			ANTIDEGRADATION WASTELOAD ALLOCATION (AD-WLA)		
	ACUTE	CHRONIC			ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH
PCB-1016	-	0.03	-	NA	-	0.007	-	-	1.5	NA			
Toxaphene	0.21	0.0002	0.0075	NA	0.053	0.00005	0.0007	0.42	0.01	NA			
BASE NEUTRAL EXTRACTABLES, VOLATILES, ACIDS EXTRACTABLES													
Acenaphthene	-	-	2,700	NA	-	-	270	-	-	NA			
Acrolein	-	-	780	NA	-	-	78	-	-	NA			
Acrylonitrile	-	-	6.6	NA	-	-	0.66	-	-	NA			
Anthracene	-	-	110,000	NA	-	-	11,000	-	-	NA			
Benzene	-	-	710	NA	-	-	71	-	-	NA			
Benzidine	-	-	0.0054	NA	-	-	0.0005	-	-	NA			
Benzo(a) anthracene	-	-	0.49	NA	-	-	0.05	-	-	NA			
Benzo(b) fluoranthene	-	-	0.49	NA	-	-	0.05	-	-	NA			
Benzo(k) fluoranthene	-	-	0.49	NA	-	-	0.05	-	-	NA			
Benzo(a)pyrene	-	-	0.49	NA	-	-	0.05	-	-	NA			
Bis-2-Chloroethyl Ether	-	-	14	NA	-	-	1.4	-	-	NA			
Bis-2-Chloro-isopropyl Ether	-	-	170,000	NA	-	-	17,000	-	-	NA			
Bromoform	-	-	3,600	NA	-	-	360	-	-	NA			
Butyl benzyl phthalate	-	-	5,200	NA	-	-	520	-	-	NA			
Carbon tetrachloride	-	-	44	NA	-	-	4.4	-	-	NA			

APPLICABLE WATER QUALITY STANDARDS, ANTIDEGRADATION CALCULATIONS AND BASELINES

PARAMETER All values in ug/l unless otherwise noted.	SALTWATER CRITERIA (SW)		OTHER SURFACE WATERS CRITERIA	INSTREAM BACKGROUND DATA (Expected Value)	ANTIDEGRADATION BASELINE			WATER QUALITY WASTELOAD ALLOCATION (WQ-WLA)			ANTIDEGRADATION WASTELOAD ALLOCATION (AD-WLA)		
	ACUTE	CHRONIC			ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH
Chrysene	-	-	0.49	NA	-	-	0.05	-	-	NA			
Chlorobenzene	-	-	21,000	NA	-	-	2,100	-	-	NA			
Chlorodibromo-methane	-	-	340	NA	-	-	34	-	-	NA			
Chloroform	-	-	29,000	NA	-	-	2,900	-	-	NA			
2-Chloronaphthalene	-	-	4,300	NA	-	-	430	-	-	NA			
2-Chlorophenol	-	-	400	NA	-	-	40	-	-	NA			
Dibenz(a,h) anthracene	-	-	0.49	NA	-	-	0.05	-	-	NA			
Dibutyl phthalate	-	-	12,000	NA	-	-	1,200	-	-	NA			
Dichloromethane	-	-	16,000	NA	-	-	1,600	-	-	NA			
1,2-Dichloro-benzene	-	-	17,000	NA	-	-	1,700	-	-	NA			
1,3-Dichloro-benzene	-	-	2,600	NA	-	-	260	-	-	NA			
1,4-Dichloro-benzene	-	-	2,600	NA	-	-	260	-	-	NA			
3,3 Dichloro-benzidine	-	-	0.77	NA	-	-	0.07	-	-	NA			
Dichlorobromo-methane	-	-	460	NA	-	-	46	-	-	NA			
1,2-Dichloro-ethane	-	-	990	NA	-	-	99	-	-	NA			
1,1-Dichloro-ethylene	-	-	17,000	NA	-	-	1,700	-	-	NA			
1,2-trans-dichloroethylene	-	-	140,000	NA	-	-	14,000	-	-	NA			

APPLICABLE WATER QUALITY STANDARDS, ANTIDEGRADATION CALCULATIONS AND BASELINES

PARAMETER All values in ug/l unless otherwise noted.	SALTWATER CRITERIA (SW)		OTHER SURFACE WATERS CRITERIA	INSTREAM BACKGROUND DATA (Expected Value)	ANTIDEGRADATION BASELINE			WATER QUALITY WASTELOAD ALLOCATION (WQ-WLA)			ANTIDEGRADATION WASTELOAD ALLOCATION (AD-WLA)		
	ACUTE	CHRONIC			ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH
2,4 Dichlorophenol	-	-	790	NA	-	-	79	-	-	NA			
1,2-Dichloropropane	-	-	390	NA	-	-	39	-	-	NA			
1,3-Dichloropropene	-	-	1,700	NA	-	-	170	-	-	NA			
Diethyl phthalate	-	-	120,000	NA	-	-	12,000	-	-	NA			
Di-2-Ethylhexyl phthalate	-	-	59	NA	-	-	5.9	-	-	NA			
2,4 Dimethylphenol	-	-	2,300	NA	-	-	230	-	-	NA			
Dimethyl Phthalate	-	-	2,900,000	NA	-	-	290,000	-	-	NA			
Di-n-Butyl Phthalate	-	-	12,000	NA	-	-	1,200	-	-	NA			
2,4 Dinitrophenol	-	-	14,000	NA	-	-	1,400	-	-	NA			
2-Methyl-4,6-Dinitrophenol	-	-	765	NA	-	-	76.5	-	-	NA			
2,4-Dinitro-toluene	-	-	91	NA	-	-	9.1	-	-	NA			
1,2-Diphenyl-hydrazine	-	-	5.4	NA	-	-	0.54	-	-	NA			
Ethylbenzene	-	-	29,000	NA	-	-	2,900	-	-	NA			
Fluoranthene	-	-	370	NA	-	-	37	-	-	NA			
Fluorene	-	-	14,000	NA	-	-	1,400	-	-	NA			
Hexachlorobenzene	-	-	0.0077	NA	-	-	0.0008	-	-	NA			
Hexachlorobutadiene	-	-	500	NA	-	-	50	-	-	NA			
Hexachlorocyclo-pentadiene	-	-	17,000	NA	-	-	1,700	-	-	NA			
Hexachloroethane	-	-	89	NA	-	-	8.9	-	-	NA			
Indeno (1,2,3-cd) pyrene	-	-	0.49	NA	-	-	0.05	-	-	NA			

APPLICABLE WATER QUALITY STANDARDS, ANTIDEGRADATION CALCULATIONS AND BASELINES

PARAMETER All values in ug/l unless otherwise noted.	SALTWATER CRITERIA (SW)		OTHER SURFACE WATERS CRITERIA	INSTREAM BACKGROUND DATA (Expected Value)	ANTIDEGRADATION BASELINE			WATER QUALITY WASTELOAD ALLOCATION (WQ-WLA)			ANTIDEGRADATION WASTELOAD ALLOCATION (AD-WLA)		
	ACUTE	CHRONIC			ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH
Isophorone	-	-	26,000	NA	-	-	2,600	-	-	NA			
Methyl Bromide	-	-	4,000	NA	-	-	400	-	-	NA			
Nitrobenzene	-	-	1,900	NA	-	-	190	-	-	NA			
N-Nitrosodimethyl-amine	-	-	81	NA	-	-	8.1	-	-	NA			
N-Nitrosodiphenyl-amine	-	-	160	NA	-	-	16	-	-	NA			
N-Nitrosodi-n-propylamine	-	-	14	NA	-	-	1.4	-	-	NA			
Pentachloro-phenol	13	7.9	82	NA	-	-	8.2	26	395	NA			
Phenol	-	-	4,600,000	NA	-	-	460,000	-	-	NA			
Pyrene	-	-	11,000	NA	-	-	1,100	-	-	NA			
1,1,2,2-Tetrachloroethane	-	-	110	NA	-	-	11	-	-	NA			
Tetrachloro-ethylene	-	-	89	NA	-	-	8.9	-	-	NA			
Toluene	-	-	200,000	NA	-	-	20,000	-	-	NA			
1,2,4 Trichloro-benzene	-	-	940	NA	-	-	94	-	-	NA			
1,1,2-Trichloroethane	-	-	420	NA	-	-	42	-	-	NA			
Trichloroethylene	-	-	810	NA	-	-	87	-	-	NA			
2,4,6-Trichloro-phenol	-	-	65	NA	-	-	6.5	-	-	NA			
Vinyl Chloride	-	-	61	NA	-	-	6.1	-	-	NA			

APPLICABLE WATER QUALITY STANDARDS, ANTIDEGRADATION CALCULATIONS AND BASELINES

PARAMETER All values in ug/l unless otherwise noted.	SALTWATER CRITERIA (SW)		OTHER SURFACE WATERS CRITERIA	INSTREAM BACKGROUND DATA (Expected Value)	ANTIDEGRADATION BASELINE			WATER QUALITY WASTELOAD ALLOCATION (WQ-WLA)			ANTIDEGRADATION WASTELOAD ALLOCATION (AD-WLA)		
	ACUTE	CHRONIC			ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH	ACUTE	CHRONIC	HUMAN HEALTH
MISCELLANEOUS													
Ammonia (mg/l)	2.87	0.43	-	NA	0.72	0.11	-	5.74	21.5				
Chlorine Produced Oxidant (mg/l)	13	7.5	-	NA	3.25	1.87	-	26	375				
Cyanide	1	1	220,000	NA	0.25	0.25	22,000	2	50				
Dioxin	-	-	1.2	NA	-	-	0.12	-	-				
Fecal Coliform (N/CML)	-	-	-	NA	-	-	-	-	-				
Hydrogen Sulfide	-	2	-	NA	-	0.5	-	-	100				
Tributyltin	0.38	0.001	-	NA	0.09	0.0003	-	0.76	0.05				

NOTES: The receiving stream has been classified as a Tier 1 water body. As such, no further review is needed regarding the antidegradation wasteload allocation (AD-WLA).

ATTACHMENT 7

SPECIAL CONDITIONS RATIONALE

ATTACHMENT 7
VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE

NAME OF PERMIT CONDITION(S):

Part I.B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. Permit Reopeners

   a. Water Quality Standards Reopener

   Rationale: The VPDES Permit Regulation, 9 VAC 25-31-220 D requires effluent limitations to be established which will contribute to the attainment or maintenance of water quality criteria.

   b. Nutrient Enriched Waters Reopener

   Rationale: The Policy for Nutrient Enriched Waters, 9 VAC 25-40 -10 allows reopening of permits for discharges into waters designated as nutrient enriched if total phosphorus and total nitrogen in a discharge potentially exceed specified concentrations. The policy also anticipates that future total phosphorus and total nitrogen limits may be needed.

   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 according 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. 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.

3. 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).

ATTACHMENT 7
VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE

NAME OF PERMIT CONDITION(S):

Part I.B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS (continued)

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. Section b. of the special condition defines QL and is included per BPJ to clarify the difference between QL and MDL.

5. Compliance Reporting Under Part I.A.

Rationale: Defines reporting requirements for toxic parameters and some conventional 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.

7. Minimum Freeboard

Rationale: Minimize the discharge of untreated wastewater to the groundwater or surface waters.

Part I.C. TOXICS MANAGENENT PROGRAM (TMP)

Rationale: To determine the need for pollutant specific and/or whole effluent toxicity limits as may be required by the VPDES Permit Regulation, 9 VAC 25-31-220 D. and 40 CFR 122.44 (d). See Attachment 8 of this fact sheet for additional justification.

Part I.D. STORM WATER MANAGEMENT CONDITIONS

1. 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 BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

b. Sampling Methodology for Specific Outfalls

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

ATTACHMENT 7
VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE

NAME OF PERMIT CONDITION(S):

Part I.D. STORM WATER MANAGEMENT CONDITIONS

1. General Storm Water Conditions (continued)

c. 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.

d. 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.

e. 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.

f. Quarterly Visual Exam of Storm Water Quality - Outfall 003

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.

g. Allowable Non-Storm Water Discharges

Rationale: The listed allowable non-storm water discharges are the same as those allowed by the EPA in their multi-sector general permit, and are the same non-storm water discharges allowed under the Virginia General VPDES Permit for Discharges of Storm Water Associated with Industrial Activity, 9 VAC 25-151-10 et seq. Allowing the same non-storm water discharges in VPDES individual permits provides consistency with other storm water permits for industrial facilities. The non-storm water discharges must meet the conditions in the permit.

ATTACHMENT 7
VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE

NAME OF PERMIT CONDITION(S):

Part I.D. STORM WATER MANAGEMENT CONDITIONS

1. General Storm Water Conditions (continued)

   h. Releases of Hazardous Substances/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.

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 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. 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, 9VAC 25-31-220 K,

ATTACHMENT 7
VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE

NAME OF PERMIT CONDITION(S):

Part I.D. STORM WATER MANAGEMENT CONDITIONS

3. Storm Water Pollution Prevention Plan (continued)

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 law.

4. Facility-specific Storm Water Management 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 8

TOXICS MONITORING/TOXICS REDUCTION/ WET LIMIT RATIONALE

MEMORANDUM
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard Virginia Beach, VA 23462

SUBJECT: Reissuance of VPDES Permit No. VA0057142
Kinder Morgan Terminals-Pier IX
Proposed TMP Language

TO: Carl Thomas

FROM: Deanna Austin

DATE: 3/15/11

COPIES: TRO/File (VA0057142@ECM)

Kinder Morgan Terminals-Pier IX operates an industrial facility on 21st and Terminal Avenue in Newport News, Virginia. The main industrial activity taking place onsite is the shipment of bulk materials. The materials shipped and received at this facility include coal, and Portland cement. There are two stormwater only outfalls and one storm/process wastewater outfall associated with the industrial activity taking place onsite.

All three outfalls discharge to the James River. Outfall 001 drains nearly all the stormwater runoff, coal dust suppression wastewater and vehicle equipment and wash water. During the current permit term (July 2006-July 2011), toxicity samples were taken at outfall 001.

The following tables show the data at the outfalls over the course of this permit term.

NPID	DESCRIPT	SPECIES	SAMPLEDT	LC50	SURVIVAL	TU	TESTCOM	LAB
VA0057142	Annual Storm Water Acute	A.b.	8/21/07	100	100	1	Also sampled C.v. 100% LC50 and % survival	CBI
VA0057142	Annual Storm Water Acute	A.b.	8/15/08	100	100	1	Also sampled C.v. 100% LC50 and % survival	CBI
VA0057142	Annual Storm Water Acute	A.b.	8/28/09	100	85	1	Also sampled C.v. 100% LC50 and % survival	CBI
VA0057142	Annual Storm Water Acute	A.b.	8/17/10	64.6	20	1.55	Also sampled C.v. 100% LC50 and % survival	CBI
VA0057142	Annual Storm Water Acute	A.b.	2/9/11	100	100	1	Also sampled C.v. 100% LC50 and % survival	CBI

C.v. - *Cyprinodon variegatus,* A.b. - *Americamysis bahia*

There has been one noted toxicity issue at outfall 001 during this permit term. Monitoring for toxicity at outfall 001 will continue in the reissued permit. It is noted that the facility SIC codes 4491 and 5052 are included in the SIC list that are to be included in the toxicity testing program based upon the DEQ Toxics Management Program Guidance, therefore toxicity monitoring is still needed based on current and relevant guidance.

With the last reissuance, the facility was allowed to monitoring only using species *Americamysis bahia* (**A.b.**). The facility continues to monitor with both species. Only **A.b** is required for this reissued permit as well.

The following TMP language is recommended for the reissuance of the Kinder Morgan Terminal-Pier IX permit (VA0051742).

C. TOXICS MANAGEMENT PROGRAM (TMP)

1. Biological Monitoring

a. In accordance with the schedule in 2. below, the permittee shall conduct annual acute toxicity tests for the duration of the permit. The permittee shall collect a grab sample of final effluent from outfall 001 accordance with the sampling methodology in Part I.A.1 of this permit. The grab samples for toxicity testing shall be taken at the same time as the monitoring for the outfalls in Part 1.A. of this permit. The acute test to use is:

48 Hour Static Acute test using Americamysis bahia

These acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for the calculation of a valid LC_{50}. Express the results as TU_a (Acute Toxic Units) by dividing 100/ LC_{50} for reporting. Both species should be analyzed from grab samples collected during the same sampling event.

Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

b. In the event that sampling of the outfall is not possible due to the absence of effluent flow during a particular testing period, the permittee shall perform a make-up sample during the next testing period.

c. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of the effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

d. The test dilutions shall be able to determine compliance with the following endpoints:

(1) Acute LC_{50} of 100% equivalent to a TU_a of 1.0

2. Reporting Schedule

The permittee shall report the results and supply **one** complete copy of the toxicity test report to the Tidewater Regional Office in accordance with the schedule below. A complete report must contain a copy of all laboratory benchsheets, certificates of analysis, and all chains of custody. All data shall be submitted by the 10th of the month following sampling.

(a)	**Conduct first annual TMP test for outfall 001 using Americamysis bahia**	**By December 31, 2012**
(b)	**Submit results of all biological tests**	**By the 10th of the month following sampling but no later than January 10, 2013**
(c)	**Conduct subsequent annual TMP tests for outfall 001, using Americamysis bahia**	**By December 31, 2013, 2014, and 2015**
(d)	**Submit subsequent annual biological tests**	**By the 10th of the month following sampling but no later than January 10, 2014, 2015 and 2016**

ATTACHMENT 9

MATERIAL STORED

ATTACHMENT 9
MATERIALS STORED

GENERAL DISCUSSION:

The applicant operates a coal storage and vessel loading activity on the James River in Newport News, Virginia. Portland cement is also handled at the site.

Based on information presented in the operations and maintenance manual, the following applies with respect to the quantities of each material handled on a regular basis:

- Coal is stockpiled on a 60 acre site with a total storage capacity of 1.2 million tons and permitted capacity of 1 million tons at any given time. Based on discussions during a site visit in April 2011, it was learned that the through-put of coal for shipment from the site had increased over the past couple of years.

- Portland cement is stormed in three silos with a total capacity of 35,000 tons.

Each commodity held in bulk is controlled and handled in a manner that prevents, to the extent practicable, loss of those materials by direct deposition into surface waters or conveyance by storm water runoff leaving the facility.

In addition to the materials noted above, the tables that follow were derived from material filed by the applicant over time, or with the application submitted for reissuance of the permit.

Table 2—TANK INVENTORY

Storage Unit	Storage Unit Location	Contents	Maximum Capacity *(Gallons)*	Average Quantity Stored *(Gallons)*	Potential Failure *(Leak, rupture, overflow)*	Rate of Release *(Gallons per Hour)*	Direction of Flow	Containment Capacity *(Gallons)*
BULK STORAGE CONTAINERS								
#1 Used Oil Tank	North of Maintenance Shop	Used Oil	2,000	1,500	Leakage	50	Into ground	Buried
#2 Oil Tank	North of Maintenance Shop	Motor Oil	550	300	Leakage	50	Into ground	Buried
#3 Oil Tank	North of Maintenance Shop	Motor Oil	550	300	Leakage	50	Into Ground	Buried
#4 Oil Tank	North of Maintenance Shop	Motor Oil	550	300	Leakage	50	Into Ground	Buried
#5 Gasoline Tank	North of Maintenance Shop	Gasoline	4,000	2,000	Leakage	50	Into Ground	Buried
#6 Diesel Tank	North of Maintenance Shop	Diesel	12,000	6,000	Leakage	50	Into Ground	Buried
#7 Diesel Tank	North of Maintenance Shop	Diesel	12,000	6,000	Leakage	50	Into Ground	Buried
#8 Oil Tank	Maintenance Shop	Motor Oil	275	200	Rupture, leakage	275	Within building	5,170
#9 Tank	Maintenance Shop	Anti-freeze	275	200	Rupture, leakage	275	Within building	5,170
#10 Oil Tank	South of Dumper	Hydraulic Oil	550	250	Rupture, leakage	550	Within containment	1,800
#11 Oil Tank	South of Dumper	Hydraulic Oil	550	250	Rupture, leakage	550	Within containment	550

#12 tank	Outside of Phase IV	Transformer Magnetic Oil	150	100	Rupture, leak	150	Within Containment	425
#13 Tank	Dumper Building	Hydraulic Oil	500	100	Rupture, leakage	200	Double Walled Tank	220
Crane G1	Pier X	Hydraulic Oil	1246	1246	Rupture, leakage	Self Contained	Self Contained	N/A
Crane G2	Pier X	Hydraulic Oil	1245	1245	Rupture, leakage	Self Contained	Self Contained	N/A
Locomotive SL1	North of Dumper Building	Diesel, Lube Oil and Hydraulic Oil	2000	2000	Rupture, leakage	Above Ground	Spill Cleanup; Drain toward perimeter ditch	N/A
Locomotive SL2	North of Dumper Building	Diesel, Lube Oil and Hydraulic Oil	2000	2000	Rupture, leakage	Above Ground	Spill Cleanup; Drain toward perimeter ditch	N/A
Locomotive SL3	North of Dumper Building	Diesel, Lube Oil and Hydraulic Oil	2000	2000	Rupture, leakage	Above Ground	Spill Cleanup; Drain toward perimeter ditch	N/A
Locomotive SL3.5	North of Dumper Building	Diesel, Lube Oil and Hydraulic Oil	1500	1500	Rupture, leakage	Above Ground	Spill Cleanup; Drain toward perimeter ditch	N/A
Locomotive Black River	North of Dumper Building	Diesel, Lube Oil and Hydraulic Oil	2200	2200	Rupture, leakage	Above Ground	Spill Cleanup; Drain toward perimeter ditch	N/A
Mag Separator Reservoir C2	C2 head end	SE7635 Dielectric Cooling Oil	776	776	Rupture, leakage	Above Ground	Spill Cleanup; Drain toward perimeter ditch	N/A
Mag Separator Reservoir C7A	C7A head end	SE7635 Dielectric Cooling Oil	776	776	Rupture, leakage	Above Ground	Spill Cleanup; Drain toward perimeter ditch	N/A

Mag Separator Reservoir C7B	C7B head end	SE7635 Dielectric Cooling Oil	776	776	Rupture, leakage	Above Ground	Spill Cleanup; Drain toward perimeter ditch	N/A
Mobile Fuel Truck	Diesel Fuel, Lube Oil & Hydraulic Oil	SE7635 Dielectric Cooling Oil	1870	2692	Rupture, leakage	Above Ground	Into ground / toward perimeter ditch	N/A

ATTACHMENT 10

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

MEMORANDUM
DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE

Water Permits Section
5636 Southern Boulevard
Virginia Beach, Virginia 23462

SUBJECT: VPDES Application Requests

TO: Kristie Britt, TRO

FROM: C. Thomas, TRO/VPDES

DATE: February 10, 2011

COPIES: TRO/File (VA0057142@ECM)

An application has been received for the following facility:

VPDES Permit Number: VA0057142

Facility Name: Kinder Morgan Bulk Terminals – Pier IX

Topo Map Name: **Newport News South Topo**

Receiving Streams: **James River**

Attached is a Topographic Map showing facility property boundaries and outfall location(s)for those included in this request.

Attached is a stream data Request Form **Yes**

We request the following information from you:

1. X Tier Determination. Tier: **Tier 1 based on benthic impairment from BIBI data. See Attachment 1.**

2. X Stream Data Requested for outfall(s) **Nearest station to facility – 2-JMS013.10 See Attachment 2.**

3. X Is this facility mentioned in a Management Plan?

   X No ____ Yes ; _____ No, but will be included when the Plan is updated.

4. X Are limits contained in a Management Plan?

   X No ____ Yes **(If Yes, Please include the basis for the limits.)**

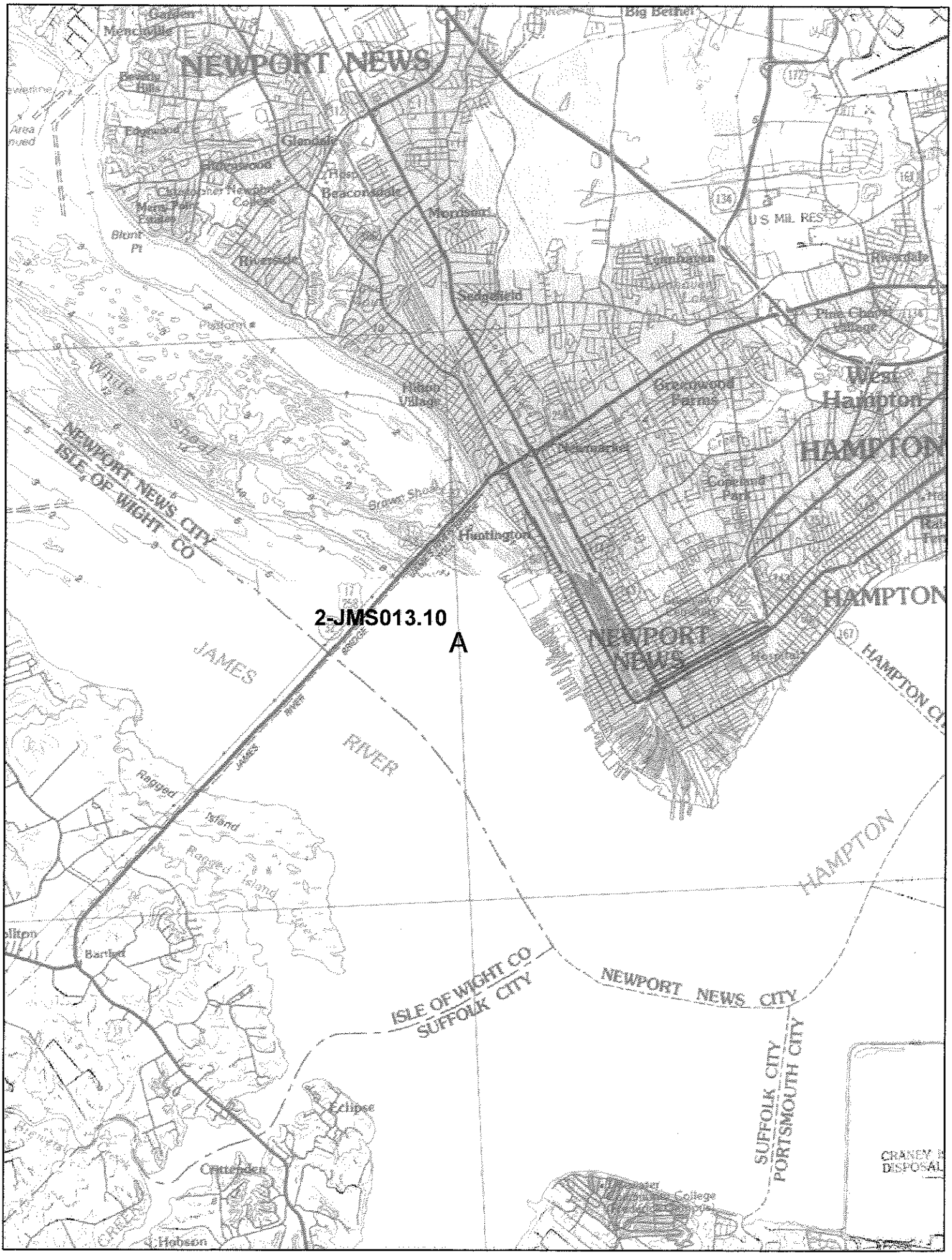
5. X Indicate outfall(s) which discharge directly to an impaired (Category 5) stream segment? **Outfall 001, 002 and 003 discharge to impaired segment VAT-G11E JMS03A06. See Attachment 1.**

6. X Are outfall(s) WLAs contained in an approved TMDL?

   X No ____ Yes **This facility is located within the Chesapeake Bay TMDL watershed. However, the facility is listed as a non-significant contributor under Appendix Q (Annual Aggregate WLA worksheet) and therefore no individual WLA was assigned by the Final Chesapeake Bay TMDL (EPA approved 12-29-2010).**

Return Date Requested: **OPEN**

Date Returned: 3-24-11


NEWPORT NEWS
HAMPTON
JAMES
RIVER
NEWPORT NEWS CITY
ISLE OF WIGHT CO
ISLE OF WIGHT CO
SUFFOLK CITY
NEWPORT NEWS CITY
SUFFOLK CITY
PORTSMOUTH CITY
2-JMS013.10
A

SUMMARY OF AVAILABLE IN-STREAM DATA
AQM STATION 2-JMS013.10

SAMPLE DATE	TEMPERATURE (oC)	pH (SU)	DIS. OXYGEN (mg/l)	SALINITY (o/oo)	NH3-N (mg/l)
01/23/2008	5.3	7.8	11.0	18.9	<0.004
02/20/2008	8.6	7.9	10.5	17.2	<0.004
03/18/2008	10.7	7.4	8.7	13.6	<0.004
04/17/2008	13.7	7.7	9.0	10.9	0.026
05/21/2008	18.2	7.7	7.8	9.6	0.069
06/17/2008	26.2	7.9	6.7	14.1	<0.004
07/15/2008	25.7	7.9	7.0	17.7	<0.004
08/20/2008	26.2	8.0	7.3	20.5	0.006
09/22/2008	22.5	7.6	6.0	18.1	0.036
10/21/2008	16.8	7.7	7.1	18.8	0.065
11/24/2008	8.0	7.8	10.1	20.4	0.016
12/08/2008	6.1	8.1	11.5	18.7	<0.004
01/29/2009	3.9	7.8	14.4	15.6	0.005
03/04/2009	3.5	7.7	15.2	18.1	<0.004
04/21/2009	14.7	7.9	8.5	13.5	<0.004
05/20/2009	17.9	7.7	8.8	8.2	0.034
06/16/2009	24.6	7.9	7.3	13.5	<0.004
07/21/2009	25.5	7.6	6.2	17.3	0.015
09/15/2009	23.3	7.8	6.1	20.3	0.047
10/20/2009	14.2	7.9	8.3	19.0	0.082
11/16/2009	13.7	7.8	9.0	13.5	0.050
12/08/2009	9.7	7.8	9.8	8.1	0.087
01/27/2010	6.0	8.1	13.1	9.6	<0.004
02/23/2010	4.4	7.8	11.8	14.1	0.045
03/02/2010	4.9	-	12.4	11.5	0.051
04/06/2010	16.3	7.9	10.7	14.6	0.038
05/04/2010	20.3	7.7	8.3	12.4	0.046
06/17/2010	26.4	7.7	5.7	16.8	0.014
07/07/2010	27.0	7.9	5.9	19.4	0.016
08/03/2010	26.2	8.1	6.8	20.3	0.011
10/05/2010	18.8	7.7	7.1	17.3	0.031
11/02/2010	16.0	7.9	7.7	19.1	0.029
12/09/2010	5.5	7.8		14.8	
01/06/2011	2.6	8.3		17.1	
02/01/2011	2.7	8.1		18.8	
03/02/2011	8.2	7.9		18.6	
MAXIMUM	27	8.3	15.2	20.5	0.087
MINIMUM	2.6	7.4	5.7	8.1	(0.002)
AVERAGE	14.6	7.8	8.9	15.8	(0.026)
90TH%	26.2	8.1	-	-	-
COUNT	36	35	32	36	32

ATTACHMENT 11

303(D) LISTED SEGMENTS

VIRGINIA

305(b)/303(d)

WATER QUALITY INTEGRATED REPORT

to

CONGRESS and the EPA ADMINISTRATOR

for the

PERIOD

January 1, 2003 to December 31, 2008

DEQ
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

DCR
Department of Conservation & Recreation
CONSERVING VIRGINIAS NATURAL AND RECREATIONAL RESOURCES

Richmond, Virginia

November 2010

Attachment 1-9

2010 Impaired Waters - 303(d) List

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

Category 5 - Waters needing Total Maximum Daily Load Study

James River Basin

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)	Initial List Date	TMDL Dev. Date
APPTF-SAV-BAY	Appomattox River						
Aquatic Life	Aquatic Plants (Macrophytes)	5A	2.705			2006	2010
Shallow-Water Submerged Aquatic Vegetation	Aquatic Plants (Macrophytes)	5A	2.705			2006	2010
EBEMH-DO-BAY	Eastern Branch Elizabeth River, Broad Creek and Indian River						
Aquatic Life	Oxygen, Dissolved	5A	2.287			2006	2010
Open-Water Aquatic Life	Oxygen, Dissolved	5A	2.287			2006	2010
ELIPH-DO-BAY	Chesapeake Bay segment ELIPH (Elizabeth River Mainstem)						
Aquatic Life	Oxygen, Dissolved	5A	8.162			2006	2010
Open-Water Aquatic Life	Oxygen, Dissolved	5A	8.162			2006	2010
G01E-01-BAC	James River						
Recreation	Escherichia coli	5A	1.466			1996	2010
	Escherichia coli	5A	2.828			2006	2010
	Escherichia coli	5A	1.964			2008	2010
G01E-02-CHLA	James River						
Aquatic Life	Chlorophyll-a	5A	5.512			2008	2010
Open-Water Aquatic Life	Chlorophyll-a	5A	5.512			2008	2010
G01E-03-PCB	James River and Various Tributaries						
Fish Consumption	PCB in Fish Tissue	5A	62.773			2002	2014
	PCB in Fish Tissue	5A	1.837			2004	2016
	PCB in Fish Tissue	5A	191.816			2006	2018
	PCB in Fish Tissue	5D			7.50	2006	2018
	PCB in Fish Tissue	5A	0.012			2008	2014
	PCB in Fish Tissue	5A	0.003			2010	2018
G01L-01-BAC	Falling Creek Reservoir						
Recreation	Escherichia coli	5A		88.37		2008	2020
G01L-01-PH	Falling Creek Reservoir						
Aquatic Life	pH	5C		88.37		2010	2022
G01R-01-BAC	Goode Creek						
Recreation	Escherichia coli	5A			1.25	2006	2014
G01R-02-BAC	Almond Creek						
Recreation	Escherichia coli	5A			2.36	2006	2010
G01R-02-PH	XVO and XVP (Almond Creek, UTs)						
Aquatic Life	pH	5A			0.54	2004	2016
G01R-03-BAC	Falling Creek						
Recreation	Escherichia coli	5A			3.11	2006	2014
G01R-04-BAC	Falling Creek						
Recreation	Escherichia coli	5A			16.99	2006	2018
G01R-04-DO	Falling Creek						
Aquatic Life	Oxygen, Dissolved	5A			0.98	2008	2020

2010 Impaired Waters - 303(d) List

Category 5 - Waters needing Total Maximum Daily Load Study

James River Basin

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)	Initial List Date	TMDL Dev. Date
G09R-02-BAC	Diascund Creek						
Recreation	Escherichia coli	5A			6.88	2008	2020
G09R-02-DO	Diascund Creek						
Aquatic Life	Oxygen, Dissolved	5C			6.88	2008	2020
G10E-04-CHLA	James River - Lower						
Aquatic Life	Chlorophyll-a	5A	126.390			2008	2010
	Chlorophyll-a	5A	0.782			2010	2010
Open-Water Aquatic Life	Chlorophyll-a	5A	126.390			2008	2010
	Chlorophyll-a	5A	0.782			2010	2010
G10E-05-EBEN	James River Mainstem - Chickahominy R. to Hog Point						
Aquatic Life	Estuarine Bioassessments	5A	26.128			2004	2016
G10E-06-BAC	College Creek						
Recreation	Enterococcus	5A	0.568			2006	2018
G10R-01-BAC	College Run						
Recreation	Fecal Coliform	5A			2.39	2002	2014
G10R-02-BEN	Powhatan Creek						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			5.35	2002	2014
G10R-03-DO	Dark Swamp, UT (XHC)						
Aquatic Life	Oxygen, Dissolved	5A			1.30	2010	2022
G11E-05-EBEN	James River - Hog Point Downstream to West side of Craney Island						
Aquatic Life	Estuarine Bioassessments	5A	24.428			2006	2018
	Estuarine Bioassessments	5A	73.889			2010	2022
G11E-17-SF	Ballard Creek & Bay, James River - Ballard Swamp Area and Kings Creek & Bay						
Shellfishing	Fecal Coliform	5B	0.096			1998	2010
	Fecal Coliform	5B	0.068			2010	2022
G11E-18-SF	Tylers Beach Boat Basin						
Shellfishing	Fecal Coliform	5B	0.003			2004	2016
G11E-19-SF	James River - Outside Chuckatuck Creek						
Shellfishing	Fecal Coliform	5B	0.564			2010	2022
G11L-01-CU	Lee Hall Reservoir						
Aquatic Life	Copper	5A		290.06		2004	2016
Wildlife	Copper	5A		290.06		2004	2016
G11L-01-DO	Lee Hall Reservoir						
Aquatic Life	Oxygen, Dissolved	5A		290.06		2006	2018
G11L-01-HG	Lee Hall Reservoir						
Fish Consumption	Mercury in Fish Tissue	5A		290.06		2010	2022
G11L-01-PCB	Lee Hall Reservoir						
Fish Consumption	PCB in Fish Tissue	5A		290.06		2010	2022

2010 Impaired Waters - 303(d) List

Category 5 - Waters needing Total Maximum Daily Load Study

James River Basin

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)	Initial List Date	TMDL Dev. Date
J16R-02-PH	Blackman Creek						
Aquatic Life	pH	5C			4.45	2004	2016
J17L-01-DO	Swift Creek Lake						
Aquatic Life	Oxygen, Dissolved	5A		102.42		2006	2018
J17R-01-BEN	Swift Creek						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			7.10	2010	2022
J17R-01-DO	Swift Creek						
Aquatic Life	Oxygen, Dissolved	5A			7.10	2002	2014
J17R-03-PH	Franks Branch						
Aquatic Life	pH	5C			10.02	2006	2018
J17R-05-PH	Church Branch						
Aquatic Life	pH	5C			2.56	2010	2022
J17R-06-DO	Nuttree Branch						
Aquatic Life	Oxygen, Dissolved	5C			5.31	2010	2022
J17R-06-PH	Nuttree Branch						
Aquatic Life	pH	5C			5.31	2010	2022
J17R-07-PH	Second Branch						
Aquatic Life	pH	5C			5.84	2010	2022
J17R-08-DO	Swift Creek						
Aquatic Life	Oxygen, Dissolved	5A			3.66	2010	2022
J17R-09-BEN	Swift Creek						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			2.79	2010	2022
J17R-10-PH	Timsbury Creek						
Aquatic Life	pH	5C			6.65	2010	2022
J17R-11-PH	Long Swamp						
Aquatic Life	pH	5C			3.65	2010	2022
JMSMH-DO-BAY	James River CBP segment JMSMH and Tidal Tributaries						
Aquatic Life	Oxygen, Dissolved	5A	100.143			1998	2010
	Oxygen, Dissolved	5A	18.371			2006	2010
Open-Water Aquatic Life	Oxygen, Dissolved	5A	100.143			1998	2010
	Oxygen, Dissolved	5A	18.371			2006	2010
JMSOH-DO-BAY	James River CBP segment JMSOH and Tidal Tributaries						
Aquatic Life	Oxygen, Dissolved	5A	48.740			2006	2010
Open-Water Aquatic Life	Oxygen, Dissolved	5A	2.212			2006	2010
JMSPH-BNUT-BAY	James River CBP segment JMSPH and Tidal Tributaries						
Aquatic Life	Nutrient/Eutrophication Biological Indicators	5A	25.011			2010	2010

Appendix A - List of Impaired (Category 5) Waters in 2010

James River Basin

Cause Group Code: **G01E-03-PCB** **James River and Various Tributaries**

Location: Estuarine James River from the fall line to the Hampton Roads Bridge Tunnel, including several tributaries listed below: Appomattox River up to Lake Chesdin Dam
Bailey Creek up to Route 630
Bailey Bay
Chickahominy River up to Walkers Dam
Skiffes Creek up to Skiffes Creek Dam
Pagan River and its tributary Jones Creek
Chuckatuck Creek
Nansemond River and its tributaries Bennett Creek and Star Creek
Hampton River
Willoughby Bay and the Elizabeth R. system (Western, Eastern, and Southern Branches and Lafayette R.) and tributaries St. Julian Creek, Deep Creek, and Broad Creek

City / County:

Charles City Co.	Chesapeake City	Chesterfield Co.	Colonial Heights City	Dinwiddie Co.
Hampton City	Henrico Co.	Hopewell City	Isle Of Wight Co.	James City Co.
New Kent Co.	Newport News City	Norfolk City	Petersburg City	Portsmouth City
Prince George Co.	Richmond City	Suffolk City	Surry Co.	Virginia Beach City
Williamsburg City				

Use(s): Fish Consumption

Cause(s) / VA Category: PCB in Fish Tissue / 5A PCB in Fish Tissue / 5D

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for PCBs fish tissue contamination within the James River and select tidal tributaries, issued 12/13/04. During the 2002 cycle, the James River from the Fall line to Queens Creek was considered not supporting of the Fish Consumption Use due to PCBs in multiple fish species at multiple DEQ monitoring locations.

During the 2004 cycle, a VDH Fish Consumption Restriction was issued from the fall line to Flowerdew Hundred and the segment was adjusted slightly to match the Restriction.

However, during the 2006 cycle, the restriction was extended on 12/13/2004 to extend from the I-95 bridge downstream to the Hampton Roads Bridge Tunnel and include the tidal portions of the following tributaries:

Appomattox River up to Lake Chesdin Dam
Bailey Creek up to Route 630
Bailey Bay
Chickahominy River up to Walkers Dam
Skiffes Creek up to Skiffes Creek Dam
Pagan River and its tributary Jones Creek
Chuckatuck Creek
Nansemond River and its tributaries Bennett Creek and Star Creek
Hampton River
Willoughby Bay and the Elizabeth R. system (Western, Eastern, and Southern Branches and Lafayette R.) and tributaries St. Julian Creek, Deep Creek, and Broad Creek

Appendix A - List of Impaired (Category 5) Waters in 2010

James River Basin

The advisory was modified again on 10/10/2006 to add Poythress Run.

James River and Various Tributaries **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
PCB in Fish Tissue - Total Impaired Size by Water Type:	**256.441**		**7.50**

Sources:

Contaminated Sediments	Source Unknown	Sources Outside State Jurisdiction or Borders

Appendix A - List of Impaired (Category 5) Waters in 2010

James River Basin

Cause Group Code: **G10E-04-CHLA** **James River - Lower**

Location: The mainstem of the James River within the Mesohaline and Polyhaline portions of the James Estuary.

City / County: Hampton City, Isle Of Wight Co., James City Co., Newport News City, Norfolk City, Portsmouth City, Suffolk City, Surry Co.

Use(s): Aquatic Life, Open-Water Aquatic Life

Cause(s) / VA Category: Chlorophyll-a / 5A

The Chlorophyll a - Spring criteria for Plankton failed for the 2008 assessment. The Chlorophyll a - Summer criteria is meeting for the 2008 assessment period.

James River - Lower **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Chlorophyll-a - Total Impaired Size by Water Type:	**127.172**		

James River - Lower **Open-Water Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Chlorophyll-a - Total Impaired Size by Water Type:	**127.172**		

Sources:

- Industrial Point Source Discharge
- Municipal Point Source Discharges
- Non-Point Source

Appendix A - List of Impaired (Category 5) Waters in 2010

James River Basin

Cause Group Code: **G11E-05-EBEN** **James River - Hog Point Downstream to West side of Craney Island**

Location: This cause encompasses the James River Mainstem, from area of Hog Point (coincident with the CBP segment JMSMH line) downstream to West side of Craney Island (coincident with the end of CBP segment JMSMH. CBP segment JMSMH.

City / County: Isle Of Wight Co. James City Co. Newport News City Portsmouth City Suffolk City
Surry Co.

Use(s): Aquatic Life

Cause(s) /
VA Category: Estuarine Bioassessments / 5A

The Aquatic Life Use is impaired based on failure to meet a statistical evaluation constituting an un-impacted benthic organism population per CBP (Benthic-BIBI) analysis. The source/stressor tool yielded an unknown source for the impairment.
The TMDL due date is 2022.

James River - Hog Point Downstream to West side of Craney Island **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Estuarine Bioassessments - Total Impaired Size by Water Type:	**98.316**		

Sources:

Source Unknown

Appendix A - List of Impaired (Category 5) Waters in 2010

James River Basin

Cause Group Code: **JMSMH-DO-BAY** **James River CBP segment JMSMH and Tidal Tributaries**

Location: This cause encompasses the entirety of the James River CBP segment JMSMH and tidal tributaries. From start of JMSMH salinity boundary (Hog Island Creek) downstream to line between Blunt Point NN) /Goodwin Pt. (Isle of Wight). CBP segment JMSMH.

City / County: Isle Of Wight Co. James City Co. Newport News City Portsmouth City Suffolk City
Surry Co.

Use(s): Aquatic Life Open-Water Aquatic Life

Cause(s) /
VA Category: Oxygen, Dissolved / 5A

The Aquatic Life and Open-Water Aquatic Life Use is impaired based on failure to meet the dissolved oxygen criteria for Open Water - Summer. The 30-day dissolved oxygen criteria for Open Water Use failed for the 2008 assessment. There is insufficient data to assess remaining shorter-term dissolved oxygen criteria for this use. The mainstem James River was included in EPA's 1998 303(d) Overlisting as impaired of the Aquatic Life Use; the impairment was attributed to excessive nutrients. During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted.

1998 CD segment for nutrients (Attachment A, Category 1, Part 2) VAT-G10E-04.

James River CBP segment JMSMH and Tidal Tributaries **Aquatic Life**		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - Total Impaired Size by Water Type:	**118.514**		

James River CBP segment JMSMH and Tidal Tributaries **Open-Water Aquatic Life**		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - Total Impaired Size by Water Type:	**118.514**		

Sources:

- Agriculture
- Atmospheric Deposition - Nitrogen
- Industrial Point Source Discharge
- Internal Nutrient Recycling
- Loss of Riparian Habitat
- Municipal Point Source Discharges
- Sources Outside State Jurisdiction or Borders
- Wet Weather Discharges (Non-Point Source)
- Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)

ATTACHMENT 12

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

ATTACHMENT 12

TABLE III(a) - Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT & 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	Total Phosphorus	FROM: 1/Year TO: Remove from permit	FROM: 2.0 mg/l as mo.avg. TO: Remove from permit	See Attachment 6 for discussions, calculations and rationale	CDT 4/2011
	Total Nitrogen	FROM: 1/Year TO: Remove from permit	FROM: No limit, monitoring only TO: Remove from permit		
	Total Petroleum Hydrocarbons	FROM: 1/Year TO: Remove from permit			
	Total Recoverable Iron	FROM: Not in permit TO: 1/3 Months	FROM: Not in permit TO: Monitor/report only		
002	All current parameters	FROM: 1/3 Months, 1/Year TO: 1/Year	FROM: No limit, monitoring only TO: No Change		
	Total Recoverable Iron	FROM: Not in permit TO: 1/Year	FROM: Not in permit TO: Monitor/report only		
003	All current parameters	FROM: 1/3 Months, 1/Year TO: No change	FROM: No limit, monitoring only TO: No Change		
	Total Recoverable Iron	FROM: Not in permit TO: 1/3 Months	FROM: Not in permit TO: Monitor/report only		

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
PERMIT CONDITIONS OR OTHER REQUIREMENTS I.B.1. Permit Reopeners (nutrient, WQ, TMDL) - retain, update I.B.2. Notification Levels - retain I.B.3. Operations and Maintenance Manual - retain, update I.B.4. Quantification Level Under Part I.A. - retain, update I.B.5. Compliance Reporting Under Part I.A. - retain, update I.B.6. Materials Handling and Storage - retain I.B.7. Minimum Freeboard - retain I.C. Toxics Management Program - retain, update I.D. Storm Water Management Conditions - retain, update	PERMIT CONDITIONS OR OTHER REQUIREMENTS The conditions in the current permit and the permit proposed for reissuance remain unchanged in title but may have been updated to reflect changes in terms, content, and/or scope of conditions' application to outfalls and situations addressed by the permit.	CDT 4/2011

ATTACHMENT 12

TABLE III(b) - Permit Processing Change Sheet

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

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
AS OF APRIL 2011, THERE ARE NO CHANGES TO DOCUMENT.					

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 13

NPDES INDUSTRIAL PERMIT RATING WORKSHEET

NPDES Permit Rating Work Sheet

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

NPDES NO: VA0057142

Facility Name: KINDER MORGAN BULK TERMINALS PIER IX

City: NEWPORT NEWS, VIRGINIA

Receiving Water: JAMES RIVER

Reach Number:

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

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

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

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

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

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: | | | | | Primary SIC Code: 4911

Other SIC Codes: 5052 | | | | | | | | |

Industrial Subcategory Code: | | | (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
___ No process waste streams	0	0	___ 3.	3	15	___ 7.	7	35
___ 1.	1	5	___ 4.	4	20	X 8.	8	40
___ 2.	2	10	___ 5.	5	25	___ 9.	9	45
			___ 6.	6	30	___ 10.	10	50

Code Number Checked: 08

Total Points Factor 1: 40

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

Section A--Wastewater Flow Only Considered

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

Section B--Wastewater and Stream Flow Considered

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

Code Checked from Section A or B: 51

Total Points Factor 2: 00

NPDES No.: |V|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: NOT APPLICABLE

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

Code Checked: |-|

Points Scored: |0|0|

B. Total Suspended Solids (TSS)

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

Code Checked: |2|

Points Scored: |0|5|

C. Nitrogen Pollutant: (check one) ___ Ammonia ✓ Other: NOT APPLICABLE

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

Code Checked: |-|

Points Scored: |0|0|

Total Points Factor 3: |0|5|

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)

✓ NO (if no, go to Factor 5)

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

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

Code Number Checked: |-|-|

Total Points Factor 4: |0|0|

NPDES No.: | V | 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
___ Yes	1	10
_✓_ No	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
_✓_ Yes	1	0
___ No	2	5

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

	Code	Points
___ Yes	1	10
_✓_ No	2	0

Code Number Checked: A | 2 | B | 1 | C | 2 |

Points Factor 5: A | 0 | 0 | + B | 0 | + C | 0 | 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 |

Check appropriate facility HPRI Code (from PCS):

HPRI #	*Code*	*HPRI Score*	Flow Code	Multiplication Factor
___ 1	1	20	11, 31, or 41	0.00
			12, 32, or 42	0.05
___ 2	2	0	13, 33, or 43	0.10
			14 or 34	0.15
_✓_ 3	3	30	21 or 51	0.10
			22 or 52	0.30
___ 4	4	0	23 or 53	0.60
			24	1.00
___ 5	5	20		

HPRI code checked: | 3 |

Base Score: (HPRI Score) 30 x (Multiplication Factor) 0.1 = 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
_✓_ Yes	1	10
___ No	2	0

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

	Code	Points
___ Yes	1	10
_✓_ No	2	0

Code Number Checked: A | 3 | B | 1 | C | 2 |

Points Factor 6: A | 0 | 3 | + B | 1 | 0 | + C | 0 | 0 | = | 13 | TOTAL

NPDES Permit Rating Work Sheet

NPDES NO: VA0057114

SCORE SUMMARY

Factor	Description	Total Points
1	Toxic Pollutant Potential	40
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)	58

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: 58

OLD SCORE: 68

C D THOMAS
Permit Reviewer's Name

(757) 518 - 2161
Phone Number

04/27/2011
Date

Revised 2/2003

State "Transmittal Checklist" to Assist in Targeting Municipal and Industrial Individual NPDES Draft Permits for Review

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name: KINDER MORGAN BULK TERMINALS – PIER IX

NPDES Permit Number: VA0057142

Permit Writer Name: C. THOMAS

Date: APRIL 27, 2011

Major [ ] **Minor** [X] **Industrial** [X] **Municipal** [ ]

I.A. Draft Permit Package Submittal Includes:	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?		X	
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?		X	
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?			X
8. Whole Effluent Toxicity Test summary and analysis?	X		
9. Permit Rating Sheet for new or modified industrial facilities?	X		

I.B. Permit/Facility Characteristics	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet **or** permit contain a description of the wastewater treatment process?	X		

I.B. Permit/Facility Characteristics – cont.	Yes	No	N/A
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet **or** permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?	X		
a. Has a TMDL been developed and approved by EPA for the impaired water?		X	
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?	X		
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?		X	
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?	X		
10. Does the permit authorize discharges of storm water?	X		
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit? **The technology-based TSS limitation of 50 mg/l imposed at outfall 001 at first permit issuance, was derived from 40CFR423.12.b.(9), and used per a BPJ determination to protect water quality at the point of discharge.**		X	
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?			X
14. Are any WQBELs based on an interpretation of narrative criteria?			X
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?			X
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Checklist – for POTWs

(To be completed and included in the record only for POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?			
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?			

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?			
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit?			

II.C. Technology-Based Effluent Limits (POTWs)	Yes	No	N/A
1. Does the permit contain numeric limits for ALL of the following: BOD (or alternative, e.g., CBOD, COD, TOC), TSS, and pH?			
2. Does the permit require at least 85% removal for BOD (or BOD alternative) and TSS (or 65% for equivalent to secondary) consistent with 40 CFR Part 133?			
a. If no, does the record indicate that application of WQBELs, or some other means, results in more stringent requirements than 85% removal or that an exception consistent with 40 CFR 133.103 has been approved?			
3. Are technology-based permit limits expressed in the appropriate units of measure (e.g., concentration, mass, SU)?			
4. Are permit limits for BOD and TSS expressed in terms of both long term (e.g., average monthly) and short term (e.g., average weekly) limits?			
5. Are any concentration limitations in the permit less stringent than the secondary treatment requirements (30 mg/l BOD5 and TSS for a 30-day average and 45 mg/l BOD5 and TSS for a 7-day average)?			
a. If yes, does the record provide a justification (e.g., waste stabilization pond, trickling filter, etc.) for the alternate limitations?			

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?			
2. Does the fact sheet indicate that any WQBELs were derived from a completed and EPA approved TMDL?			

II.D. Water Quality-Based Effluent Limits – cont.	Yes	No	N/A
3. Does the fact sheet provide effluent characteristics for each outfall?			
4. Does the fact sheet document that a "reasonable potential" evaluation was performed?			
a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures?			
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?			
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"?			
d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations)?			
e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?			
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?			
6. For all final WQBELs, are BOTH long-term AND short-term effluent limits established?			
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?			
8. Does the record indicate that an "antidegradation" review was performed in accordance with the State's approved antidegradation policy?			

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters and other monitoring as required by State and Federal regulations?			
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?			
3. Does the permit require at least annual influent monitoring for BOD (or BOD alternative) and TSS to assess compliance with applicable percent removal requirements?			
4. Does the permit require testing for Whole Effluent Toxicity?			

II.F. Special Conditions	Yes	No	N/A
1. Does the permit include appropriate biosolids use/disposal requirements?			
2. Does the permit include appropriate storm water program requirements?			

II.F. Special Conditions – cont.	Yes	No	N/A
3. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			
4. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?			
5. Does the permit allow/authorize discharge of sanitary sewage from points other than the POTW outfall(s) or CSO outfalls [i.e., Sanitary Sewer Overflows (SSOs) or treatment plant bypasses]?			
6. Does the permit authorize discharges from Combined Sewer Overflows (CSOs)?			
a. Does the permit require implementation of the "Nine Minimum Controls"?			
b. Does the permit require development and implementation of a "Long Term Control Plan"?			
c. Does the permit require monitoring and reporting for CSO events?			
7. Does the permit include appropriate Pretreatment Program requirements?			

II.G. Standard Conditions	Yes	No	N/A
1. Does the **permit** contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?			

List of Standard Conditions – 40 CFR 122.41

Duty to comply
Duty to reapply
Need to halt or reduce activity not a defense
Duty to mitigate
Proper O & M
Permit actions

Property rights
Duty to provide information
Inspections and entry
Monitoring and records
Signatory requirement
Bypass
Upset

Reporting Requirements
Planned change
Anticipated noncompliance
Transfers
Monitoring reports
Compliance schedules
24-Hour reporting
Other non-compliance

2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for POTWs regarding notification of new introduction of pollutants and new industrial users [40 CFR 122.42(b)]?			

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Review Checklist – For Non-Municipals

(To be completed and included in the record for all non-POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet **or** permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit?	X		

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?		X	
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?	X		
b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?			
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?			X
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?	X		
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a "reasonable measure of ACTUAL production" for the facility (not design)?			X
5. Does the permit contain "tiered" limits that reflect projected increases in production or flow?		X	
a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?	X		

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ) – cont.	Yes	No	N/A
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits?		X	
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?		X	

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?		X	
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a "reasonable potential" evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?		X	
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"?		X	
d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)?		X	
e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?		X	
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?			X
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the fact sheet indicate that an "antidegradation" review was performed in accordance with the State's approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State's standard practices?	X		

II.F. Special Conditions	Yes	No	N/A
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?	X		
a. If yes, does the permit adequately incorporate and require compliance with the BMPs?	X		
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			X
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?	X		

II.G. Standard Conditions	Yes	No	N/A
1. Does the **permit** contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		

List of Standard Conditions – 40 CFR 122.41

Duty to comply
Duty to reapply
Need to halt or reduce activity not a defense
Duty to mitigate
Proper O & M
Permit actions

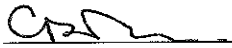
Property rights
Duty to provide information
Inspections and entry
Monitoring and records
Signatory requirement
Bypass
Upset

Reporting Requirements
Planned change
Anticipated noncompliance
Transfers
Monitoring reports
Compliance schedules
24-Hour reporting
Other non-compliance

2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?	X		

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	C. Thomas
Title	Environmental Engineer, Sr.
Signature	
Date	April 27, 2011

ATTACHMENT 14

CHRONOLOGY SHEET

ATTACHMENT 14

VPDES PERMIT PROGRAM - CHRONOLOGY OF EVENTS

APPLICATION RECEIVED	APPLICATION RETURNED	ADDITIONAL INFO REQUESTED	APPLICATION/ADD INFO DUE BACK IN RO	APPLICATION/ADD. INFO RECEIVED
01/13/2011		02/02/2011		02/10/2011

APPLICATION TO VDH: 03/15/2011 VDH COMMENTS RECEIVED: 03/17/2011

APPLICATION TO OWPS: NA OWPS COMMENTS RECEIVED:

APPLICATION ADMIN. COMPLETE: 01/13/2011 APPLICATION TECH. COMPLETE: 03/17/2011

DATE FORWARDED TO ADMIN:

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

MALCOLM PIRNIE

INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS AND CONSULTANTS

Malcolm Pirnie, Inc.
701 Town Center Drive
Suite 600
Newport News, VA 23606-4296
T: 757-873-8700
F: 757-873-8723
www.pirnie.com

File: (0451.PPT)

April 13, 2006

Mr. Carl Thomas
Virginia Department of Environmental Quality
5636 Southern Boulevard
Virginia Beach, BA 23462

Re: Kinder Morgan Pier IX Terminal
VPDES No. VA0057142
Amendment to VPDES Permit Renewal Application

Dear Mr. Thomas:

On behalf of its client, Kinder Morgan, Malcolm Pirnie hereby submits this amendment to the above-captioned permit renewal application. On January 28, 2006, Kinder Morgan's Pier IX Terminal (through Malcolm Pirnie, Inc.) submitted to DEQ an addendum to its VPDES application package identifying plans for a new pier and conveyor to be included in the permitting review process. If plans move forward as expected, the new pier and conveyor should be in operation in late 2007 or 2008. The purpose of this amendment is to address questions raised in DEQ's e-mail of March 29, 2006 to Robbie Coffey regarding: (1) handling of dust suppression water at the new pier; and (2) best management practices (BMPs) associated with the new conveyor.

BEST MANAGEMENT PRACTICES FOR PIER OPERATIONS

The following BMPs shall apply to all pier operations at Kinder Morgan's Pier IX Terminal:

1. Washdown of the dock and equipment is allowed provided that inadvertent spills and/or releases of cargo products and leaks or drips of oil on docks and/or on equipment is cleaned up by appropriate means such as sweeping, vacuuming and/or absorbents, etc. prior to the washdown process. No detergents, solvents or other cleaning agents may be used in the wash water.

2. Inadvertent spills and/or releases of cargo products directly into the James River from handling equipment, such as, but not limited to, loading spouts and clamshell buckets, shall be prevented to the extent practicable by (a) maintaining all equipment in accord with manufacturer's specifications and good engineering practice; and (b) frequent cleanup of accumulations of spilled cargo.

3. Pollutants in stormwater runoff from the dock area shall be minimized by means of regular, frequent cleanup of inadvertent spills and/or releases of cargo products and other potential pollutants.

4. Uncontaminated river water and/or rain water that collects in Kinder Morgan's dockside equipment or in work barges may be discharged provided there is no sheen on the discharged water and no other visible indication of any contamination, other than minor amounts of rust, in the discharged water. "Work barges" are clean barges that are used only to provide working surface area and are never used to carry cargo

It should be noted that these BMPs have been incorporated into Kinder Morgan's NPDES permits for similar terminals in other states, including Florida, Ohio, Oregon, and Louisiana.

HANDLING OF DUST SUPPRESSION WATER

As described in Pier IX's Stormwater Pollution Prevention Plan (SWP3), Kinder Morgan currently pumps water from the stormwater retention basin for dust suppression in the coal pile storage area. The water is applied as fine mist at a rate that is carefully controlled based on meteorological factors. Application rates are carefully controlled based on meteorological factors and relatively little of the water runs off; most either stays entrained with the coal or evaporates. What runoff does occur is collected in the perimeter ditch system and conveyed to the retention basin, where it is either reused for further dust control or discharged in accordance with Pier IX's VPDES permit.

Kinder Morgan plans a similar system for the new pier and hopper. Water will be pumped as needed from the retention basin for dust suppression on the new pier. It is estimated that the new pier will require about 3,700 gallons of water per day[1] on average for dust suppression. However, as described above, relatively little of this water would runoff; most would either evaporate or stay entrained with the coal.

All water used for dust suppression will either stay entrained in the coal or will drain by gravity back to the retention pond, where it will be either reused for further dust control or discharged in accordance with the permit (see attached dock layout plan). The new pier will be equipped with perimeter curbs to prevent direct runoff into the James River, and a perimeter trench drain to collect and convey the runoff back to the retention pond. The quality of the runoff is expected to be similar to that of the existing coal pile runoff. No new stormwater outfall will be necessary for this project.

[1] The estimate of 3,700 gpd is based on 8 nozzles operating at 100 psi, each discharging 0.32 gpm.

NEW CONVEYOR

The new conveyor will be covered along its entire route to prevent wind-driven losses of bulk materials. As an additional protection measure, the conveyor will be completely enclosed in a tube over the road to DTA and railroad tracks. The conveyor will be loaded at rates in accordance with its design capacity. With these control measures, losses from the conveyor are expected to be negligible. In the unlikely event of a spill from the conveyor onto the pier, the spilled material would be cleaned up promptly in accordance with the BMPs listed above.

Kinder Morgan appreciates DEQ's assistance with its permit application. Please call me at (757) 873-4465 if you have any questions.

Very truly yours,

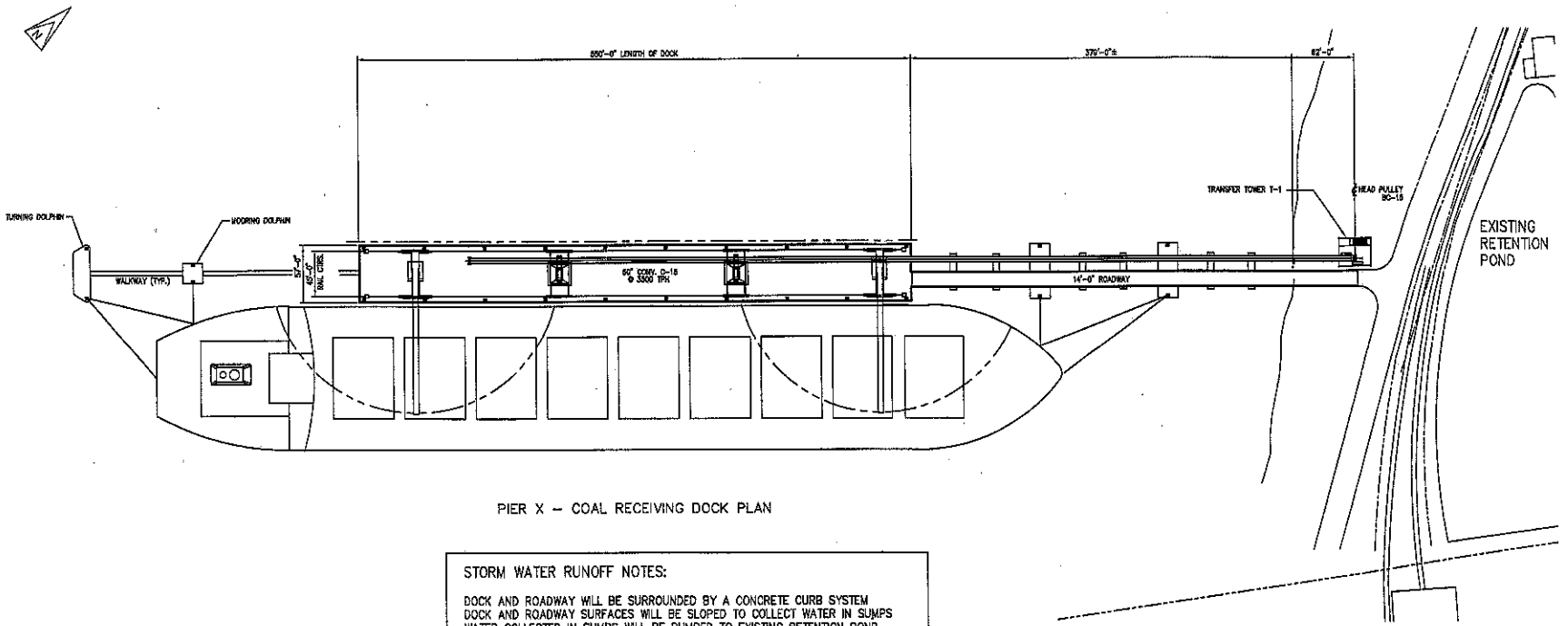
MALCOLM PIRNIE, INC.

Clifton F. Bell, P.E., P.G.
Senior Hydrologist

ld
3773-043

c: R. Coffey, Kinder Morgan
M. Krienschmidt, Kinder Morgan

cfbl041304-thomas



PIER X – COAL RECEIVING DOCK PLAN

STORM WATER RUNOFF NOTES:

DOCK AND ROADWAY WILL BE SURROUNDED BY A CONCRETE CURB SYSTEM
DOCK AND ROADWAY SURFACES WILL BE SLOPED TO COLLECT WATER IN SUMPS
WATER COLLECTED IN SUMPS WILL BE PUMPED TO EXISTING RETENTION POND

DRIP PANS WILL BE INSTALLED UNDER NEW CONVEYOR BELT BC-15
DRIP PANS WILL EXTEND FROM HEAD OF CONVEYOR TO NEW DOCK
ALL WATER RUNOFF FROM CONVEYOR DRIP PANS WILL COLLECT IN DOCK SUMPS

FOR PRELIMINARY USE ONLY

IVER CONSULTING

KINDER MORGAN TERMINALS

PIER X – DOCK LAYOUT PLAN

cy → BAT
8/2
file w/ NPDES
Applic.

Dravo

August 2, 1982

RECEIVED

AUG 2 1982

STATE WATER CONTROL BOARD
Tidewater Regional Office

Commonwealth of Virginia
State Water Control Board
Tidewater Regional Office
287 Pembroke Office Park
Suite 310, Pembroke 2
Virginia Beach, VA 23462

Attention: Mr. David Mashaw

Reference: Massey Coal Terminal Corporation
N.P.D.E.S. Permit No. VA0057142

Dear Dave:

In finalizing the design criteria for the terminal, a re-examination of the calculations indicated that the retention ponds were over designed. This letter includes, for your information, copies of the latest Dravo design, supportive calculations and general description of the retention system for the Massey Coal Terminal located in Newport News, Virginia.

It is noted that this engineering modification will not affect the effluent limitations, monitoring requirements and other conditions set forth in our N.P.D.E.S. Permit. The lined retention pond is designed to exceed the state and federal requirements of the 10 year-24 hour storm event.

A minor modification to the existing N.P.D.E.S. Permit may be required to reflect the relocation of the discharge point. Originally, the effluent was to be pumped from the narrow end of the pond via pipeline along the pier to the discharge point. The modified design allows the effluent to be pumped into a manhole and discharged by gravity directly into the James River. A new location map is included with this letter for your files.

The precise location of the point of discharge to the nearest second was:

Latitude	76 Deg.	25 Min.	53 Sec.
Longitude	36 Deg.	57 Min.	52 Sec.

The new location is:

Latitude	76 Deg.	25 Min.	38 Sec.
Longitude	36 Deg.	58 Min.	6 Sec.

ENGINEERING WORKS DIVISION DRAVO CORPORATION NEVILLE ISLAND PITTSBURGH, PA 15225 412 777-5000 TELEX 866-125

STORMWATER RUNOFF OUTSIDE THE COAL STORAGE AREA

Stormwater runoff outside the coal pile area will drain to the natural water courses. An existing storm sewer system on the southwestern portion of the property will be renovated to assist in draining the uncontaminated stormwater runoff from the high land areas surrounding the coal storage yard and retention pond directly to the James River.

STORMWATER RUNOFF WITHIN THE COAL STORAGE AREA

When the facility is completely constructed, one retention pond will allow for settling of the solids which run off the coal storage area. Stormwater runoff will drain by gravity into the drainage ditches as shown on Dravo Drawing 364655. The ditches will feed the retention pond. The retention pond is shown on Dravo Drawing 364656. After a detention time of at least 24 hours, the effluent will be pumped into a manhole and discharged by gravity into the James River.

DISCHARGE TO JAMES RIVER

Discharge volume will be made up of the stormwater and washdown water components. All dust suppression water will be absorbed by the coal and shipped out with it. Potable and sanitation water will drain to a separate sewer system and eventually be treated at the municipal wastewater treatment facility. The following discharge figures are based on averages over an entire year. The discharge will be intermittent and variable because of the highly variable nature of the stormwater runoff component. During high precipitation storm events, relative humidities are nearly 100% and evaporation losses are assumed to be zero.

Stormwater Runoff

Assumptions

Rainfall per year	= 44.68 inches (3.723 ft.)
10 yr. - 24 hr. event	= 6 inches (.5 ft.)
25 yr. - 24 hr. event	= 6.7 inches (.588 ft.)
Coal storage area	= 32 acres (1,393,920 $ft.^2$)
Runoff/rainfall ratio	= 0.73 (1) (2)

(1) Cox, D.B., Chu, T.J., and Ruane, R.J., "Characterization of Coal Pile Drainage" EPA-600/7-79-051 (Feb. 1979)

(2) Dominion Terminal Association Permit Application to the Commonwealth of Virginia, State Water Control Board, Submitted August 17, 1982

Assumptions - continued

32 x 3.723 x .73 = 86.97 acre-feet per year

86.97 acre-feet = 3,788,400 $ft.^3$

$\frac{3,788,400 \times 7.48}{365}$ = 77,650 gallons per day

Washdown Water

Assumptions

2,500,000 gallons per year = 334,300 $ft.^3$

$\frac{2,500,000}{365}$ = 6,850 gallons per day

Stormwater Runoff (gpd) = 77,650

Washdown Water (gpd) = 6,850

James River Discharge (gpd) = 84,500

SEDIMENTATION BUILDUP IN THE RETENTION POND

Annual runoff is expected to average approximately 86.97 acre-feet. The estimated mean concentration of suspended solids in this runoff is 1521 g/m^3 (3). Using the annual runoff and washdown volumes and the average suspended solids concentration for Appalachian coal, it is possible to calculate the annual loading of the retention pond. The annual loading of suspended solids is estimated to be approximately 391,660 pounds per year. Assuming the specific weight of settleable solids is 75 pounds per cubic foot (lb./$ft.^3$), the annual volume of solids accumulating in the bottom of the retention pond is expected to be 5,222 cubic feet ($ft.^3$). The total bottom area of the retention pond is approximately 55,800 square feet ($ft.^2$); therefore, the annual accumulation of solids will be an average depth of approximately 1-1/8 inches in the retention pond.

(3) R. A. Wachter and T. R. Blackwood
"Water Pollutants from Coal Storage Areas"
EPA-600/2-78-004m (May 1978)

Accumulation will be greater than average near the point where the drainage ditch empties into the retention pond. At this location, solids removal may be required approximately every five to eight years to avoid problems with solids resuspension.

Depending on the Owner's preference, the solid waste removed from the pond during the cleaning process may be disposed of either by loading into awaiting ships, back to the storage pile, or removed off site by the sub-contractor.

Sedimentation Buildup

$1521\ g/m^3 = .095\ lbs./ft.^3$

$\frac{.095\ (3,788,400 + 334,300)}{75} = 5222\ ft.^3$ per year

$\frac{5222}{55800} = .094$ ft. (approx. 1-1/8 in.) per year

PUMP SIZE

Pump size selection is based on the system handling the runoff associated with the 10 year - 24 hour rainfall event.

10 year - 24 hour event

$32 \times .5 \times .73 = 11.68$ acre feet

11.68 acre feet = 3,805,680 gallons = $508,780\ ft.^3$

Flow Rate = $\frac{3805680}{24 \times 60}$ = 2643 gallons per minute

This system will incorporate two pumps with a combined total pumping capacity of 2000 GPM to insure a minimum of 24 hour retention.

RETENTION POND DESIGN

The retention pond is designed for a total capacity of approximately 595,350 ft.^{3} (13.67 acre-feet). The bottom surface area is 55,800 ft.^{2} (1.28 acres) with a bottom surface perimeter of 1150 ft. Side wall slopes are typical 2 to 1 with a holding height of 9 feet. This volume assumes a heavy sediment accumulation of 9 inches over 8 years before cleaning (0.976 acre-feet) and still exceeds the volume requirements needed to handle the runoff from the 10 year - 24 hour rainfall event.

Pond design (acre-feet) - Sediment Accumulation (acre-feet) = Capacity (acre-feet)

13.67 - 0.98 = 12.69

11.68 is less than 12.69

I respectfully request your review of this information and your issuance of the appropriate modification and No Objection Letter required for this construction to begin. If you have any questions related to this matter, please do not hesitate to call me collect at 412-777-5460.

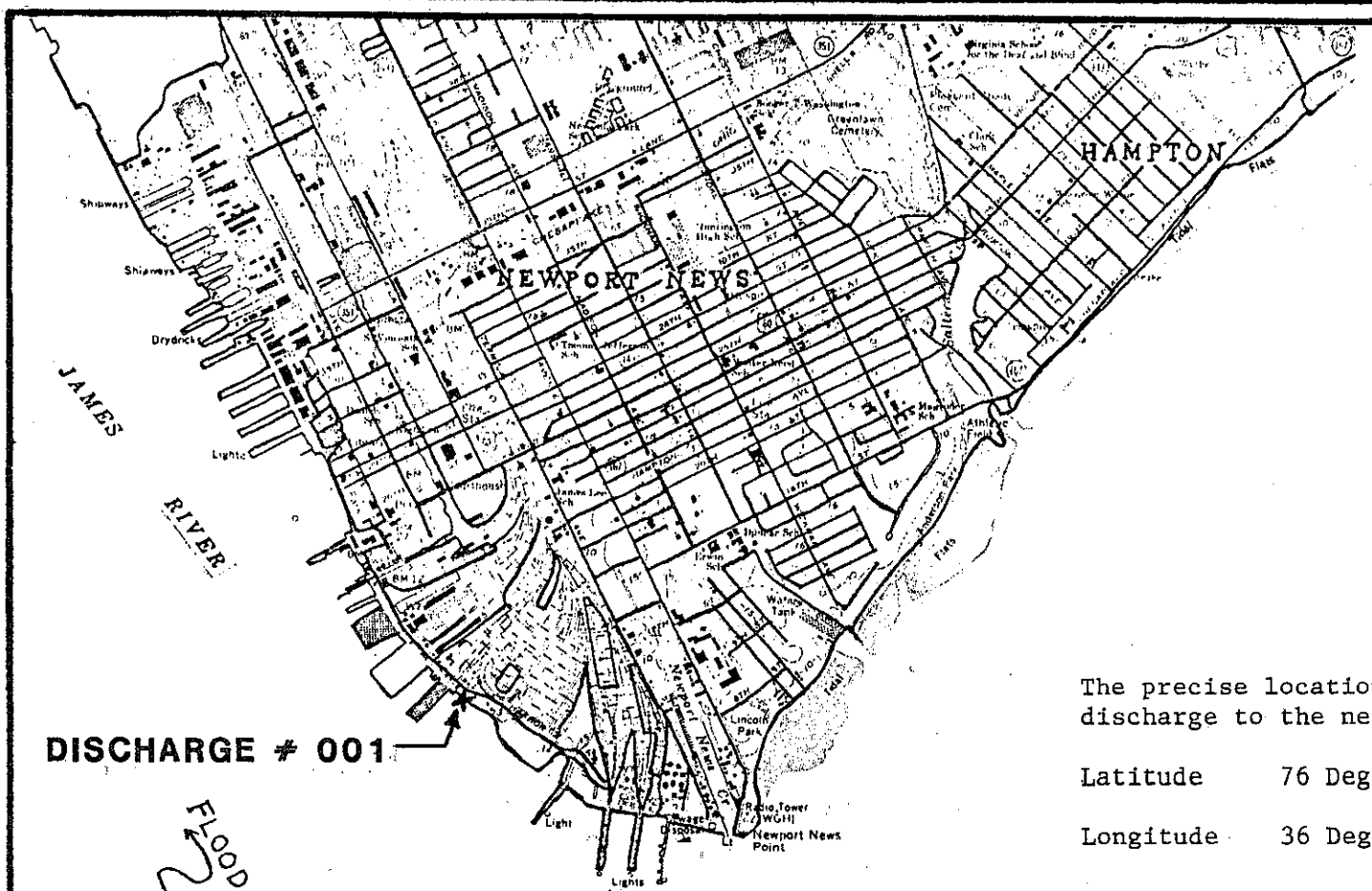
Very truly yours,

DRAVO CORPORATION
Engineering Works Division

Thomas Rupik

Thomas Rupik, P.E.

TR/tmd



The precise location of the point of discharge to the nearest second is:

Latitude	76 Deg.	25 Min.	38 Sec.
Longitude	36 Deg.	58 Min.	6 Sec.

LOCATION MAP

FROM: U.S.G.S. SURVEY MAP, 1964
MASSEY COAL TERMINAL
NEWPORT NEWS, VIRGINIA
JULY 27 1982 PAGE 1 OF 1

PLOT PLAN

PURPOSE: MODIFIED PLOT PLAN & RETENTION POND

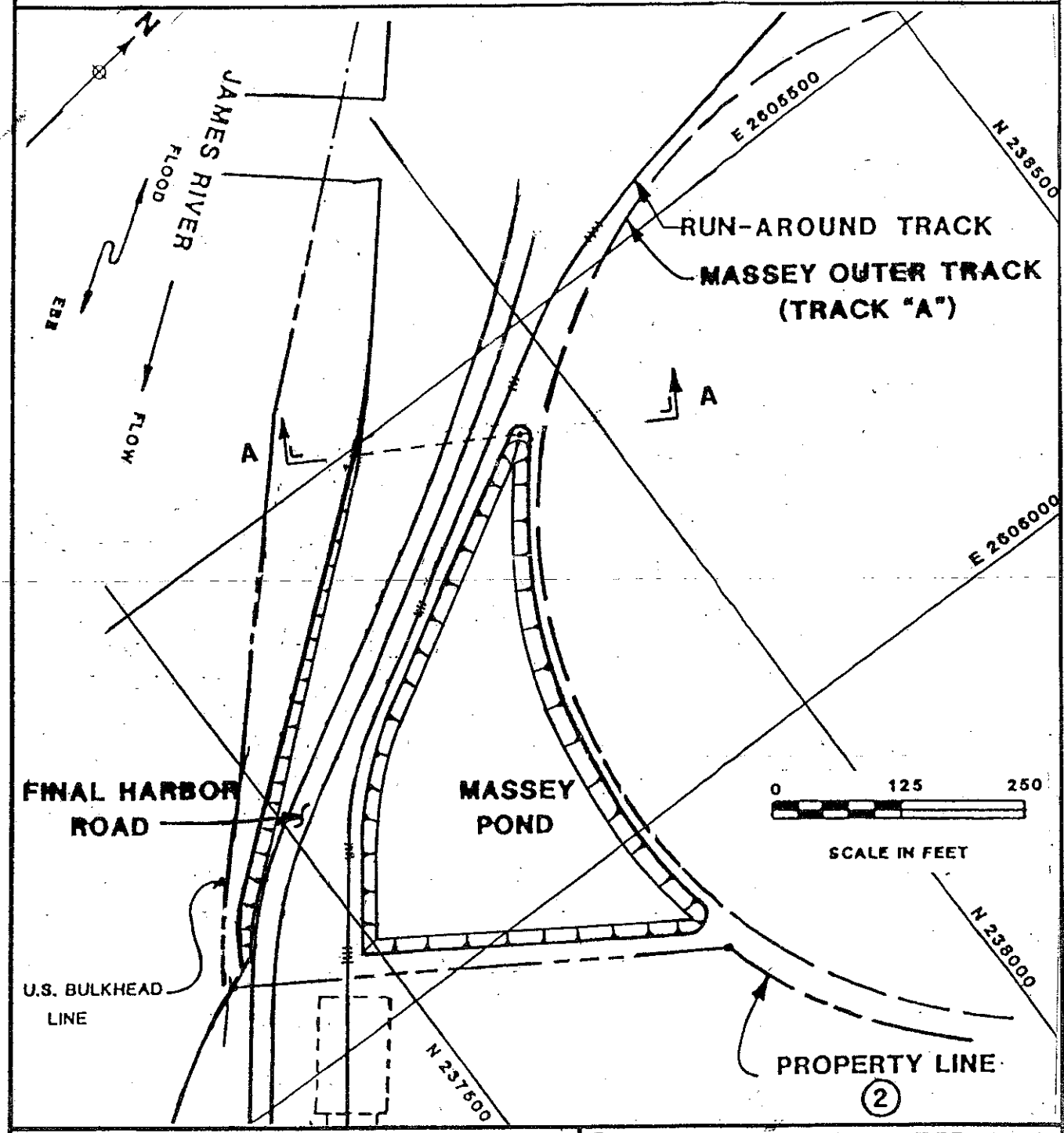
ADJACENT PROPERTY OWNERS: SEE (1) AND (2) ABOVE

COMMERCIAL USE

Prop: COAL TRANSFER TERMINAL
In JAMES RIVER
At NEWPORT NEWS
State VIRGINIA

Application By
MASSEY COAL TERMINAL CORP

SHEET 1 OF 3 DATE: 7-29-82



ENLARGED VIEW RETENTION POND AREA

PURPOSE : MODIFIED RETENTION POND

ADJACENT PROPERTY OWNERS:

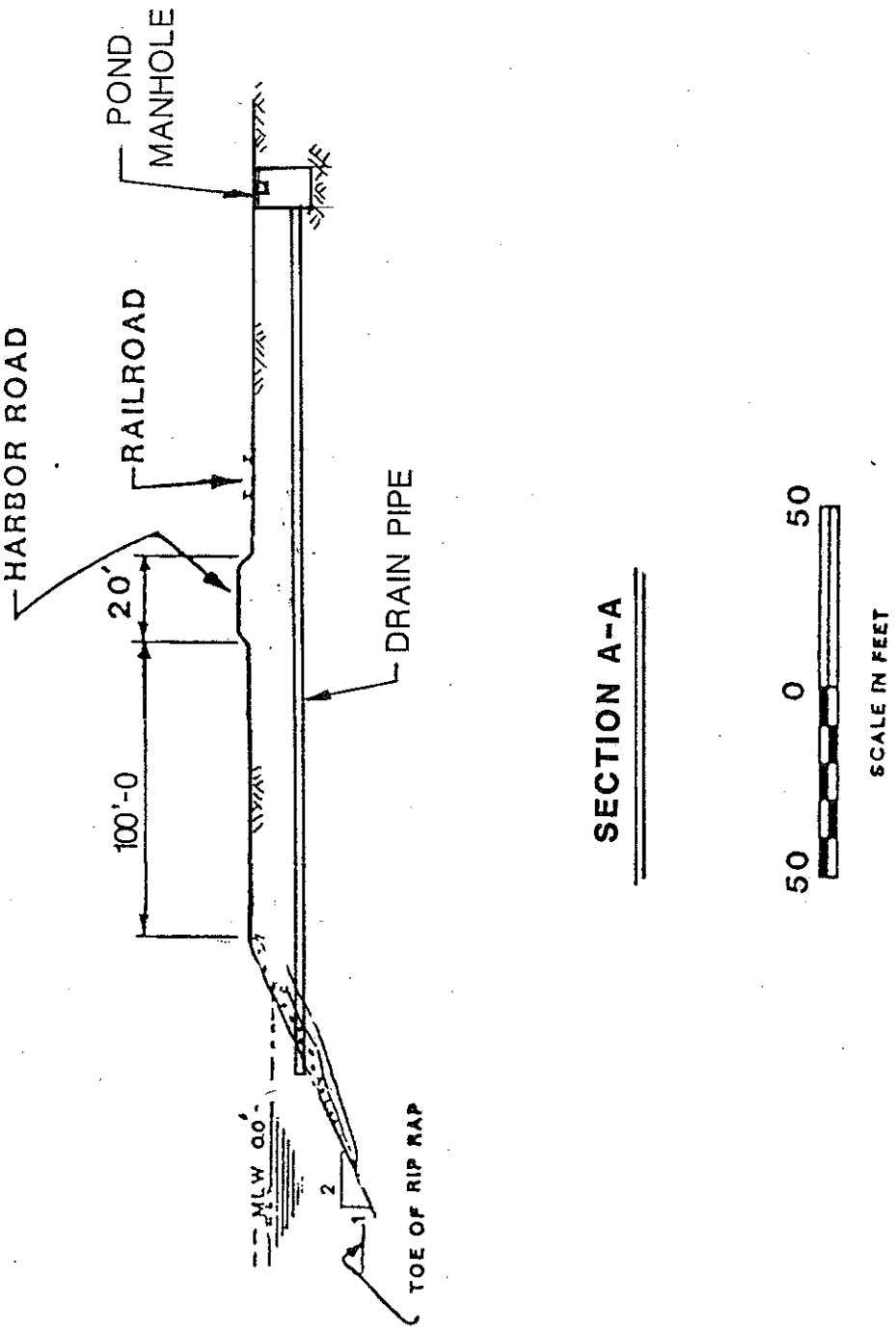
SEE (1) AND (2) ABOVE

COMMERCIAL USE

Prop: COAL TRANSFER TERMINAL
In JAMES RIVER
At NEWPORT NEWS
State VIRGINIA

Application By
MASSEY COAL TERMINAL CORP

SHEET 2 OF 3 DATE: 7-29-82



CROSS-SECTION

PURPOSE : MODIFIED RETENTION POND

ADJACENT PROPERTY OWNERS:
SEE (1) AND (2) ABOVE
COMMERCIAL USE

Prop: COAL TRANSFER TERMINAL
In JAMES RIVER
At NEWPORT NEWS
State VIRGINIA

Application By
MASSEY COAL TERMINAL CORP

SHEET 3 OF 3 DATE: 7-29-82