PPM-194 Ceds 2/12/07

OPERATIONS & MAINTENANCE MANUAL

DOMINION TERMINAL ASSOCIATES

DTA

Dominion Terminal Associates
P.O. Box 967-A
Newport News, Virginia 23607

By

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CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

D R Wagner

Superintendent of Engineering and Maintenance

1/31/07

Date

1.0 INTRODUCTION

The purpose of this Operations & Maintenance (O&M) Manual is to meet the requirements of Dominion Terminal Associates' (DTA) new Virginia Pollutant Discharge Elimination System (VPDES) Permit (Permit No. VA0057576). The permit went into effect December 5, 2006 and will expire December 4, 2011.

DTA is located within an industrial area of the southernmost portion of the City of Newport News (Figure 1). The property is roughly rectangular in shape and is bound by Pier IX Coal Terminal Company and Newport News Marine Terminal (Virginia Port Authority) to the west, CSX Transportation and I-664 to the east, I-664 and residential property to the north, and the James River to the south (Figure 2).

DTA is a coal transshipping facility. Coal is offloaded from railcars in a tandem rotary dumper and is stored on-site until it is loaded onto colliers and barges for shipment to other ports. Two stacker/reclaimer units are used to stack the coal dumped from railcars and the two stacker/reclaimers and a reclaimer pick up coal and a single shiploader loads coal onto vessels. Conveyor systems and other equipment including: diesel locomotives, cranes, bulldozers, front-end loaders, forklifts, and vehicles, assist with the loading and unloading of coal.

The transportation of coal is accomplished by several operations. As railcars arrive on-site they are routed to the dumper where they are inverted and the contents emptied into a large in-ground hopper (in cold weather, railcars are first routed through a "thaw shed" where propane heaters thaw frozen coal before being routed to the dumper). From the hoppers, coal is either loaded directly onto vessels, or moved into "soil cement" paved areas for storage. Coal is stacked according to grade using conveyors, transfer towers, surge silos, and stacker/reclaimer units.

Coal is loaded onto vessels by reversing the above processes. Blends of coal can be created by using the blending silos while loading vessels. The load and empty yards are used to stage railcars prior to and after being emptied into the dumper. Empty cars are formed into a train that is transported off-site by CSX.

Wash down and dust suppression water are the only sources of wastewater generated on-site which are not treated by Hampton Roads Sanitation District. Stormwater and the above described wastewater travel via sheet flow to on-site ditches. The ditches drain into stormwater management ponds, prior to discharge through Outfall 001 to the James River.

2.0 WASTEWATER TREATMENT FACILITIES

2.1 Description and Operation

2.1.1 Ditches

The coal storage yard is surrounded by a large concrete ditch that discharges into two of the three on-site stormwater management ponds (Ponds 1 and 3). The coal yard is sloped to promote drainage toward the ditch. The northern and eastern portions of the ditch drain via a culvert into Pond 3, whereas the southern and western portions of the ditch drain into Pond 1.

The high point of the ditch is in the northernmost portion of the site. Weirs have been constructed in the ditch to improve the sedimentation rate and to reduce the quantity of coal fines reaching the ponds.

Stormwater from the southern portion of the facility (including the main entrance, personnel parking, administration and maintenance buildings, and surge silos) is directed to one of four stormwater pump stations, which direct water to the concrete ditch and/or stormwater ponds.

2.1.2 Stormwater Management Ponds

Three stormwater management ponds exist on-site. Stormwater and wastewater flow from the ditches into Ponds 1 and 3 where sedimentation is allowed to occur. Two on-site groundwater wells pump water into Pond 2 on an as needed basis. Water from all three ponds is used for dust suppression (in the Rainbirds). Hand operated sluice gates and transfer pumps between Ponds 1 and 2 and Ponds 2 and 3 allow water to be moved between ponds and to allow for neutralization of the pH. One foot, or more, of freeboard is maintained in Pond 2.

DTA personnel are constantly monitoring the water levels in the three ponds, and the interrelationship between them. In general, a greater amount of freeboard is kept in Ponds 1 and 3, than in Pond 2, so that runoff from the facility may reach the ponds, without backing up beyond the ditches. DTA monitors the weather and adjusts water levels in the ponds on a regular basis. When an inundating rain event is anticipated DTA tries to prepare by discharging prior to the rain event, if necessary. This way they are not forced to discharge during or after the event.

2.1.3 Process Chemicals

Material Safety Data Sheets (MSDS) for all chemicals, including process chemicals, are maintained current and readily accessible in the Administration Building. In addition, DTA has a link to 3E Company which provides immediate response to MSDS requests. All chemicals are stored and used according to the information on their MSDS.

Table 1 lists the process chemicals used on-site.

Table 1: Process Chemicals and Uses.

Chemical Name	Use
Caustic 50%	neutralize pH
Caustic 25%	neutralize pH
polymer	flocculation
Muriatic Acid	reduces pH

2.1.4 Operating Issues

The main operating issue faced at the facility is maintaining the pH at an acceptable level (between 6 and 9 S.U.) within the three on-site ponds. This involves measuring the pH, adding caustic, re-measuring, adjusting, and balancing.

Emergency action is taken if an unexpected rain event threatens to flood the lower lying areas of the facility and create an unauthorized discharge. Emergency actions and reporting requirements are detailed in the VPDES Permit.

2.2 Maintenance

The following routine maintenance is performed on the system:

- Daily measuring of pH in each of the three stormwater ponds
- Daily inspection of the ponds and ditches
- Removal of silt from ditches as required and as equipment is available
- Annual cleaning of the stormwater ponds, if necessary
- Annual calibration of the Marsh-McBirney Flow Meter by an outside contractor

Materials that are removed from the ditches and ponds are placed back in one of the coal pile storage areas to be dried and made available to the facility's owners for blending with other coals.

The stormwater management system does not have any backup systems.

3.0 EFFLUENT SAMPLING and REPORTING

This section only discusses sampling and reporting of discharges from Outfall 001. Other items, such as visual inspections and site inspections, are required by the facility's VPDES permit. Please refer to the SWPPP and the facility's permit for a discussion of these other items.

3.1 Sampling Procedures

When necessary (when an inundating rain event is anticipated or minimum freeboard is reached) a discharge from Pond 2, through Outfall 001, to the James River is scheduled. When a discharge is deemed necessary the Engineering and Maintenance Superintendent, or his designee, contacts Universal Laboratories' field personnel. Universal Laboratories is given as much notice as possible prior to the scheduled discharge so that they can arrive on-site, check the pH, and collect samples from the discharge.

Each discharge from Outfall 001 is documented by DTA personnel on the Discharge Logs which are kept in the meter box at the pond discharge. Discharge logs are transferred to the Permit Book at the end of the year.

Samples are collected from the discharge water using pre-prepared jars provided by Universal Laboratories. Universal Laboratories' field personnel conduct the sampling. All personnel conducting or assisting with the sampling wear gloves. A decontaminated and properly calibrated pH meter is used in the field to measure the water's pH from an unpreserved sampling jar. The pH measurement is recorded so that it may be correctly reported on the Discharge Monitoring Report (DMR). All samples collected on-site are grab samples. Water from the discharge pipe is collected using an unpreserved jar and then transferred to sample containers. All containers are labeled with the analysis requested, sample date, and time. Samples are then transported on ice to Universal Laboratories in Hampton, Virginia for analysis.

Universal Laboratories is responsible for ensuring that the sampling jars are properly prepared, and that the proper analytical and quality assurance/quality control measures are used. Once the laboratory analysis is complete Universal Laboratories sends laboratory report sheets to DTA. Flow is calculated by the Flow Meter and recorded on the discharge log.

The sampling location is at such an elevation that it is not tidally influenced and is in a location where it is representative of the discharge.

Table 2: Effluent Sampling Requirements for Outfall 001.

Parameter	Discharge Limitations				Monitoring Requirements		
	Monthly Average	Weekly Average	Min	Max	Frequency	Sample Type	Field/Lab Analyzed
Flow (MGD)	NL	NA	NA	NL	1/month	Estimate	Field
pH (S.U.)	NA	NA	6.0	9.0	1/month	Grab	Field
TSS (mg/l)	NA	NA	NA	50	1/month	Grab	Lab
Total Phosphorous (mg/l)	2.0	NA	NA	NA	1/6month	Grab	Lab
Total Nitrogen (mg/l)	NL	NA	NA	NA	1/6month	Grab	Lab
Dissolved Copper (µg/l)	NA	NA	NA	NL	1/6month	Grab	Lab
Dissolved Nickel (µg/l)	NA	NA	NA	NL	1/6month	Grab	Lab
TPH (mg/l)	NA	NA	NA	NL	1/6month	Grab	Lab
There will be no discharge of floating solids or visible foam, except in trace amounts.							

MGD = Million Gallons per Day
S.U. = Standard Units
TSS = Total Suspended Solids
mg/l = milligrams per liter
µg/l = micrograms per liter
TPH = Total Petroleum Hydrocarbons
NL = No Limit
NA = Not Applicable

An annual acute toxicity test is completed in accordance with Part I, C, 2 of the VPDES Permit (Page 6). Please refer to this section of the permit for details on sampling and reporting procedures.

3.2 Reporting Procedures

DTA personnel utilize data from the laboratory report sheets and the data collected in the field to complete the DMR for Outfall 001. DMRs may be found in the facility's VPDES permit (Appendix A of the SWPPP) and in Appendix C of the SWPPP. If laboratory data are below the Quantification Level (QL) they shall be reported as <QL on the Discharge Monitoring Reports. If the facility does not discharge then no sampling is conducted and the DMR is submitted to DEQ stating "No Discharge." The Superintendent of Engineering and Maintenance completes and signs the DMRs. DMRs and laboratory results are submitted by DTA's Superintendent of

Engineering and Maintenance to the Tidewater Office of DEQ. Copies of DMRs, laboratory report sheets, chain of custodies, and other related information are kept in the appropriate appendices of the SWPPP.

Table 3: Submittal Requirements.	
Item	**Due Date**
DMR for Outfall 001	10th Day of the Following Month
Annual acute toxicity screening and annual report	February 10th of each year

The annual acute toxicity test, flow rate at the time of sampling, estimate of total volume of sampling discharged during the discharge event, the time at which the discharge began and ended, the duration of the discharge event, and the time at which the discharge was sampled must be submitted to DEQ as part of each annual report. The annual report should also include a summary of any modifications to the SWPPP, O and M Manual, or BMPs.

All records (including calibration and maintenance records and copies of reports and data) are retained on-site for at least three years from the date of the sample, measurement, or report. Should any litigation regarding the regulated activity or regarding control standards applicable to DTA be unresolved all records shall be kept until the litigation is resolved. Records should be kept with/in the SWPPP.

3.3 Contact Procedures

All submittals are made to:

Mr. Frank Daniel
Regional Director
Department of Environmental Quality
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach, Virginia 23462

757-518-2000

Universal Laboratories is contacted prior to discharge to Outfall 001. Laboratory Analysis is completed by Universal Laboratories:

Universal Laboratories
20 Research Drive
Hampton, VA 23666

757-865-0880

4.0 EMERGENCY INFORMATION

4.1 Safety Hazards

The handling of caustic is the only safety hazard associated with the stormwater operations. An MSDS for this material is kept readily available on-site and a procedure for its use has been developed and is followed to ensure safe handling.

4.2 Emergency Contacts

Table 4: Emergency Contacts.	
Contact	**Phone Number**
DTA Contacts	
Dan Wagoner, Superintendent, Engineering and Maintenance	757-245-2275 x305 757-897-8670 (cell)
Contractors	
Industrial Marine Services, Spill Contractor	757-436-3000
Bay Environmental, Spill Contractor	757-436-5900
Safety Kleen, Spill Contractor	757-543-5907
Local Contacts	
Newport News Fire Department	911
State Contacts	
Virginia Department of Environmental Quality	757-518-2000
Virginia Department of Emergency Management	804-674-2400
Federal Contacts	
National Response Center	800-424-8802
US Coast Guard	757-441-3299

4.3 Emergency Procedures

4.3.1 Notification Procedures

1. Individual discovering a spill must notify his immediate supervisor.

2. Supervisor notifies the Superintendent Engineering and Maintenance (or his authorized delegate) of the spill, giving all known details and initiates spill containment, investigates cause.

3. Superintendent Engineering and Maintenance will assess the spill size and hazards, order additional outside clean-up help as required, and notify appropriate authorities.

4. If discharge occurs from a vessel the vessel will be notified, as well as the Superintendent Engineering and Maintenance, and the US Coast Guard.

4.3.2 Impervious Areas

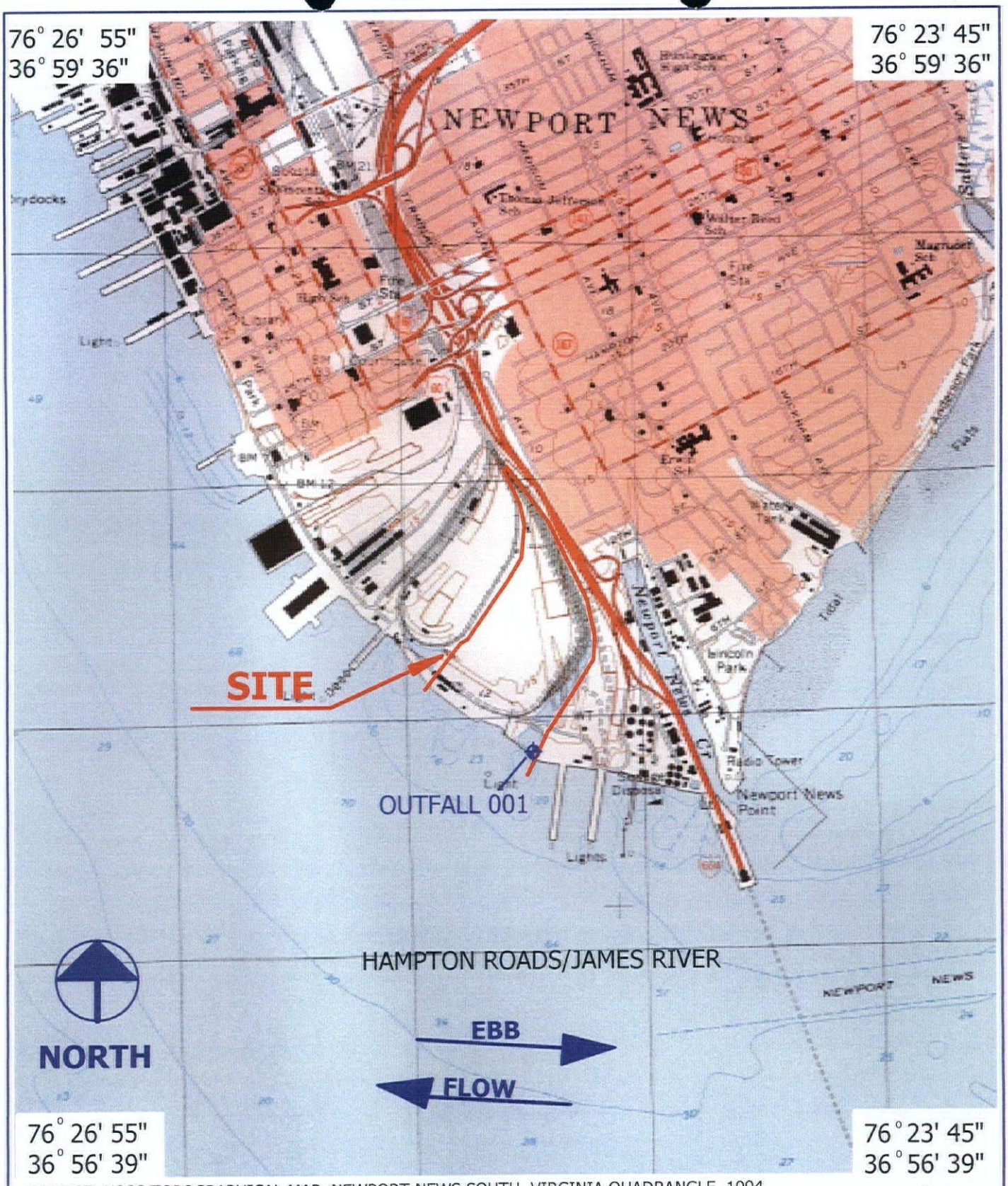
All impervious areas drain towards the on-site ditch and all stormwater is directed toward the pond system. All aboveground tanks and containers are stored such that a leak or spill would be confined to a containment dike and a spill from an underground tank would drain to a storm water pump station. Therefore, the main concern in the pervious areas is a spill from a mobile source.

A spill in a pervious or impervious area would be contained and absorbed with boom and blankets which are stored in the warehouse and near the ponds. In the event of a large spill, an outside contractor would be called and on-site personnel would contain as much of the spill as possible while waiting for the contractor.

4.3.3 Drainage Ditch

A spill from all tanks, containers, and mobile equipment would flow toward the ditch. If a large spill occurs any uncollected petroleum would drain into the ditch and eventually find its way into the storm water management ponds. The sluice gates between the ponds and between Pond 2 and the river would be shut and the spill would be contained in the ponds by the boom around each pond's outfall. A contractor would be notified and they would handle any necessary additional containment and cleanup. Prior to discharge of Pond 2 to the James River, water would be sampled and laboratory analyzed for appropriate constituents (depending on the nature of the spill) to ensure that sufficient cleanup measures had been taken and that concentrations exceeding the facility's permit limitations were not discharged to the river.

Appendix A: Figures



SOURCE: USGS TOPOGRAPHICAL MAP, NEWPORT NEWS SOUTH, VIRGINIA QUADRANGLE, 1994

1 in = 2,000 ft DATE: 3/28/06 BAY # 04-011 DRAWN BY: SSH	FIGURE 1: VICINITY MAP DOMINION TERMINAL ASSOCIATES NEWPORT NEWS, VIRGINIA	BAY ENVIRONMENTAL, INC. Environmental Consulting Services

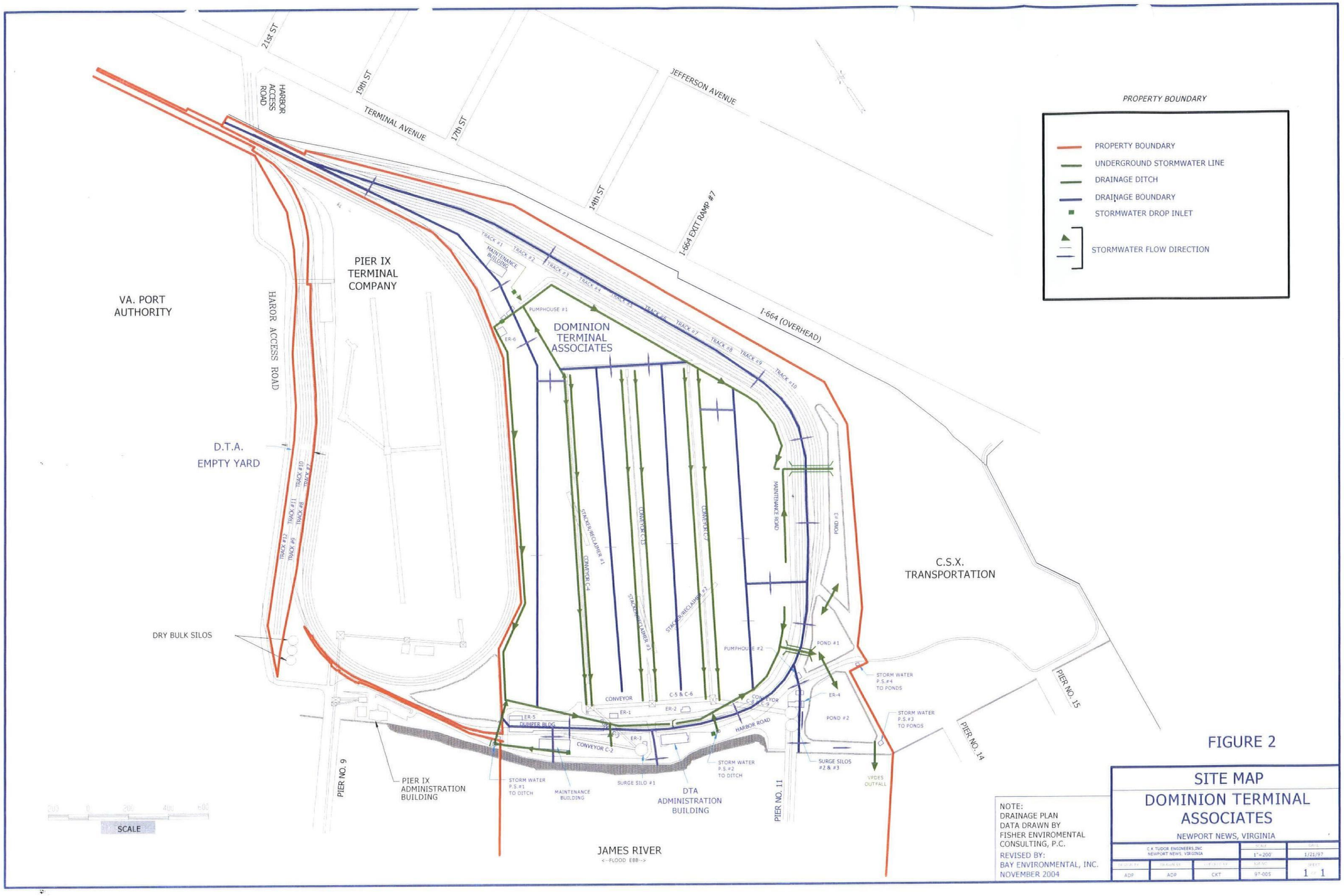
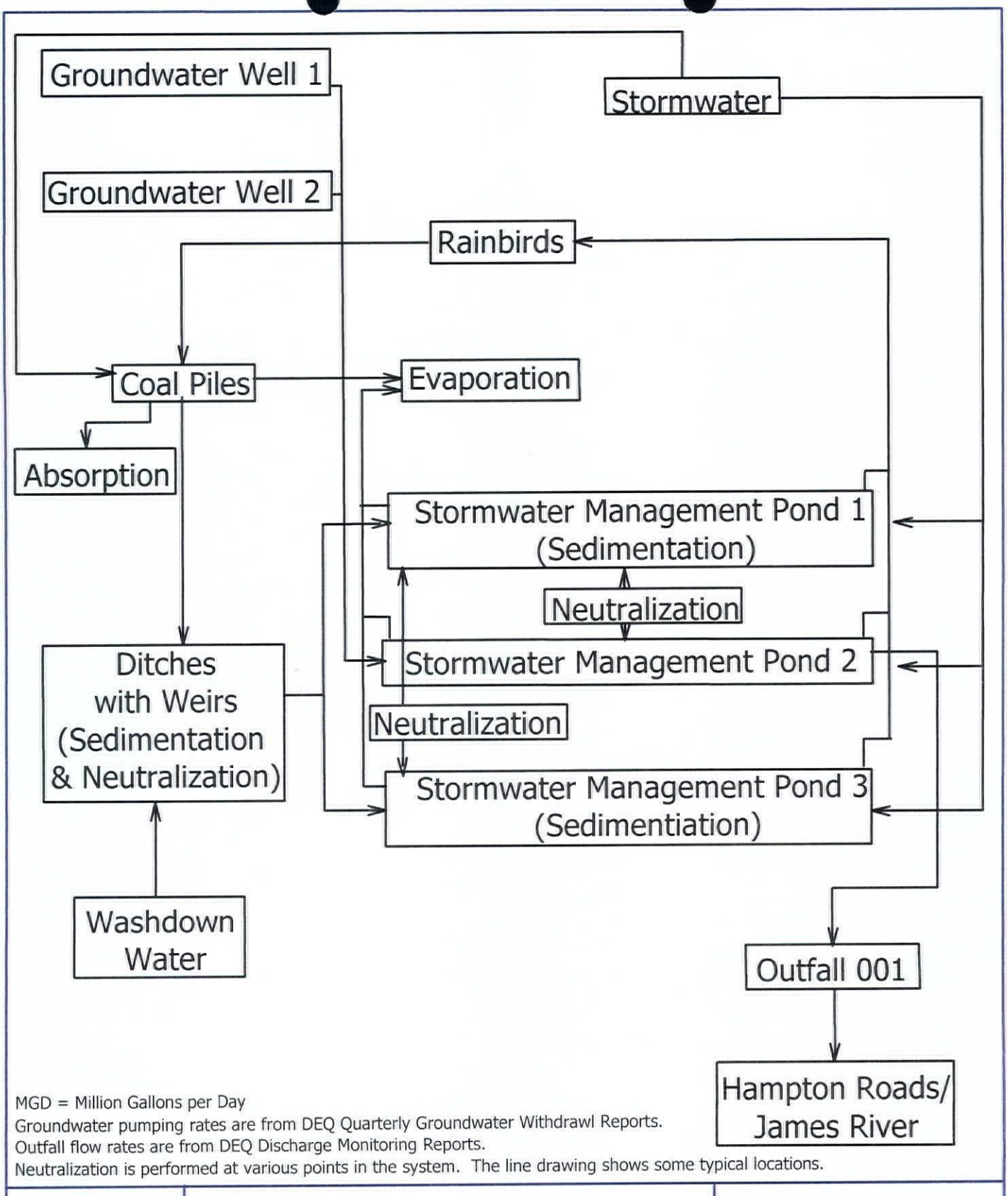


FIGURE 2

NOTE:
DRAINAGE PLAN
DATA DRAWN BY
FISHER ENVIROMENTAL
CONSULTING, P.C.
REVISED BY:
BAY ENVIRONMENTAL, INC.
NOVEMBER 2004

SITE MAP
DOMINION TERMINAL ASSOCIATES
NEWPORT NEWS, VIRGINIA

C K TUDOR ENGINEERS,INC NEWPORT NEWS, VIRGINIA			SCALE 1"=200'	DATE 1/21/97
DESIGNED ADP	DRAWN BY ADP	CHECKED BY CKT	JOB NO. 97-005	SHEET 1 OF 1



MGD = Million Gallons per Day
Groundwater pumping rates are from DEQ Quarterly Groundwater Withdrawl Reports.
Outfall flow rates are from DEQ Discharge Monitoring Reports.
Neutralization is performed at various points in the system. The line drawing shows some typical locations.

DATE: 3/31/06 BAY # 04-011- DRAWN BY: SSH	LINE DRAWING & ESTIMATED WATER BALANCE DOMINION TERMINAL ASSOCIATES NEWPORT NEWS, VIRGINIA	BAY ENVIRONMENTAL, INC. Environmental Consulting Services

Appendix B: Discharge Log

Discharge Start: _____ Discharge End: _____

DISCHARGE CHECKLIST AND LOG SHEET

Date: _____ Meter Total Before Discharge: _____

Time: _____ Pond pH: _____

Operator Name: _____ Discharge pH: _____

Meter Total After Discharge: _____

Reason For Discharge: _____

Total Discharge Volume: _____

Total Discharge Duration _____

Checklist:	**YES**	**NO**
1.) Are Ponds free of visible contamination(i.e. sheen)?	_____	_____
2.) Are the booms around the pump intakes in good condition?	_____	_____
3.) Has the lab been notified? (Only if discharge)	_____	_____
4.) Has the Superintendent Engineering and Maintenance been notified of any problems, If any?	_____	_____
5.) Are the suspended solids levels acceptable?	_____	_____
6.) Has a clean record chart been installed for the Flow meter?	_____	_____

Visual Observations: At the outfall pipe, when the tide allows, observe the flow and note the following:

7.) Color of flow: _____

8.) Color of river immediatly surrounding discharge: _____

9.) Odor: _____

10.) Clarity of flow stream: _____

11.) Comment on floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution:

_____

_____