Long, Steven (DEQ)

From: Long, Steven (DEQ)
Sent: Monday, May 15, 2023 9:47 AM
To: Lieberman, Mark
Cc: Blair, Donald; Miles, Joshua
Subject: RE: Inspection report attached for 3/15/23

Mark,

Finally got to this review and all resolved. Thanks.

Steve Long
Office/Mobile phone # 757 705-8152
steven.long@deq.virginia.gov

From: Lieberman, Mark <mark_lieberman@kindermorgan.com>
Sent: Thursday, April 27, 2023 9:51 AM
To: Long, Steven (DEQ) <Steven.Long@deq.virginia.gov>
Cc: Blair, Donald <Donald_Blair@kindermorgan.com>; Miles, Joshua <Joshua_Miles@kindermorgan.com>
Subject: RE: Inspection report attached for 3/15/23

Steve,

See attached updated O and M manual to address one of the deficiencies you identified, as for the other item we will completely fill out the visual observation documentation for all observation events going forward.

Mark Lieberman
EHS Manager
KINDER MORGAN
O: (757) 928-1520
C: (708) 305-6891

Do The Right Thing Everyday!

Our Core Principles:
1) Safety Will Not Be Compromised
2) Environmentally Compliant and Responsible Operator
3) Ethics and Integrity
4) Commitment to Employees and Resources
5) Customer Service and Fiscal Responsibility
6) Quality Focus

From: Long, Steven (DEQ) <Steven.Long@deq.virginia.gov>
Sent: Thursday, April 13, 2023 2:08 PM
To: Lieberman, Mark <mark_lieberman@kindermorgan.com>; Steil, Cory <Cory_Steil@kindermorgan.com>; Miles, Joshua <Joshua_Miles@kindermorgan.com>
Subject: FW: Inspection report attached for 3/15/23

[This email message was received from the Internet and came from outside of Kinder Morgan.]

WARNING: EXTERNAL EMAIL: PROCEED WITH CAUTION.

Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Good afternoon gentlemen:

Unless I missed filed it…….do not see a return mailing that acknowledge the email from 4/4/23 for the site visit report from 3/15/23 inspection. Due 5/4/23.

Can someone return a mailing please.

Steve Long
Office/Mobile phone # 757 705-8152
steven.long@deq.virginia.gov

From: Long, Steven (DEQ)
Sent: Tuesday, April 4, 2023 2:28 PM
To: Mark Lieberman (mark_lieberman@kindermorgan.com) <mark_lieberman@kindermorgan.com>; Steil, Cory <Cory_Steil@kindermorgan.com>; Miles, Joshua (joshua_miles@kindermorgan.com) <joshua_miles@kindermorgan.com>
Cc: Phelps, Bradley (DEQ) <Bradley.Phelps@deq.virginia.gov>
Subject: Inspection report attached for 3/15/23

Gentlemen,

The inspection report for the site visit on March 15, 2023 is attached.

A response to the report is required with the response due within 30 days. I have the response due date as XX/XX/XX. The response should be on letterhead, signed an preferably sent electronically.

To ensure delivery of the report, please return a mailing, separate from any read receipt sent, to acknowledge receipt of the report.

If you have any questions please let me know.

Steven J.E. Long
Environmental Specialist II
Department of Environmental Quality
Tidewater Regional Office
5636 Southern Blvd.
Virginia Beach, VA 23462
Office/Mobile phone # 757 705-8152
steven.long@deq.virginia.gov
www.deq.virginia.gov

KINDER MORGAN
BULK TERMINALS, INC.

KINDER MORGAN BULK TERMINAL
PIER IX / PIER X

O & M MANUAL

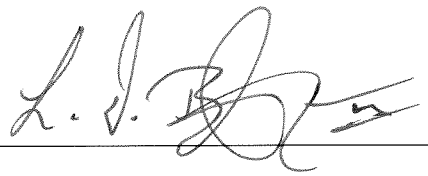
April
2023

O & M MANUAL

Table of Contents

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 gathered and evaluated 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 fines and imprisonment for knowing violations."



(Signature)

Donald Blair

(Printed Name)

Terminal Manager

(Title)

4/26/2023

(Date)

Storm Water Collection and Treatment System

I. Introduction

Kinder Morgan Pier IX Terminal is a bulk material-handling terminal located on the James River in the east end of Newport News, VA. The products transferred through Pier IX Terminal are coal, petroleum coke and Portland cement. Coal and Petroleum Coke is stockpiled on a 60-acre site with a total storage capacity of 1.4 million tons and permitted capacity of 1.4 million tons at any given time. The Portland cement is stored in three silos with a total capacity of 35,000 tons.

This manual has been prepared to meet the requirements of Section B.3 in VPDES Permit No. VA 0057142.

II. State Discharge Requirements

Wastewater and storm water discharges from Pier IX Terminal are authorized under VPDES Permit No. VA 0057142. Discharges are monitored regularly as required by the permit.

III. Description of Storm Water and Waste Water Treatment Facility

Storm Water Collection

There are three separate storm-water collection systems at Pier IX. The first system collects storm water runoff from the coal storage yard, the second collects storm water runoff from the Pier IX and immediately adjacent shore area, the third Pier X collects runoff from the pier and pumps water to the retention pond. (At this time the Pier X collection is inoperable due to below pier piping damage caused by debris in the river. If there is need for commodity to be transferred a temporary collection will be set in place. Until repairs are made the "non-contact" water flows directly to the river) all storm water collection systems direct storm water flow to the retention pond. See Appendix 2 for a detailed flow chart of the two systems.

The storage yard system collects water from the area inside the facility's loop rail track system through a perimeter drainage ditch. All storm water runoff in this area flows into the perimeter drainage ditch. The storm water collected in the perimeter ditch achieved either through runoff or a pumping system and water originates specifically from the following areas:

1. coal pile runoff
2. the conveyor tunnel sumps
3. the areas adjacent to the maintenance building, warehouse building and all buildings inside the loop rail track system
4. the area adjacent to and inside the dumper building
5. the dumper sump and pit areas
6. automobile access tunnel sump
7. pier IX sumps
8. silo area and shoreline roadway at silo area
9. pier X sumps (when in service)

The perimeter ditch encircles the coal storage area gathering all storm water runoff from the coal piles and draining directly toward the retention pond. The perimeter ditches are graded to provide drainage toward the southern end of the facility (see drawing in Appendix 2). Drainage and flow from the perimeter ditch to the retention pond occurs by one of two methods: gravity flow or pumping.

Gravity flow from the perimeter ditch to the retention pond occurs through a culvert pipe. The culvert pipe has a sluice gate installed on either side. The sluice gates currently remains closed. Gravity flow will not allow maximum retention pond levels nearing the one foot freeboard limit.

Pumped flow from the perimeter ditch to the pond occurs through a fixed electric pump drawing water from the ditch and pumping through a permanent piping system leading to the retention pond. Pumping perimeter ditch water to the pond is the usual and preferred method. There is a level sensor installed at the pond pump house that restricts the ditch pump from overfilling the pond.

Oil booms are used in the perimeter ditch as a precaution for preventing any oil from entering the pond. The oil booms are usually located at the dozer parking area and at the pond inlet but are often located in other areas of the perimeter ditch as well.

Pier IX Storm Water Collection System

The Pier IX system handles storm water runoff from the pier and the shoreward area immediately adjacent to the pier. Storm water from the pier is contained within a ten-inch curb around the pier and is directed to one of two sump/pump systems (#3,#5) on the pier. Water from the pier sumps (#3,#5) are pumped to two shoreward sump/pump systems (#1,#2) located in the parking lot at the foot of Pier IX. The storm water runoff from the shoreward area driveways and parking areas between the silo and the taxi stand drains to the shoreward sump/pump systems (#1,#2). All storm water from these areas are pumped to the perimeter ditch and ultimately into the retention pond.

Retention Pond

All storm water from the areas defined above and coal pile runoff water (wastewater) is contained in the retention pond. The retention pond serves two purposes:

1. To settle all suspended solids (typically coal fines) and
2. To serve as water supply for a pump system that provides water for the coal pile wet suppression system.

Normally, pH in the retention pond remains neutral between 6.0 and 9.0 unless rainfall is experienced in excess. If necessary, the pH can be adjusted with caustic soda or other basic materials such as soda ash.

When and if the retention pond volume becomes extremely low, well water is pumped to the perimeter ditch to supplement retention pond volume. This to make certain that volume is sufficient to supply coal pile wet suppression water. Well water is supplied from 2 horizontal wells (Columbia Aquifer) and one deep well (Well 1-Potomac Aquifer).

Wastewater Treatment

The pH is corrected with a caustic soda treatment system. There is a pH probe located in the perimeter ditch at the south end of the facility that monitors the pH in real time, 24/7. This information goes to the pH controller which then throttles the chemical pump to add caustic from the main tank when necessary. The caustic pump injects directly into the discharge pipe of the ditch pump, and only while the ditch pump is running to avoid damaging the pump and piping. This allows the water and caustic to mix as it flows to the pond. There is a pH probe in the retention pond by the pond pump house that reads pH in real time, 24/7. The pond pH probe is a high point cut off and will shut the caustic pump off if it exceeds a pH of 8.00.

There are 4 circulation valves that dump water being pumped from the pond, into the ditch line all day long. This assists the water in mixing further and maintaining movement. That is the normal operating parameters for the treatment system unless extenuating circumstances arise such as blowouts of product hindering flow in the ditch line, flooding, or system malfunctions.

Wastewaters at the facility are classified as such:

1. coal pile wet suppression water (if treated w/ caustic or soda ash)
2. vehicle or equipment wash down water (No Detergents are Used)
3. other ancillary wastewater flows

All wastewater flows (identical to storm water) to and is contained within the retention pond.

IV. Specific / Detailed Description of the Equipment & Facility

As outlined above, the storm-water/wastewater collection system for the facility is comprised of a perimeter ditch, sumps, pumps, a culvert and a retention pond. The retention pond is lined with concrete and has a storage capacity of 4.5 million gallons.

The pond pump station consists of two 1900-gpm pumps (125 HP). The pumps are used for two primary purposes:

1. Charging the water supply loop piping for coal pile wet suppression and wash down
2. Discharging the retention pond water through Outfall 001 to the James River.

BMP's of the system include the use of booms in the ditch line to keep any sheens that may occur from reaching the retention pond as well as routinely removing coal from the ditch line to prevent coal build up from blocking the flow in the ditch line and creating a pH upset in the retention pond.

Non-Hazardous oil contaminated booms, rags and debris are managed throughout the terminal indoors in closed drums. Once the drums are full they are placed in drum storage sheds prior to disposal off site to minimize stormwater exposure.

V. Emergency Operation

During flood conditions, excessive storm water flows through the emergency by-pass storm drain located at the highest ground level in the south yard between the perimeter ditch and the rail loop. This storm drain directs water directly through Outfall 003 to the James River. At present the bypass is plated off and only removed for hurricanes or 100 year storm events.

VI. Process Chemicals

Caustic Soda is utilized for pH adjustment.

VII. Personnel Responsibilities

Appendix 1 contains a list of the personnel and their responsibilities.

VIII. Operation of the Treatment Facility

Storm water is collected and retained by means as described above. The pond provides the capacity to collect and treat large quantities of storm water from the facility area. Typically, treatment of the water is unnecessary unless pH quality goes beyond the neutral parameters between 6.0 and 9.0. If this occurs, it is usually when excessive rainfalls are experienced. The pond also provides water needed for controlling dust emissions from the coal stockpiles and washing down areas of the facility

Appendix 2 contains a map that outlines the layout of the terminal.

The water level in the pond must be maintained for supply reasons as outlined above. If the water level in the pond gets too low, the wells are used as a supplemental water supply. The lowest level of the pond is at the point where there is a maximum freeboard of 4' 6". This level provides a 1' 6" water level above the pump inlets.

If there is a failure of the supplemental well water supply and/or if the well water supply cannot sustain the volume needed (during extreme dry conditions), it is possible to switch to the City of Newport News municipal water supply. The procedures for switching to the city water supply are given in Appendix 4 and a copy of the procedures is posted at the pond pump house. When switching to city water, the Terminal Manager is to be notified for contacting the City of Newport News Water Works.

If excessive rainfall increases the pond water level to within two feet from the top of the pond's retaining wall, the Operations Supervisor or the Environmental Coordinator will evaluate the weather conditions to determine whether pond water should be discharged to the James River. Appropriate personnel will collaborate to decide.

If a discharge is necessary, the Operations Supervisor/ Environmental Coordinator must:

- Check to make sure there are no sheens or visible material solids in the pond water.
- Ensure that pH is within neutral range.
- Check pumping systems to ensure proper operation.
- Record start and stop times for discharge period.
- Volume of discharge is calculated by multiplying discharge duration by pump capacity.

If it is necessary to grab a sample of the discharge, appropriate personnel must:

- Check to make sure there are no sheens or visible material solids in the pond water.
- Ensure that pH is within neutral range.
- Begin pumping from the pond to the river through outfall 001
- Collect grab sample within the first 30 minutes of flow using a clean bucket on a rope dipped into discharge flow at the outfall. Be sure to use pre-preserved sample containers provided by Universal Laboratories and that it is clean prior to sampling.
- The annual metals sample is collected by pouring the sample through a filter mounted on the sample container, the filter is discarded once used and the container is sealed.
- Conduct a visual examination and record the data on the proper form.
- Check and record the pH of the grab sample.
- Place the grab sample in a cooler with ice, located in the environmental office, for preservation until the laboratory staff can take custody for testing.
-

Analyses	EPA Method	Preservation Method
Total Nitrogen	EPA 351.2	Sulfuric Acid
Total Phosphorus	EPA 365.1	Sulfuric Acid
Toxicity	M bahai EPA 2007.0 C. variegatus – EPA 2004.0	Temperature
Dissolved Arsenic	EPA 200.7	Nitric Acid
Dissolved Copper	EPA 200.7	Nitric Acid
Dissolved Iron	EPA 200.7	Nitric Acid
Dissolved Nickel	EPA 200.7	Nitric Acid
Dissolved Selenium	EPA 200.7	Nitric Acid
Dissolved Zinc	EPA 200.7	Nitric Acid
pH	SM 4500-H	Time
Total Iron	EPA 200.7	Nitric Acid
TKN	EPA 351.2	Sulfuric Acid
TSS	SM 2540D	Temperature

The procedure explaining this process is given in Appendix 5.

The operating procedure for the Pier IX Area Water System is as follows:

- The storm-water collection system is automated
- There are four sump and pumping locations
- Two sump/pump locations on the pier and two located on shore
- Appendix 2 shows the location of the pumps and the designated numbering system
- The four pumps are responsible for moving the storm water from the pier to the perimeter ditch on the inside of the railroad tracks
- The pier pumps transfer the pier water to the shore sump tanks.
- The shore sump/pumps then transfer the water through piping located on Transfer Tower T-8, over the road and then discharging to the perimeter ditch at the southwest corner.
- The controls for the pumps are located in the lean-to building on the west side of Tower 9.

The pump control panel has six (6) switches; each switch has three (3) positions: Hand / Auto / Off.

- Hand: When the controls are turned to the "Hand" position, the pumps will immediately start pumping and will continue to pump until the water level in the sump gets low enough to trigger the automatic float switch in the sump.

- Auto: When the controls are turned to the "Auto" position, the pumps will begin pumping automatically when the water level in the sump is about two-thirds of the way full. The pumps will automatically shut off when the water level gets below the two-thirds level in the sumps.

- Off: When the controls are in the "Off" position, the pumps will not start pumping.

Retention Pond Monitoring & Capacities

The retention pond water level is monitored by the Operations Supervisor and the Environmental Coordinator designated to facility waterworks. Monitoring is to ensure sufficient water supply for dust suppression and preventing storm water from over burdening the pond.

The total capacity of the Pier Storm-water collection System is approximately 414,000 gallons, as compared with the 4.5 million gallons capacity of the pond. If the 414,000 gallons were pumped to the pond, the increase in the water level in the pond would be approximately 8.25 inches. This must be taken into account with the knowledge that if the pond level reaches the two-foot monitoring point. At this time, management will evaluate conditions and whether to pump to the river to prevent overburdening the pond.

All Kinder Morgan field employees have a knowledge and understanding regarding water flows and containment at the facility. If an employee notices an unusually low or an unusually high water level in the settling pond, it is their responsibility to report the condition to their immediate supervisor.

The Operations Supervisor/ Environmental Coordinator is required to evaluate if a discharge from the pond is necessary and/or if the Pier Storm-Water Collection System pumps should be de-activated. If the pier storm-water pumps are deactivated, the curbing around the pier and shore can contain a significant volume of storm water. Pier containment should suffice until normal collection and pumping conditions are resumed.

There are no solid or liquid wastes or residues generated by the system, coal fines removed from the system are returned to the product piles. All liquid wastes generated from the maintenance of vehicles and equipment are managed indoors with no stormwater exposure

IX. Maintenance

The Environmental Coordinator and the Operations Supervisor inspect all areas and equipment on a routine basis. All Kinder Morgan employees are instructed to report any problems observed to their supervisor. All major issues are recorded in the Daily Operations Log, the Daily Environmental Log and/or a daily email from the Environmental Coordinator facilitating environmental control maintenance. All issues reported are either repaired when found or the items are prioritized and repaired when applicable. If the issue risks reduced efficiency of our dust suppression systems, operations are stopped and emergency repairs are made.

Coal fines accumulated in the pond are partially cleaned out of the pond approximately every five years as needed to maintain compliance with pH.

Environmental staffing for the treatment works is 5 days per week first shift (7 am to 4 pm)and are on call 24/7, however, operations supervision have operational responsibility for the system when the environmental staff are not on site. The terminal is operated 24 hours per day and 365 days per year.

X. Sampling and Laboratory Testing

Pier IX Terminal has three point source outfalls: All three outfall are on the banks of the James River between the Main Office and Training Trailer.

- Outfall 001
- Outfall 002 (Closed)
- Outfall 003

A. Outfall 001 – from Retention Pond

Sampling of water discharged through outfall 001 is required once per month, only if a discharge(s) to the James River occur during the specific month. The sampling method and parameters are outlined in Pier IX's VPDES Permit No. VA 0057142. It is the responsibility of the Environmental Coordinator or Operations Supervisor to ensure that the samples are taken. A sample from outfall 001 is collected by appropriate personnel and analyzed by a selected local laboratory. Currently the lab of records is: Universal Laboratories, 20 Research Drive, Hampton, Virginia 23666. All questions concerning laboratory protocol and techniques are addressed to Universal Laboratories.

The characteristics, parameters and quantification levels analyzed are listed on the Discharge Monitoring
Report (DMR) sheet provided by the Virginia Department of Environmental Quality.

The Environmental Coordinator completes the discharge monitoring report electronically and online at the DEQ website for such (https://edmr.deq.virginia.gov/edmr). Appendix 8 provides an example copy of a competed DMR. The DMR is completed and filed electronically with the Tidewater office of the DEQ by the 10th day following the month of the report. All environmental documents, including DMR's, are to be retained in the files for a period of three (3) years.

B. Outfalls 002, 003 (Storm Water Outfalls)

Outfall 002 is not currently sampled because it is closed off. Outfall 003 is sampled and tested semi-annualy as required by VPDES Permit No. VA 0057142. Samples are collected by the Environmental Coordinator and tested by Universal Laboratories. The characteristics, parameters and quantification levels analyzed are listed on the DMR sheet provided by the Virginia Department of Environmental Quality.

The Environmental Coordinator completes the discharge monitoring report electronically and online at the DEQ website for such (https://edmr.deq.virginia.gov/edmr). Appendix 8 provides an example copy of a competed DMR. The DMR is completed and filed electronically with the Tidewater

office of the DEQ by the 10th day following the last month of the quarterly report. All environmental documents, including DMR's, are to be retained in the files for a period of three (3) years

XI. Equipment Records

All equipment records are stored electronically in our Computerized Maintenance Management System. These records will be retained for a period of three (3) years.

XII. Plant Safety

The retention pond water can be treated with caustic soda or soda ash to raise the pH characteristic of the water. Caustic soda is stored in one of three tanks. Two tanks are located adjacent to the perimeter ditch on a containment unit near the Phase IV warehouse. The third tank is located beside the electric ditch pump (Appendix 2 shows the location of this building). Additions of the caustic soda are completed with supervision or management provided by the Operations Supervisor or Environmental Coordinator.

All employees shall follow good housekeeping practices, which will result in a cleaner working area and a safer facility.

XIII. Emergency Telephone Numbers

DEQ – State Water Control Board

5636 Southern Blvd.
Virginia Beach, VA
23462
Information: (757) 518-2000

DEQ – State Air Pollution Control Board

5636 Southern Blvd.
Virginia Beach, VA
23462
Information: (757) 518-2000

Newport News Police Dept.

EMERGENCY 911

2600 Washington Avenue
Newport News, VA 23607
Information: (757) 926-870

Peninsula Health Center

416 J. Clyde Morris Blvd.
Newport News, VA 23606
Information: (757) 594-7300

Newport News Fire & Emergency Medical

EMERGENCY 911

2400 Washington Avenue
Newport News, VA 23607
Information: (757) 926-8404

United States Coast Guard

Marine Safety Center
200 Granby Mall, Suite 700
Norfolk, VA 23510
Information: (757) 668-5555

O & M MANUAL

Appendix 1

PERSONNEL RESPONSIBILITIES

I. Terminal Manager

- Overall responsibility for terminal operation, maintenance and governmental compliance with all laws and regulations.
- Maintains the O&M Manual, VPDES permit and the SWPPP.

II. Operations Supervisor, Environmental Coordinator

- Responsible for operation of the storm-water collection and treatment system
- Calls testing lab
- Monitors pond level
- Authorizes Start / Stop of well
- Authorizes Start / Stop of Pier Collection System
- Monitors safety of system operations
- Maintains and monitors maintenance of system
- Starts and stops Pier pumps as needed
- Starts and stops pond pumps to the river.
- Records all start and stop times during their shift of control.
- Inspects ditch-line and settling pond on a shift-by-shift basis.
- Records items needing attention in the Daily Log

IV. Maintenance Supervisor and CMMS Administrator

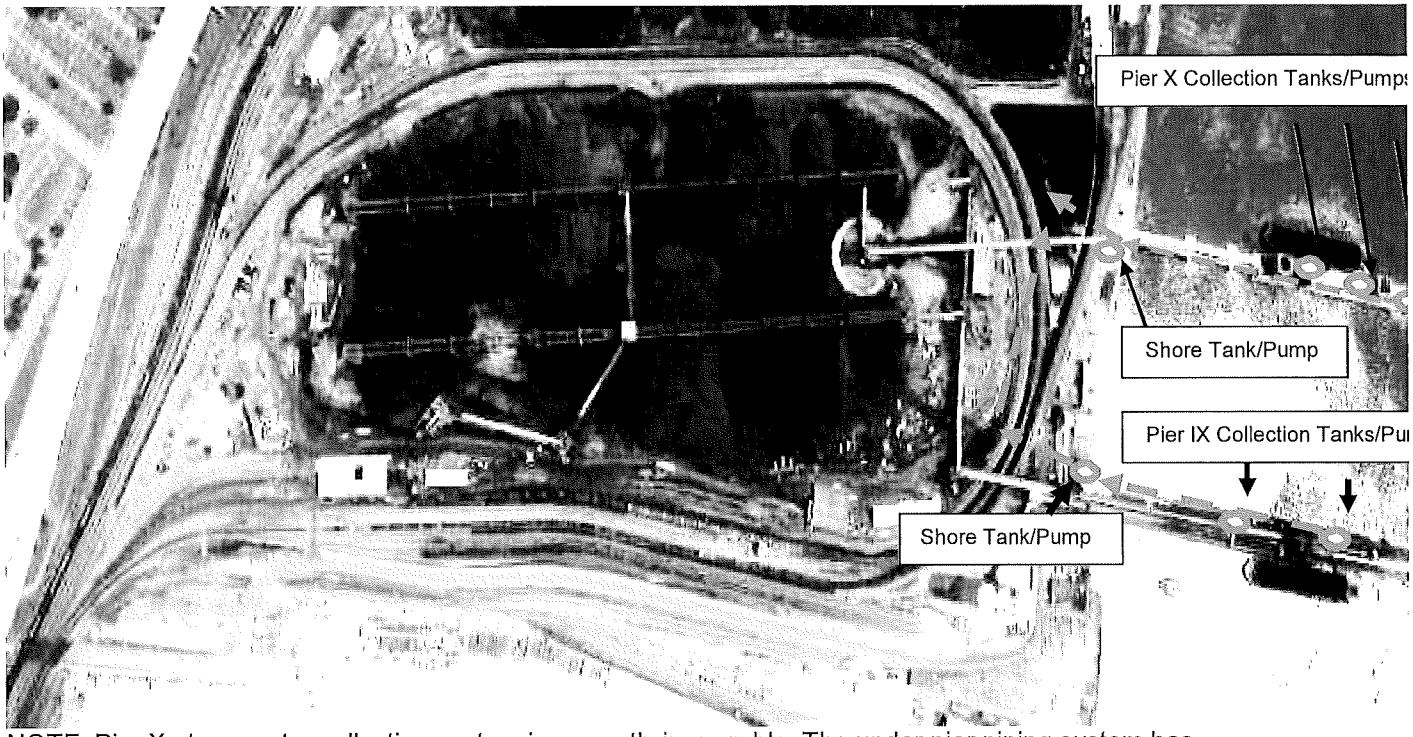
- Organizes and assist with repairs as requested by Environmental Coordinator.

Appendix 2

Facility map showing the following:

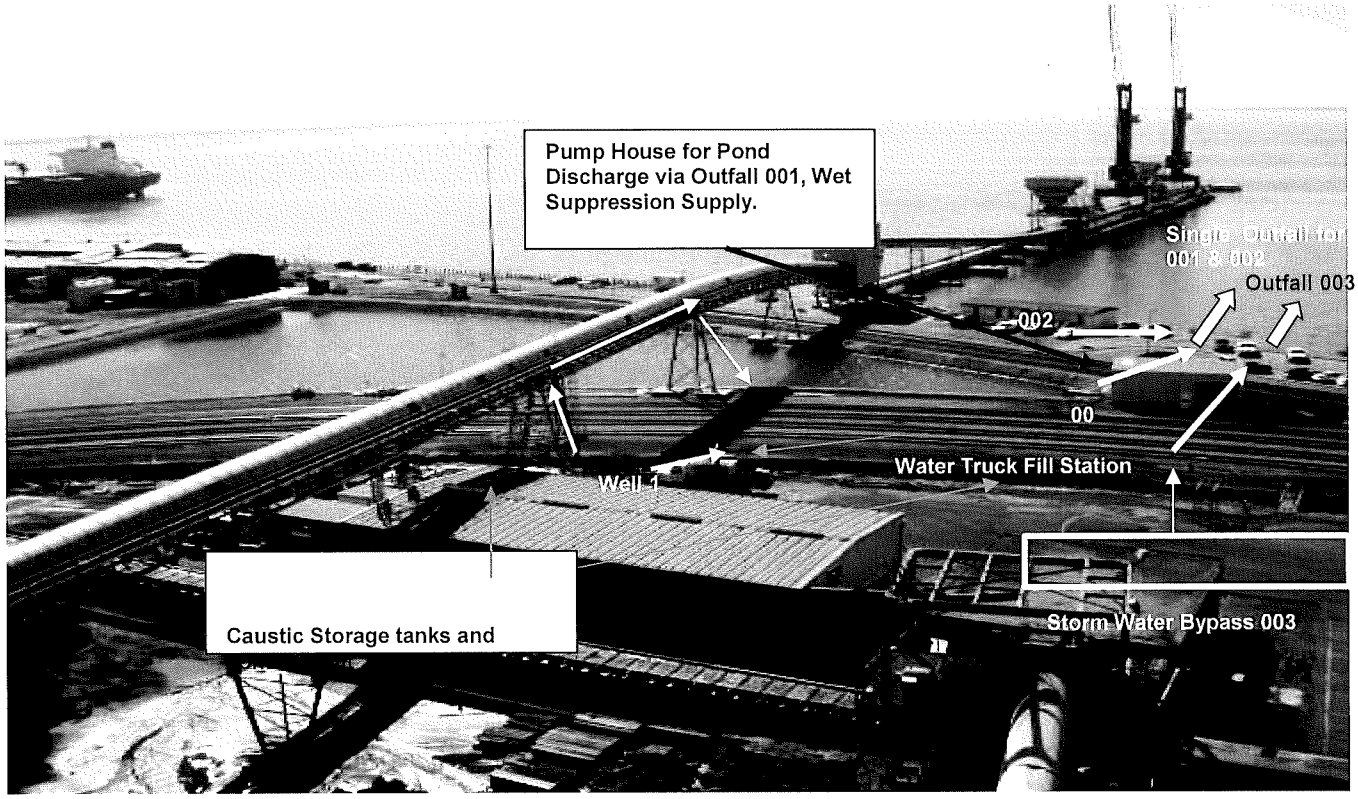
1) **Pier IX and Pier X storm water collection tanks**
2) **Pier IX routing of water from pier collection tanks to shore collection tanks and then pumping to perimeter ditch line with drainage to pond**
3) **Pier X routing of water from pier collection tanks to shore collection tank and then to retention pond**
4) **Storm water by-pass**
5) **Well location**
6) **Caustic storage tank location**
7) **Underground storage tank location**
8) **Aboveground storage tank location**
9) **Transformer location**
10) **Fuel dock location**

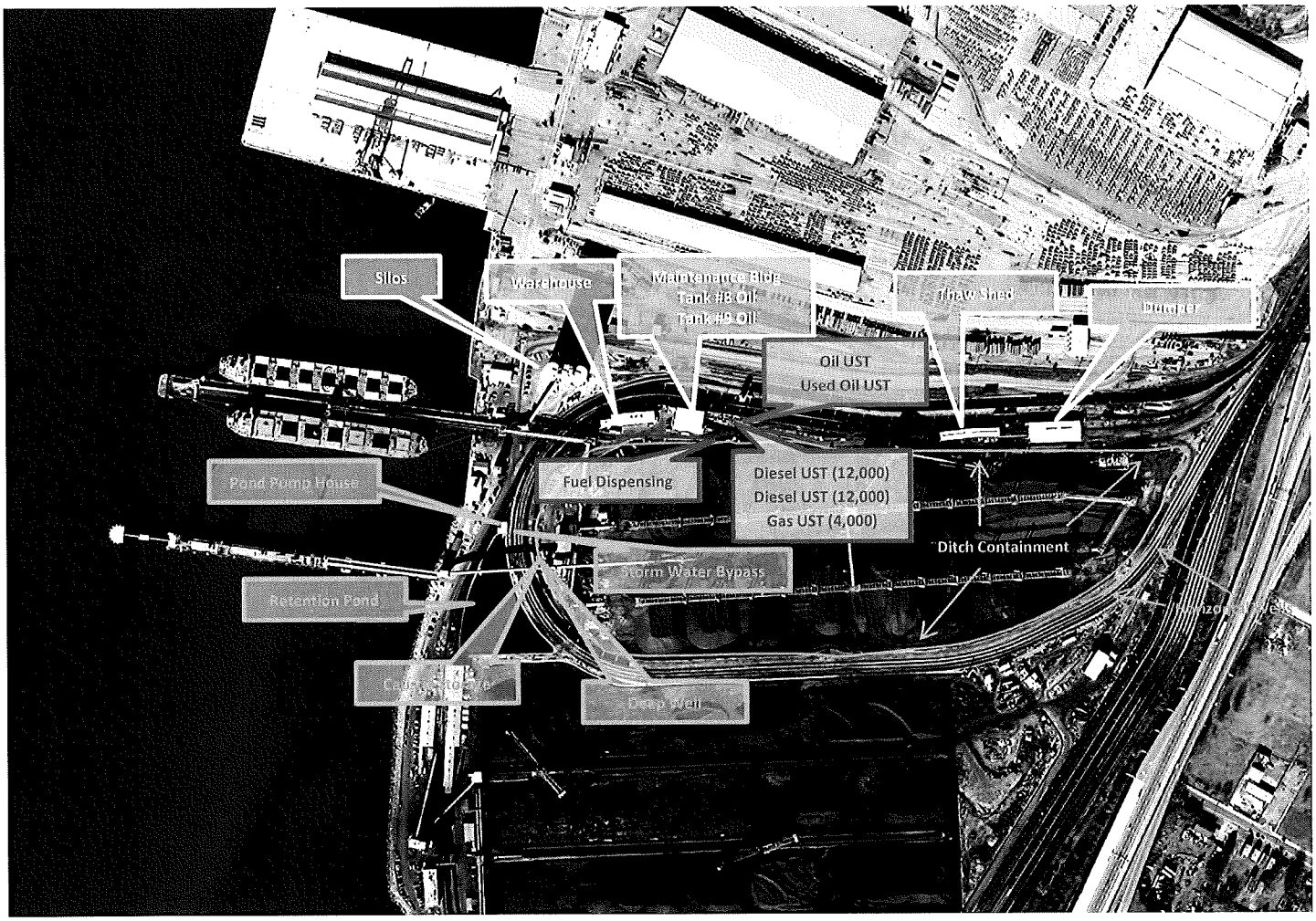
Pier IX & Pier X Storm Water Collection and Pump Routing To Retention Pond



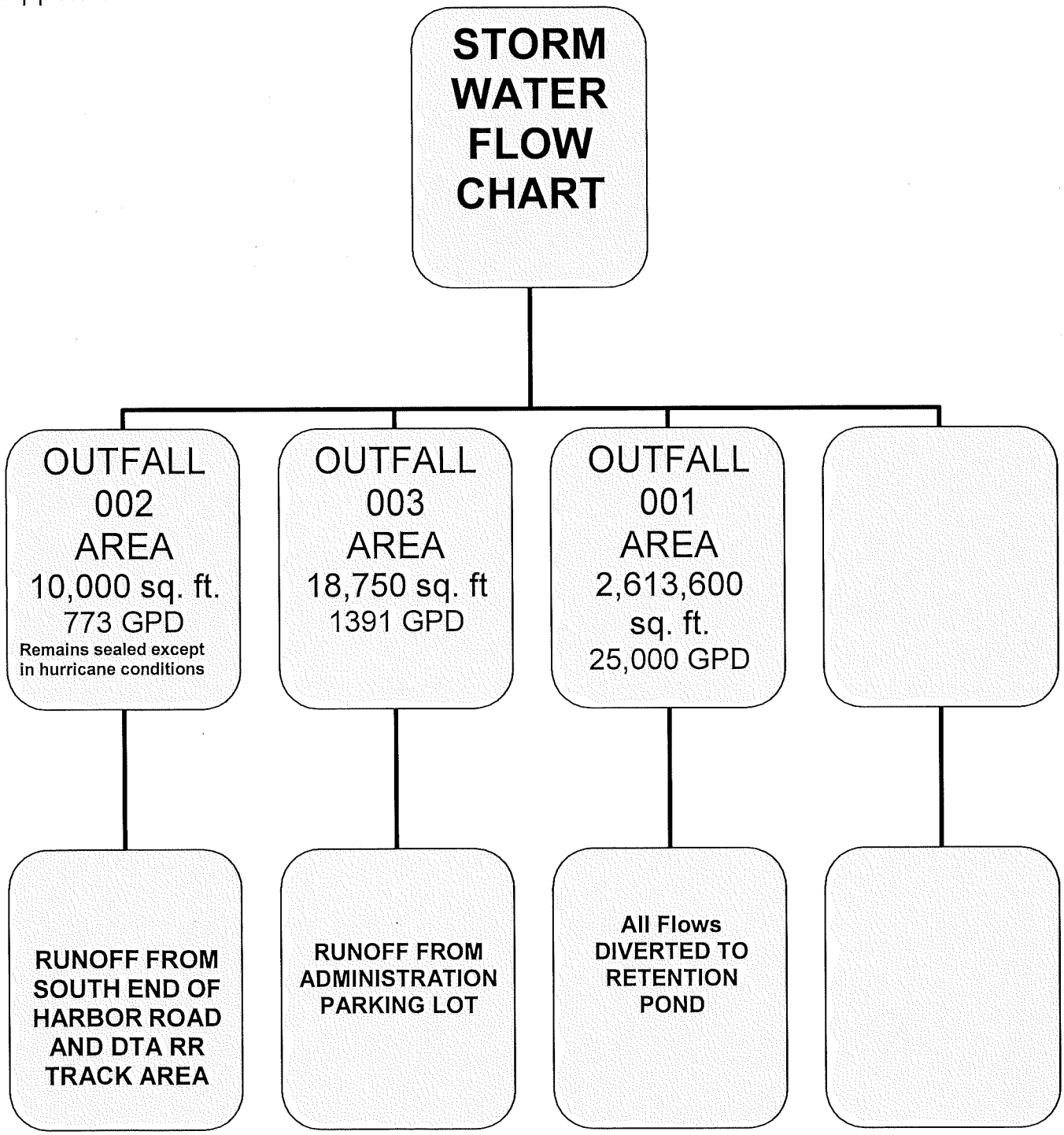
NOTE: Pier X storm water collection system is currently inoperable. The under pier piping system has sustained severe damage from debris in the river at high tide.

Retention Pond and Outfall Layout




Silos
Warehouse
Maintenance Bldg.
Tank #8 Oil
Tank #9 Oil
Oil UST
Used Oil UST
Pond Pump House
Fuel Dispensing
Diesel UST (12,000)
Diesel UST (12,000)
Gas UST (4,000)
Ditch Containment
Storm Water Bypass
Retention Pond
Deep Well

Appendix 3



ALL FLOW RATES ARE BASED ON THE NATIONAL WEATHER BUREAU LOCAL AVERAGE RAINFALL OF 45.77 INCHES PER YEAR

O & M MANUAL

Appendix 4

SWITCHING THE FACILITY FROM POND WATER TO CITY WATER

THIS PROCEDURE MUST BE COMPLETED IN THE CORRECT ORDER.
POND WATER TO CITY WATER

* Rack out the Stackout pump at the dumper mcc.
- Rack out the 150 Rainbird pump at T2. While in the Stackout mcc switch the toggle to city water (located in the Northwest corner of building)
- Rack out the Reclaim pump inside Reclaim mcc.
- Rack out the 1900 #1 inside Reclaim mcc.
- Rack out the 1900 #2 inside Reclaim mcc.
- Rack out the charge pump "pond supply pump" inside Reclaim mcc.
- Switch the toggle in Reclaim to city (located in the pump room North wall left of door to mcc)
- Turn the 1900 #1 to the off position inside of the pond pump house.
- Turn the 1900 #2 to the off position inside of the pond pump house.
- Turn the charge pump to the off position inside of pond pump house.
- Close valve # 26 inside of pond pump house.
- Close valve #29 inside of pond pump house.
- Open a perimeter rainbird gun and leave open. (This will relieve pressure in the piping system. If this is not completed the backflow preventer in the dumper may trip during the transition)
- Go to the dumper pipe room and open the blue limitorque valve inline with the fire pump.
  1) Turn the limitorque to the off position.
  2) Pull the clutch lever completely to the left and continue to hold.
  3) Turn the open/close handle counter clockwise until full open limits have been reached.

  NOTE: Please refer to picture for better understanding.
- The facility is now on city water.
- The perimeter rainbird can now be closed.
- Rack in pumps.
  Stackout pump at the dumper.
  150 rainbird pump at T2.
  Reclaim pump in the Reclaim mcc
- While on city water the 1900 #1, 1900 #2 and the charge pump must remain racked out.

NOTE: The terminal manager must be made aware when placing the facility on city water and the start and stop times must be documented.

O & M MANUAL

Appendix 5
SWITCHING THE FACILITY FROM CITY WATER TO POND WATER

THIS PROCEDURE MUST BE COMPLETED IN THE CORRECT ORDER.

CITY WATER TO POND WATER

- Rack out the Stackout pump at the dumper.
- Rack out the 150 Rainbird pump at T2. While in the Stackout mcc switch the toggle to pond water (located in the Northwest corner of the building)
- Rack out the Reclaim pump inside Reclaim mcc. While in Reclaim switch the toggle to pond water (located in the pump room North wall to the left of mmc door)
- Close the blue limitorque valve at the dumper.
  1) Pull the clutch lever completely to the left and continue to hold the lever.
  2) Turn the open/close handle clockwise until full closed limits are reached.
  3) Set the valve to the remote/automatic position.

  NOTE: Refer to picture of limitorque.
- Open a perimeter rainbird gun and leave open. (This will relieve pressure from the piping system and help bleed air while switching back to pond water)
- Rack in the charge pump "pond supply pump" inside the Reclaim mcc.
- Rack in the 1900 #1 inside Reclaim mcc.
- Rack in the 1900 #2 inside Reclaim mcc.
- Open valve #26 inside the pond pump house.
- Open valve #29 inside the pond pump house.
- Ensure ball valve #1 is open and open the bypass. (This will prevent air/water hammers and help bleed air from the system) inside of the pond pump house.
- Turn the charge pump to the start/on position. Inside the pond pump house.
- The facility is now on pond water. Allow the water to run for 10 minutes and purge the air from the system. After the air has been purged close the bypass in the pond pump house. (Ball valve 1 must remain open)
- Select the pump that has the valves set for pumping to the loop (1900 #1 or 1099 #2) and turn to the remote position. (Refer to pumping pond water to the loop to determine witch pump shall be turned on) Only turn one of the 1900s on, 1 pump to the loop & 1 pump in the off/rest position
- Close the perimeter rainbird that was opened during the transition.

NOTE: The Terminal Manager must be notified the facility is back on pond water. Start & stop times must be documented.

Appendix 6

DISCHARGING TO THE RIVER

PROCEDURES FOR DISCHARGING THE 1900 # 1 TO THE RIVER

- Check pump for correct fluid level.
- Ensure priming valve #1 is open.
- Open valve #28.
- Ensure valves #25 & #26 are in the closed position.
- Open valve # 27.
- Once flow has begun the pump shall be set in the "Local" position and started.

PROCEDURES FOR DISCHARGING THE 1900 # 2 TO THE RIVER

- Check pump for correct fluid level.
- Ensure priming valve #2 is in the open position.
- Close valve #25.
- Open valve #24.
- Once flow has begun the pump shall be set to the local position and started.

NOTE: DO NOT RUN BOTH PUMPS AT THE SAME TIME UNLESS THERE IS A FLOOD CONDITION. ALWAYS NOTIFY SUPERVISOR OF PUMPING TO THE RIVER. LOG START & STOP TIMES AND MAKE SURE THE WATER IS SAMPLED.

O & M MANUAL

Appendix 7 – Examples of Discharge Monitoring Reports for Outfalls 001 & 003

Permitted Facility: Kinder Morgan Bulk Terminals - Pier IX
Permittee Name: Kinder Morgan Bulk Terminals Incorporated
Permit Number: VA0057142

Physical Address: 1900 Harbor Access Rd
Newport News, VA, 23607
Mailing Address: 1900 Harbor Access Rd
Newport News, VA, 23607

COMMONWEALTH OF VIRGNINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES)
INDIVIDUAL PERMIT
DISCHARGE MONITORING REPORT (DMR)

Monitoring Period	
FROM	TO
12/01/2022	12/31/2022

Submitted:

RETURN TO:
Department of Environmental Quality
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach VA 23462
NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM AND RETURNING IT.

Outfall Number: 001
Discharging: Yes

Parameter		Quantity or Loading			Quality or Concentration				No. Ex	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
001 FLOW	Reported	**********	2.736	MGD	**********	**********	**********	-		1/M	EST
	Required	**********	NL	MGD	**********	**********	**********	-		1/M	EST
002 pH	Reported	**********	**********	-	7.31	**********	7.31	SU		1/M	GRAB
	Required	**********	**********	-	6.0	**********	9.0	SU		1/M	GRAB
004 TSS	Reported	**********	**********	-	**********	**********	13.8	MG/L		1/M	GRAB
	Required	**********	**********	-	**********	**********	50	MG/L		1/M	GRAB
361 IRON, TOTAL RECOVERABLE	Reported	**********	**********	-	**********	**********	4.51	MG/L		1/M	GRAB
	Required	**********	**********	-	**********	**********	NL	MG/L		1/M	GRAB

Outfall Comments:
DEQ Comments: QL's - TSS = 1.0 mg/l; Total Recoverable Iron = 0.5 mg/l

O & M MANUAL

Permitted Facility: Kinder Morgan Bulk Terminals - Pier IX
Permittee Name: Kinder Morgan Bulk Terminals Incorporated
Permit Number: VA0057142

Physical Address: 1900 Harbor Access Rd
Newport News, VA, 23607
Mailing Address: 1900 Harbor Access Rd
Newport News, VA, 23607

COMMONWEALTH OF VIRGNINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES)
INDIVIDUAL PERMIT
DISCHARGE MONITORING REPORT (DMR)

Monitoring Period	
FROM	TO
07/01/2022	12/31/2022

Submitted:

RETURN TO:
Department of Environmental Quality
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach VA 23462
NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM AND RETURNING IT.

Outfall Number: 003
Discharging: Yes

Parameter		Quantity or Loading			Quality or Concentration				No. Ex	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
002 pH	Reported	*********	*********	-	7.04	*********	7.04	SU		1/6M	GRAB
	Required	*********	*********	-	6.0	*********	9.0	SU		1/6M	GRAB
004 TSS	Reported	*********	*********	-	*********	*********	203.2	MG/L		1/6M	GRAB
	Required	*********	*********	-	*********	*********	NL	MG/L		1/6M	GRAB
199 FLOW, PRECIPITATION EVENT	Reported	*********	.008509	MG	*********	*********	*********	-		1/6M	EST
	Required	*********	NL	MG	*********	*********	*********	-		1/6M	EST
361 IRON, TOTAL RECOVERABLE	Reported	*********	*********	-	*********	*********	2.62	MG/L		1/6M	GRAB
	Required	*********	*********	-	*********	*********	NL	MG/L		1/6M	GRAB

Outfall Comments:
DEQ Comments: REPRESENTS OF 002; QL's - TSS = 1.0 mg/l; Total Recoverable Iron = 0.5 mg/l;