COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2103
www.deq.virginia.gov

L. Preston Bryant, Jr
Secretary of Natural Resources

David K. Paylor
Director

Francis L. Daniel
Regional Director

June 24, 2008

Mr. Chris Holt
Environmental Health and Safety/Pier IX
Kinder Morgan Terminals/Pier IX
P. O. Box 38
Newport News, VA 23607

Re: VPDES Permit No. VA0057142
Kinder Morgan Bulk Terminals/Pier IX
Newport News, Virginia

Dear Mr. Holt:

Thank you for meeting with us on May 19, 2008, to discuss the company's upcoming plans for scheduled maintenance of the facility's storm water management system. The coal handling and transfer facility utilizes a perimeter collection ditch and large volume retention pond to ensure storm water runoff and wet suppression wastewaters comply with the terms and conditions of the current VPDES permit, upon release from outfall 001.

As detailed in our meeting, and again in correspondence dated June 17, 2008, the company determined that the retention pond has filled with coal fines and other solids over the last few years. As a result, the available capacity in the pond has been significantly reduced, thus impacting its function as a water quality management practice.

We have reviewed your plans and timelines to accomplish removal of coal fines from the facility's retention pond and do not object to the proposed project as described. If this activity is necessary on a regular basis, it may be prudent to develop a standard operational procedure (SOP) for all aspects of this activity and make it part of the facility's storm water pollution prevention plan, as a formal revision.

The limitations and monitoring requirements for outfall 001 remain applicable to any discharge(s) of wastewaters identified for that discharge point, for the duration of the planned maintenance event.

If there are any questions, or if we can be of any further assistance, please feel free to contact this office.

Sincerely,

Carl D. Thomas
Environmental Engineer, Sr.

cc: DEQ - TRO/file (0451, P-AP)

KINDER MORGAN

Zu:
(0051, p.Ap)

June 17, 2008

Mr. Carl D. Thomas
Environmental Engineer Senior
Department of Environmental Quality
5636 Southern Boulevard
Virginia Beach, VA 23462

Dear Mr. Thomas:

As a result of daily monitoring, we have concluded that the area and capacity for coal fines in our settling pond has been compromised. This due to constant accumulation of coal fines since our last cleaning. It has been eight years since cleaning was last completed and this is typical of our cleaning cycles.

As you know, our facility stores coal in a stockpile yard. We collect wet suppression and storm water runoff from the storage area in a perimeter ditch. The perimeter ditch flows into our pond for settlement of solids.

In an effort to regain maximum settling capacity, it is now time to clean the pond. To eliminate water drainage in our pond while cleaning, wet suppression and storm water runoff will collect in our perimeter ditch during the process.

As required by General Condition U of our permit, we are formally requesting your approval to temporarily bypass utilization of our pond as a settlement area during the cleaning process. We request that the general "Prohibition of Bypass" in Section II.U.3 of our permit not apply during this temporary cleaning process.

Removal of the coal accumulation should be complete in about twenty-one working days. It should be noted that all coal recovered from the pond will be put back into our stockpile area for customer use.

If absolutely necessary, we will discharge water from our perimeter ditch to the James River. We will use a portable pump to direct water from the perimeter ditch into the river through outfall 003. As per our conversation on May 19, we will sample outfall 003 as required when and if we discharge to the river. This should only occur if excessive rainfall is experienced during the cleaning process. Our ditches will be capable of maximum storage prior to the cleaning event. If discharge occurs, temporary filters will be applied to minimize the discharge of solids during the pumping process.

5/19/08
WTG.

KINDER MORGAN

We will be utilizing city water for our dust suppression during the cleaning event. As discussed, we will sample for TSS, chlorine and any other components the DEQ advises us to sample.

The pond cleaning is scheduled to begin on Monday July 14 and end August 2 or sooner. These dates are essential due to a planned maintenance outage at the terminal during this time frame.

We trust this letter meets the notification requirements needed to request an anticipated bypass. We respectfully request the Department of Environmental Quality approval.

If you need further information or have any questions, please do not hesitate to contact me at (757-928-1578).

Sincerely,
Chris Holt

Thomas,Carl

From: Holt, James C. [JamesC_Holt@kindermorgan.com]
Sent: Friday, June 20, 2008 12:31 PM
To: Thomas,Carl
Subject: DEQ approval request

Chris Holt
Environmental Health and Safety/Pier IX
Phone: 757-928-1578
Cell: 757-544-3916
Fax: 757-928-1560
Email: jchris_holt@kindermorgan.com

KINDER MORGAN

http://www.kindermorgan.com

File:
(0451, P-AP)

COMMONWEALTH of VIRGINIA

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L. Preston Bryant, Jr
Secretary of Natural Resources

David K. Paylor
Director

Francis L. Daniel
Regional Director

October 23, 2006

Mr. Robert Coffey
Facility Manager, Sr.
Kinder Morgan Terminals/Pier IX
P. O. Box 38
Newport News, VA 23607

Re: VPDES Permit No. VA0057142
Kinder Morgan Bulk Terminals/Pier IX
Newport News, Virginia

Dear Mr. Coffey:

On October 10, 2006, a copy of an Operations & Maintenance manual was submitted to the Department for review and approval. The submission of this manual is a requirement of the recently reissued VPDES permit.

Based on a review of the manual, several deficiencies are believed to exist. These omissions and/or lack of sufficient details have been identified on the attached O&M manual checklist. It is requested that the items noted on the attachment are addressed in some manner to reflect actual operational conditions at the facility. A revised and approvable O&M manual is requested by not later than January 10, 2007.

If there are any questions, or if we can be of any further assistance, please feel free to contact this office.

Sincerely,

Carl D. Thomas
Environmental Engineer, Sr.

cc: DEQ - TRO/file (0451, P-AP)

Enclosure:

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

(1) Five hundred micrograms per liter (500 ug/l);
(2) One milligram per liter (1 mg/l) for antimony;
(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application.
(4) The level established by the State Water Control Board.

3. Operations and Maintenance (O & M) Manual

The permittee shall review the existing O & M Manual and notify the DEQ Tidewater Regional Office, in writing, that it is still current. This O&M Manual shall include descriptions of the treatment works operations and its contributing sources, and practices necessary to achieve compliance with this permit. The revised Manual shall specifically address: treatment system operation; routine and emergency maintenance; wastewater and/or storm water collection, treatment and disposal/discharge; permitted outfall locations; effluent sampling and preservation procedures; laboratory testing, analysis and recording of results; submittal and retention of all records, reporting forms and testing results; and a listing of the personnel responsible for the above activities. Also included in the Manual shall be a list of facility, local and state emergency contacts; procedures for reporting and responding to any spills/overflows/ treatment works upsets; a copy of the VPDES permit; and copies of all reporting forms. If the O&M Manual is no longer current, a revised O&M Manual shall be submitted for approval. Once approved, this revised manual shall become an enforceable condition of this permit. Future changes to the facility must be addressed by the submittal of a revised O & M Manual.

Letter/Revised O&M Manual Due: No later than October 10, 2006

4. Quantification Levels Under Part I.A.

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

Effluent Characteristic	Quantification Level
Total Suspended Solids	1.0 mg/l
Total Phosphorus	0.1 mg/l

O & M MANUAL REVIEW CHECKLIST - INDUSTRIAL FACILITIES

Legend: ☑ = information complete ⊗ = information missing or incomplete
☑- = information provided but may be lacking specificity n/a = not applicable

A. Preliminary Information

☑ 1. Title Page

☑ 2. Table of Contents

⊗ 3. Introduction, including description of facility operations, contributing sources of wastewater, and type(s) of wastewater and/or storm water produced

No discussion of collocated industrial activity (Synfuel) plant's contribution to perimeter ditch system; application identified potential to handle bulk materials other than coal and Portland cement, but no discussion provided as to additional products and/or precautions.

☑- 4. Site plan of sufficient scale, noting process buildings, storage areas, treatment works

B. Wastewater Treatment Facilities

1. Description and Operation

☑- a. Description of wastewater treatment facilities

A discussion pertaining to wastewater discharges occurring at vehicle maintenance locations should be provided noting the types and volumes of potentially contaminated wastewaters, how they are generated and when it is believed necessary that they are collected and diverted to on-site oil/water separator(s). If on-site oil/water separators discharge to the facility's perimeter ditch system, then maintenance of these treatment systems shall be part of the manual

☑- b. Schematic flow diagram of process showing all treatment units, components and water flow(s) to/from each unit

Content contingent upon response to B.1.a., above.

☑- c. General description, purpose and function of each unit and type of treatment accomplished by each unit

Content contingent upon response to B.1.a., above.

☑- d. Description of normal operating mode

Content contingent upon response to B.1.a., above.

☑- e. Normal operating procedures

Content contingent upon response to B.1.a., above.

⊗ f. Common operating problems and solutions/operating mode modifications to remedy problems

Content contingent upon response to B.1.a., above.

⊗ g. Emergency operations and/or shutdown procedures

⊗ h. List of process chemicals used

⊗ i. Methods and precautions for chemical storage and use

☑ j. Material Safety Data Sheets (MSDS), or a reference to the MSDS sheets if they are maintained current in a separate location or document

2. **Maintenance:** **Content contingent upon response to B.1.a., above.**

⊗ a. Schedule for routine (preventative) maintenance tasks to be preformed on daily, weekly, monthly, semiannual and/or annual basis

⊗ b. Procedures for performing routine maintenance tasks

⊗ c. Schedule for routine testing of wastewater treatment facilities and back-up systems

⊗ d. Disposal of solids, sludge, etc. from the cleaning of the treatment system

C. Effluent Sampling, Preservation and Analysis

NOTE: If effluent sampling and analysis is performed by a contract laboratory and/or consultant, this section may either duplicate their procedures, or may reference the contract laboratory and provide lab/contractor name, address, telephone number and point of contact. This section should then also include procedures for contacting the laboratory and scheduling a sampling event.

⊗ 1. Map and description of permitted sampling point(s) listed by outfall number matching those in the VPDES permit

⊗ 2. List or chart of laboratory and/or field tests for VPDES/VPA permit requirements and proper analytical methods

⊗ 3. Explanation of grab and composite sampling as defined in VPDES/VPA permit and proper sampling techniques to obtain a representative sample, including procedures for collecting grab and/or composite samples and operating an automatic sampler, if used

⊗ 4. Explanation and procedures for field tests and proper sample preservation

⊗ 5. Description of sampling safety precautions

⊗ 6. Procedures for reporting results of field tests

⊗ 7. Procedures for analyzing effluent samples; or, procedures for delivering samples to laboratory or pick up by laboratory personnel

⊗ 8. Procedures for analysis of samples; or, procedures for receiving analytical results from laboratory

n/a 9. Procedures for groundwater well monitoring and result reporting (If applicable)

D. Reporting, Data and Records Submittal and Retention; and Personnel Responsibilities

⊗ 1. Requirements for operator's daily operating logs, worksheets, etc.

⊗ 2. Reporting requirements for VPDES/VPA permits(s)

⊗ 3. Detail procedures for completing monthly, quarterly, semi-annual, annual reporting forms and/or Discharge Monitoring Reports (DMR's)

⊗ 4. Discussion of requirement to submit data to DEQ and tabular presentation of required due dates or actions stipulated in the VPDES/VPA permit

☑ 5. Addresses and telephone numbers of the Regional Office of the DEQ

⊗ 6. Methods for preserving and retaining treatment records, logs, test results and reporting forms

D. Reporting, Data and Records Submittal and Retention; and Personnel Responsibilities (continued)

⊗ 7. Statement of length of time to retain all records

☑- 8. Outline of personnel responsible for all phases of operation and maintenance or treatment system, effluent sampling and testing, and reporting

E. Emergency Contact List and Procedures for Reporting and Responding to Emergencies, Spills, Overflows, and/or Upsets

☑- 1. Discussion of safety hazards associated with treatment works, treatment chemicals, sampling and laboratory equipment, and chemicals

☑- 2. Emergency contact list with telephone numbers, including appropriate plant personnel, local authorities, State and Federal agencies, and emergency clean-up contractors

Facility staff identified in generalities, contact information not apparent

☑- 3. Discussion of procedures for reacting to and reporting of emergencies, spills, overflows, and/or plant upsets

O & M MANUAL REVIEW CHECKLIST - INDUSTRIAL FACILITIES

F. Copies of VPDES/VPA Permit(s), Operator's Logs and Worksheets, Monitoring Reports and Forms, and Laboratory Records/Datasheets

⊗ 1. Provide complete copy of VPDES/VPA permit(s)

⊗ 2. Provide copies of logs, worksheets and other paperwork completed to ensure compliance with the permit and reporting requirements

⊗ 3. Provide copies of monitoring reports and forms, including DMRs

⊗ 4. Provide copies of laboratory records/datasheets typically received from in-house and/or contract lab(s)

NAME OF FACILITY: Kinder Morgan Bulk Terminals – Pier IX

PERMIT NUMBER: VA0057142

DATE OF RECEIPT: October 10, 2006

DATE OF REVIEW: October 23, 2006 (document submitted with DMR package and routing through TRO delayed prior to receipt for review)

DATE OF APPROVAL: Pending

COMMENTS:

KINDER MORGAN
ENERGY PARTNERS, L.P.

KINDER MORGAN BULK TERMINALS/PIER IX

O&M MANUAL

OCTOBER, 2006

O & M MANUAL

Table of Contents

October, 2006

Storm Water Collection and Treatment System

I. Introduction

KMBT's Pier IX Terminal is a bulk material handling terminal located in downtown Newport News. The products transferred through Pier IX Terminal are coal and Portland cement. The coal is stockpiled on our 60-acre site with a total storage capacity of 1.2 million tons. 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. VA0057142.

II. State Discharge Requirements

Wastewater discharges from the Pier IX Terminal are authorized under VPDES Permit No. VA0057142. Discharges are monitored regularly as required by the permit.

III. Description of Waste Water Treatment Facility

There are two separate storm water collection systems at Pier IX. The first system collects storm water runoff from the coal storage yard and the second collects storm water runoff from the pier and immediately adjacent shore area. Both of the storm water collection systems allow the storm water to flow to the settling pond. See Appendix 2 for a detailed flow chart of the two systems.

Storage Yard Storm Water Collection

The storage yard system collects water from the area inside the facility's perimeter drainage ditch. The storm water is collected and flows into the perimeter drainage ditch. The storm water collected is from coal pile runoff, the tunnel sump, the shop floor drain, the area adjacent to the maintenance building and warehouse building, and from the area adjacent to the dumper building.

The perimeter ditch is located around the coal storage area so storm water from the coal piles drains directly into the ditch and then flows to the settling pond. The automobile access tunnel has a sump, and pumps the storm water to the perimeter drainage ditch on the inside of the railroad track. The storm water runoff from the area adjacent to the facility buildings that are inside of the railroad tracks also drains to the perimeter ditch.

The perimeter ditches are graded to provide drainage toward the southern end of the facility. The only inlet to the pond (see drawing in Appendix 2) is located at the southern end of the facility.

Oil booms are used in the perimeter ditch as a precaution for preventing any oil from entering the pond. The oil booms are located at the dozer parking area and at the pond inlet.

Pier Storm Water Collection System

The Pier area system handles storm water runoff from the pier and the shoreward area immediately adjacent to the pier. Storm water runoff from the pier is contained within a ten-inch curb around the pier. The storm water runoff from the shoreward area drains to an underground tank located on shore. The storm water is collected and stored in theses areas and is pumped to the perimeter ditch on the other side of the road and allowed to gravity drain to the settling pond.

Settling Pond

Storm water is collected in the settling pond, which provides the time necessary for reducing suspended solids. The pH can be adjusted, if necessary, with caustic soda or other basic materials such as soda ash.

The pond water is pumped from the pond and sprayed over the coal piles to provide dust suppression.

IV. Specific/Detailed Description of the Equipment & Facility

The storm water collection system for the coal yard is comprised of perimeter ditches and a concrete lined pond. The pond has a storage capacity of 4.5 million gallons. The pond pump station consists of a 1000 gpm pump (150 Hp) and a 1900 gpm pump (125 Hp). These pumps are used for dust suppression and for discharging the pond water to the river.
The pier storm water collection system consists of four submersible pumps, two wet wells on the pier, one underground tank on shore, a ten-inch concrete curb around the pier, and associated piping for the pumps.

V. Description of the Industrial Operation in Connection with Which Such Facility is Used

Pier IX Terminal is a bulk marine cargo handling terminal (sic 4491) located in downtown Newport News. The products transferred through Pier IX Terminal are coal and Portland cement. The coal is stockpiled on our 60-acre site with a total storage capacity of 1.2 million tons. The Portland cement is stored in three silos with a total capacity of 35,000 tons.

VI. Personnel Responsibilities

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

VII. Operation of the Treatment Facility

Storm water is collected by means of the two collection systems described above and flows into the settling pond. The pond provides the capacity to collect and treat large quantities of storm water from the facility area. The pond also provides water needed for controlling dust emissions from the coal stockpiles.
Storm water enters the pond where suspended solids settle to the bottom of the pond. The water in the pond is recycled via pumps to overhead sprays that disperse the water over the coal piles for dust suppression.

Appendix 2 contains a map that shows the storm water outfalls for the terminal.

The water level in the pond is maintained to supply water for dust suppression spray. If the water level in the pond gets too low, the wells are used as a supplemental water supply. The lowest level for the dust suppression pumps to continue pumping 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 for some reason, the well is out of commission, then it is possible to switch to the City of Newport News 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 dumper building pump house where the valves for switching over are located. When switching to city water, the Environmental Manager is to be notified and he is to notify the City of Newport News Waterworks.

If excessive rain increases the water level to within two feet from the top of the pond's retaining wall, then the Environmental Manager or the shift Facility Manager must be notified. Either person will monitor the weather conditions to determine if a discharge is necessary.

If a discharge is necessary then the Environmental Manger or the Facility Manager must:

- Check to make sure there isn't any foreign material or petroleum residue in the water.
- Check pumping systems to ensure proper operation.
- Record start and stop times in the daily operations log book.

If it is necessary to have the discharge sampled, then the Environmental or the facility manager must:

- Call the laboratory to come out and collect a sample.
- Begin pumping from the pond.
- Collect a one-quart grab sample after 30 minutes of flow. (The 30 minutes will provide a representative sample.) Be sure the sample container is clean.
- Check the pH of the grab sample.
- Place the grab sample on ice for preservation.

The procedures explaining which valves must be turned and how to turn the pumps on are given in Appendix 5. Appendix 6 also includes a schematic diagram of the piping for the pumps.

The operating procedures for the Pier Area Water System are as follows:

The storm water collection system is automated. There are four pumping locations, two pump locations on the pier and two located on shore. Appendix 6 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 tank. The shore tank pumps then transfer the water over the road to transfer tower T-8 and then over to the perimeter ditch.

The controls for the pumps are located in the lean-to building on the west side of the sampling building. The pump control panel has six switches, each switch has three 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.

Pond Monitoring & Capacities

The settling pond water level is monitored by the Environmental Manager or the Facility Managers 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 billion 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, then the Pier Storm Water Collection System must be turned off. All pier control switches must be turned off.

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 Environmental Manager or the shift Facility Manager is required to determine if it is necessary to make a discharge from the pond or if he should turn the Pier Storm Water Collection System pumps off. If the pier storm water pumps are turned off, the curbing around the pier and shore would hold more than a 10year, 24-hour storm event until pumping to the pond could be resumed.

Facility Managers and employees are trained on the location and the operation of the controls for the Pier Storm Water Collection System.

VIII. Maintenance

Pier IX's preventive maintenance program is organized using a computer software program call Preventive Maintenance Information System (PMIS).

Refer to the PMIS manual for details on how the system works. The maintenance manager is responsible for maintaining and monitoring the system.

IX. Sampling and Laboratory Testing

Pier IX Terminal has a total of three point source outfalls, one from the settling pond and two from parking and road storm water collection.

A. Settling Pond (Outfall 001)

A sample for outfall 001 (Settling Pond) is taken once per month when a discharge is made to the river.

The sample of the settling pond outfall (001) is collected and analyzed by a selected laboratory. The characteristics, which must be analyzed, are listed on the DMR sheet provided by the State DEQ.

If a discharge is necessary, follow the procedures in Section VII of this manual.

B. Storm Water Outfalls (Outfalls 002 & 003)

Outfalls 002 and 003 are sampled and tested quarterly as required by Permit No. LA0057142. Samples are collected by contract laboratory personnel. Outfalls 004 & 005 do not require monitoring because they do not discharge "storm water associated with industrial activity." (Outfall 004 was blocked off due to the installation of the inshore pumping station for the pier Stormwater run off. Outfall 005 was blocked off in order to treat the Stormwater runoff for pH and suspended solids. Both have been removed from the permit requirements. The water is pumped to the holding pond and is treated with the storage facility Stormwater.)

X. Equipment Records

All equipment records are stored in the computer software program (PMIS) as described in Section VIII of this manual or in hard copy files in the maintenance building and OMS office.

XI. Plant Safety

The storm water can be treated with caustic soda or soda ash to raise the pH of the water. Caustic soda is stored in the pond pump building; Appendix 2 shows the location of this building. Employees must exercise caution when working around this area. Refer to the MSDS book or the Material Safety Data Sheet posted next to the caustic storage tank.

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

XII. 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) 926-8700

Newport News Fire & Emergency Medical Services
EMERGENCY 911
2400 Washington Avenue
Newport News, VA 23607
Information: (757) 926-8404

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

United States Coast Guard
Marine Safety Center
Suite 700
200 Granby Mall
Norfolk, VA 23510
Information: (757) 668-5565

Appendix 1

PERSONNEL RESPONSIBILITIES

I. Environmental Manager

1. Keep this manual updated
2. Responsible for operation of the storm water collection and treatment system.
3. Calls testing lab
4. Monitors pond level
5. Authorizes Start/Stop of well
6. Authorizes Start/Stop of Pier Collection System
7. Monitors Safety of System Operations
8. Maintains and monitors maintenance of system

II. Operation & Facility Managers

1. Starts and stops Pier Pumps as needed.
2. Starts and stops pond pumping to the river during off hours and on weekends.
3. Records all start and stop times during his shift of operations.
4. Inspects ditch-line and settling pond on a shift by shift basis.

III. Mechanics & Electricians

1. Make repairs and adjustments as required

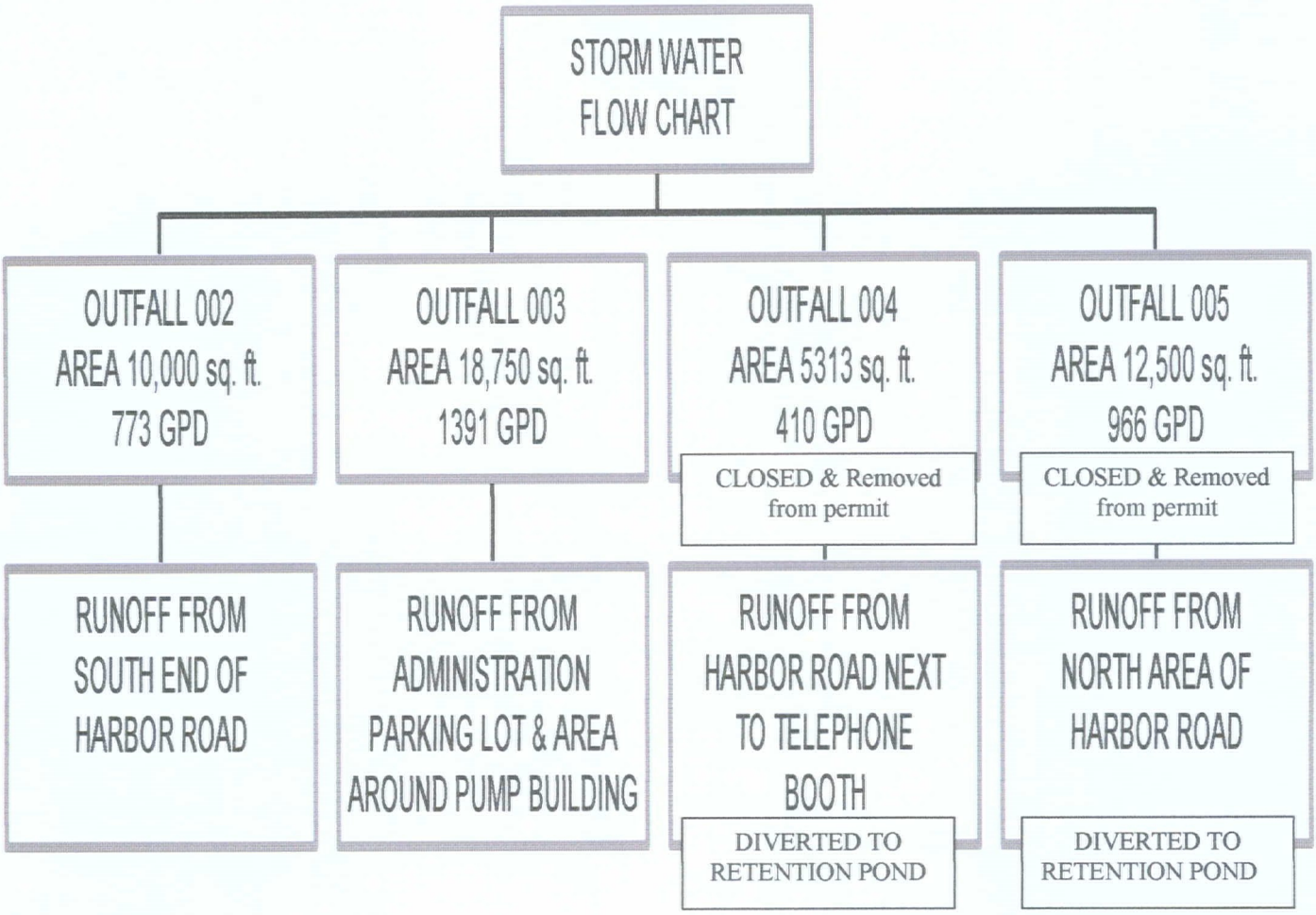
Appendix 2

Facility map showing the following.

- **Five Outfalls (004 & 005 are closed off)**
- **Well Location**
- **Caustic Storage Tank Location**

Appendix 3

Storm Water Flow Chart



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

Appendix 4

PROCEDURES FOR SWITCHING DUST CONTROL SYSTEM FROM POND WATER TO CITY WATER

To switch the water supply from the pond pumps to the city water main, the following procedure is used:

1. Turn the dust suppression "local/off/remote" switches located in the dumper and reclaim dust suppressions rooms to the "Off" position.
2. Turn the pond pump "remote/of f /local" switches located at the pond to the "Off" position.
3. Close the two yellow main gate valves to each of the two pumps.
4. Open the white by-pass valve and insure that all pressure has been relieved from the water line to facility by checking pressure gauge on the main header.
5. Close the white by-pass valve.
6. Switch the pond water/city water selector switch located in stakeout MCC near the northwest man door to "city water" position.
7. Record the time, date and enter this information in the supervisor's shift log.
8. Unlock and open the city water main stop located on Terminal Avenue.
9. Close the white 3-inch air gap valve located between the fire pump and the yellow 8-inch butterfly valve in the dumper valve room.
10. Open the two red 10-inch gate valves on either side of the 10-inch backflow prevention device.
11. Open the yellow butterfly valve located on the right hand side of the white 10 inch air gap valve.
12. Turn the dust suppression system "local/of f /remote" switches to the "remote" position.
13. The system is now set to operate the dust suppression systems from the city waster fire main.
14. Notify the City Water Billing department that we have had to switch our dust suppression systems to the city water supply and estimate the amount of time we will be using city water.
15. In the event of a fire, the above procedure should be used and then open the red post indicator valve located on Terminal Boulevard labeled "fire main" and close the blue post indicator valve labeled "potable water."

NOTE: When water for fire fighting is not needed, close the red post indicator valve Labeled "fire main" and open the blue post indicator valve labeled "potable water.

CITY WATER SUPPLY TO POND WATER SUPPLY INSTRUCTIONS

To switch the water supply from the city water supply to the pond water supply water, the following procedure is used:

1. Turn the dust suppression "local/of f /remote" switches located in the dumper and
2. reclaim dust suppressions rooms to the "Off" position.
3. Close the two red 10-inch gate valves on either side of the 10-inch backflow prevention device.
4. Close the yellow butterfly valve on the right hand side of the white 3-inch air gap valve in the dumper valve room.
5. Record the time and date and then log in supervisor's shift log.
6. Open the while 3-inch air gap valve located on the left-hand side of the yellow butterfly valve.
7. Close and lock city water main stop valve on Terminal Avenue.
8. Place the pond water/city water switch located in stakeout MCC in the "pond water" position.
9. Open the two yellow main gate valves to the pond pumps.
10. Place the system's pond pumps in the "remote" position.
11. Turn the dust suppression system local/off/remote switches to the "remote" position.

The system is now set to operate from the pond water supply.

Notify the City Water Billing Department of the time we switched off of the city water supply and the total time using the city water system.

Appendix 5

PROCEDURES FOR DISCHARGING TO THE RIVER USING 1000 GPM PUMP

- Turn valve V1 to the open position.
- Turn the "150 HP" switch to the "L" position for local start.
- Push start button.

PROCEDURES FOR DISCHARGING TO THE RIVER USING 1900 GPM PUMP

- Turn valve V3 to the open position.
- Turn the "125 HP" switch to the "L" position for local start.
- Push start button.

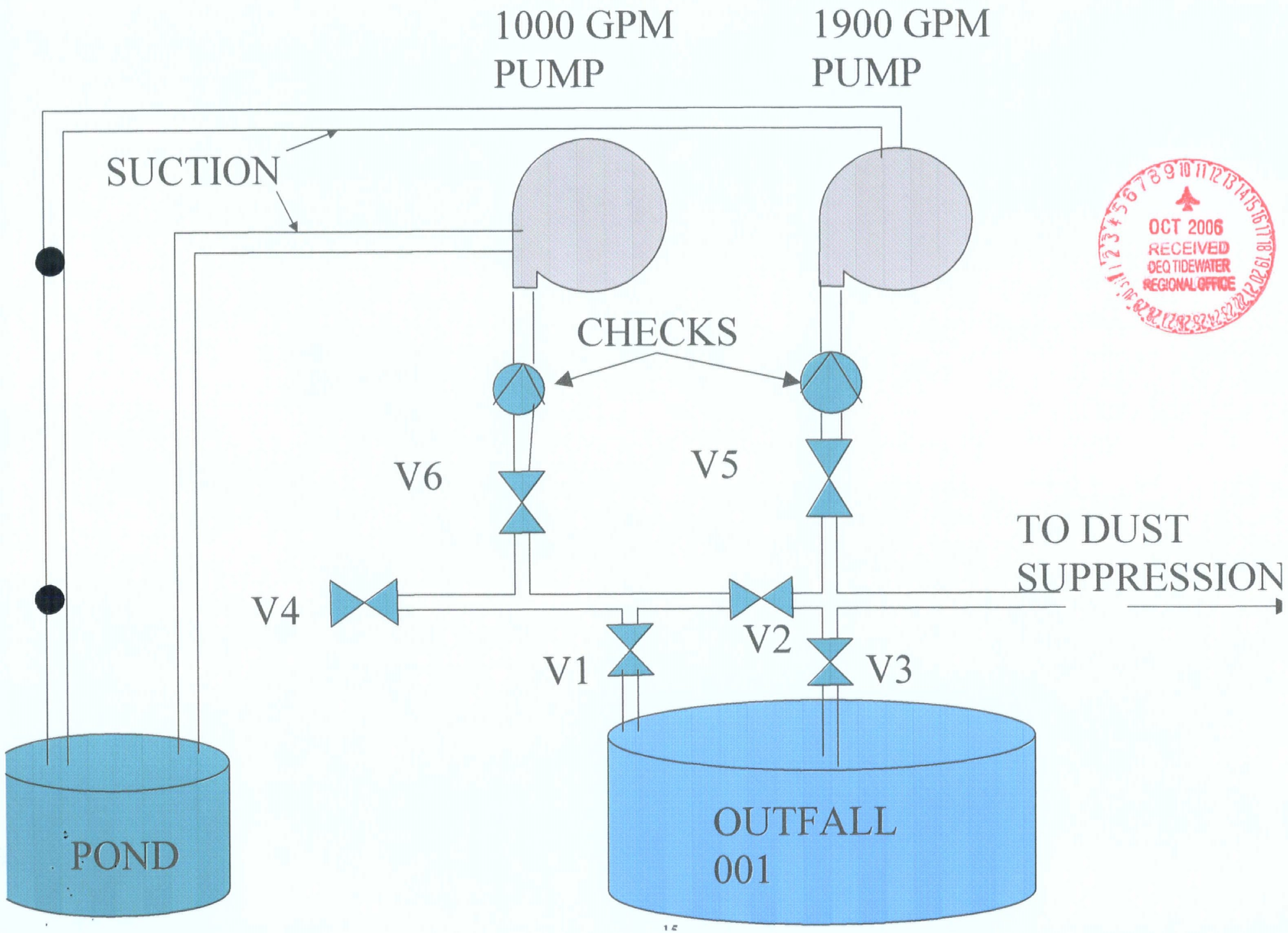
Note: **DO NOT RUN BOTH PUMPS AT THE SAME TIME EXCEPT IN A FLOOD CONDITION.**

STANDARD VALVE SETTINGS FOR DAILY OPERATION OF DUST CONTROL SYSTEM

The following procedures are for opening the proper valves for everyday operation of the dust suppression system.

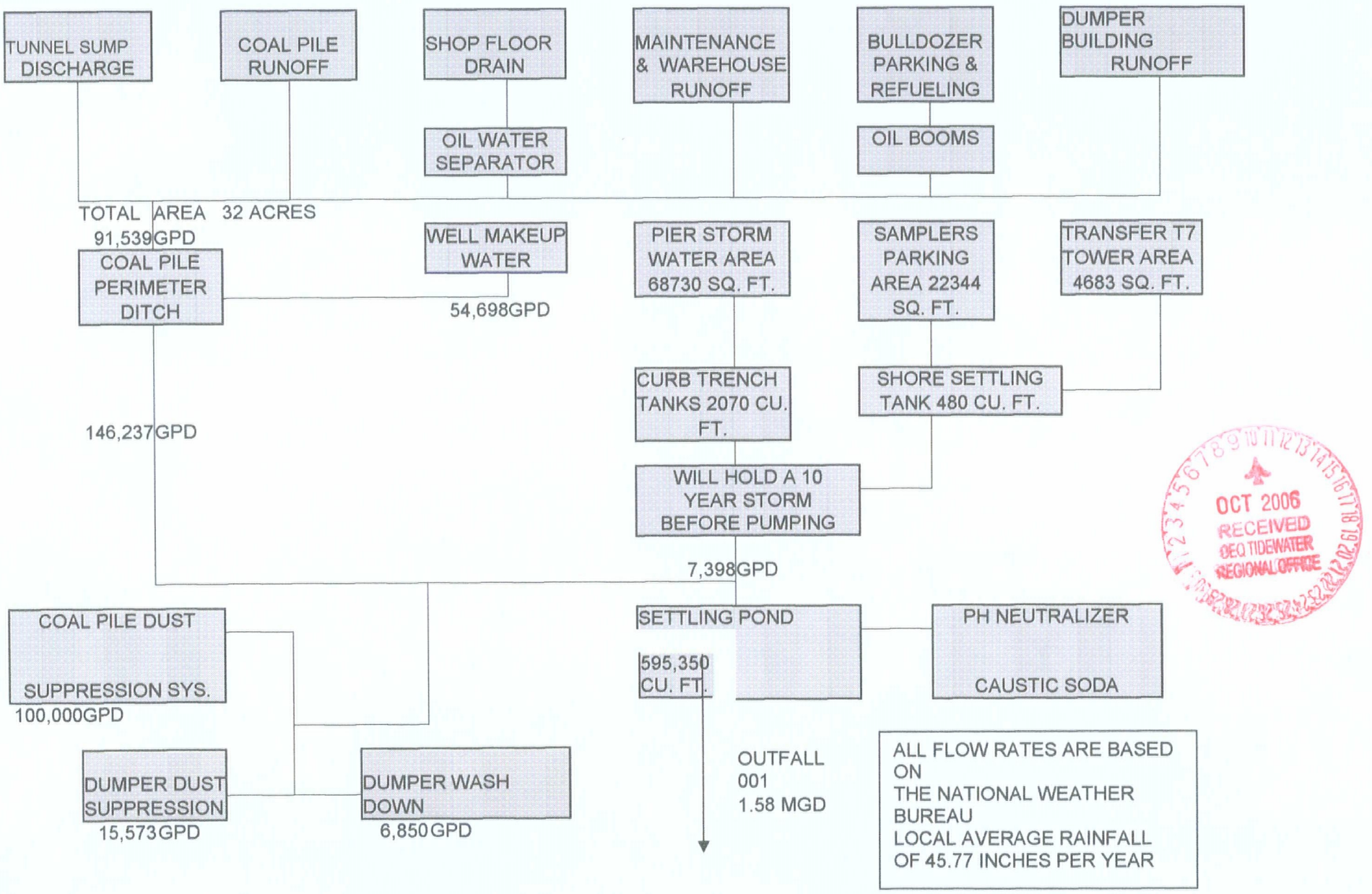
- Turn valves V1, V2, V3 and V-4 to the closed position.
- Make sure valves V-5 and V-6 are in the open position .
- Go to the control panel next to the pumps and place the switch labeled "150 HP" in the off position and the switch labeled "125 HP" to the auto position.
- The "125 HP" pump should automatically start.

VALVES V5 &V6 ARE NOMALLY OPEN



Appendix 6

Pier Area Storm Waster Collection System




OCT 2006
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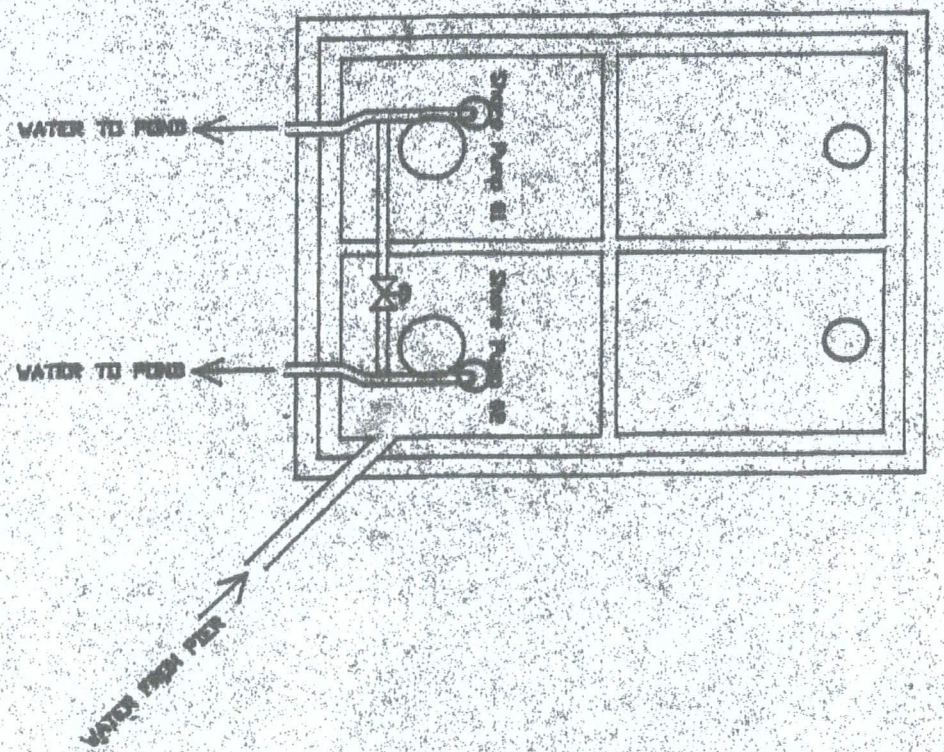
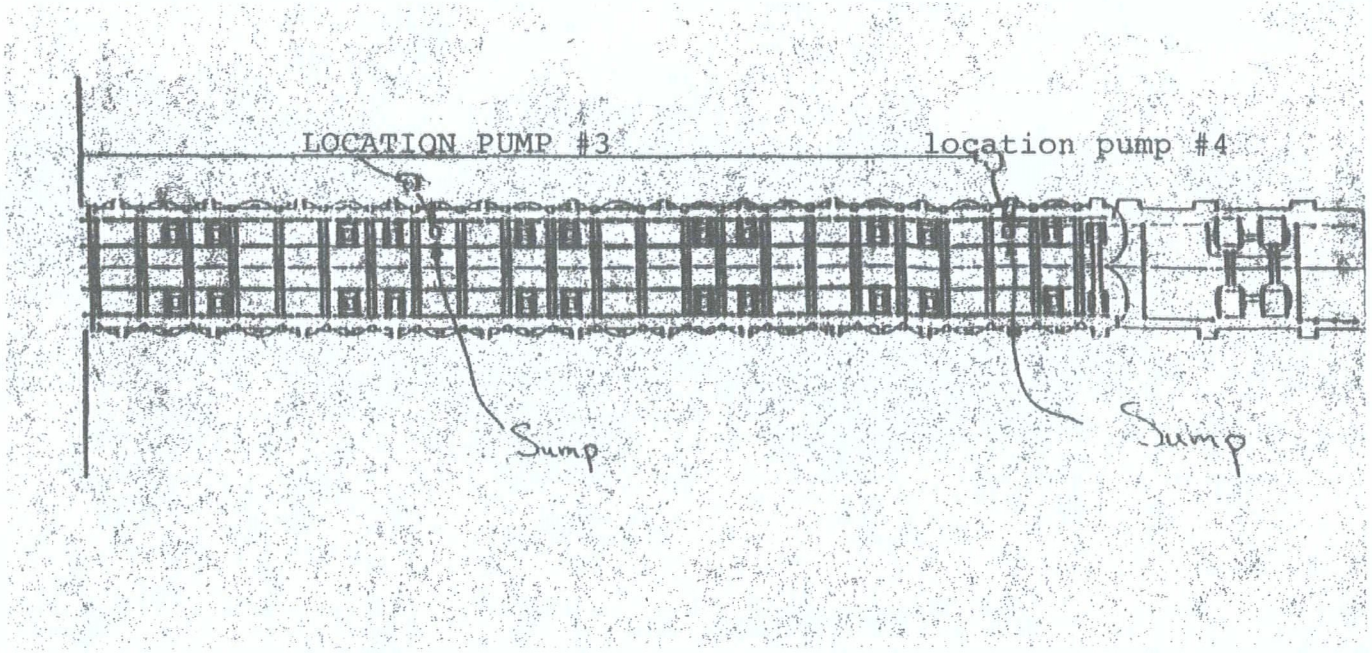
DEQ TIDEWATER
REGIONAL OFFICE

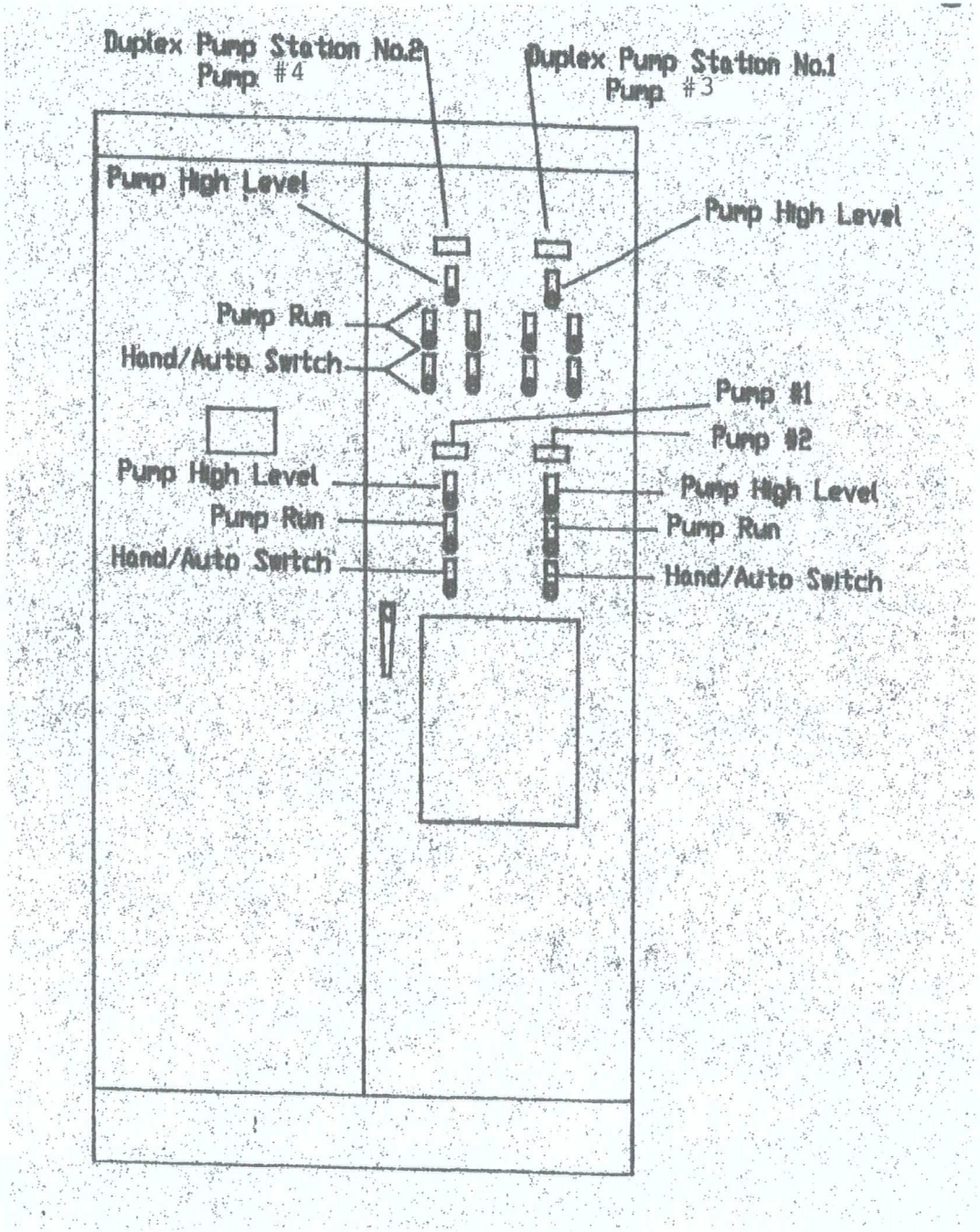


OPERATING INSTRUCTIONS:

- Check Pond level and make sure well pump is not on.
- Turn Pier Pumps (#3 & #4) to 'Auto'
- Turn both Shore Pumps (1&2) to 'Hand'

NOTE: Green lights indicate pump is on.





COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

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

Dennis H. Treacy
Director

Francis L. Daniel
Tidewater Regional Director

November 2, 2001

Mr. Robert Coffey
O&M Manager
Kinder Morgan Bulk Terminals, Inc.
P.O. Box 38
Newport News, VA 23607

Re: Kinder Morgan Bulk Terminals, Inc.
VPDES Permit No. VA0057142
Operations & Maintenance Manual

Dear Mr. Coffey:

The referenced Operations and Maintenance (O&M) Manual that was submitted October 31, 2001 to the Department of Environmental Quality has been approved.

Thank you for your cooperation in submitting this revised manual. If you have any questions or need additional information, please contact this office.

Sincerely,

William M. Cash-Robertson
Regional Permit Manager

Cc: DEQ/TRO - Files (#451, PAP)

MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Blvd, Virginia Beach, VA 23462

SUBJECT: Operations and Maintenance Manual
Kinder Morgan Bulk Terminals, Inc.
VPDES Permit No. VA0057142

TO: William M. Cash-Robertson

FROM: Clyde Gantt

DATE: November 2, 2001

COPIES: TRO File

I have reviewed the subject Operations and Maintenance Manual and recommend that it be approved.

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

KINDER MORGAN
ENERGY PARTNERS, L.P.

Pier IX Terminal

Kinder Morgan Bulk Terminals, Inc.

October 31, 2001

Clyde Gantt
Department of Environmental Quality
5636 Southern Blvd.
Virginia Beach, VA 23462

Subject: O&M Manual Under Permit #VA0057142

Dear Mr. Gantt,

PLEASE FIND ENCLOSED THE FOLLOWING:

1. The updated O & M Manual for Kinder Morgan Bulk Terminals/Pier IX for the new permit period starting July 2001.

If there are any questions concerning this manual, please contact Robert Coffey, O&M Manager, at (757) 928-1520.

Sincerely,

Robert Coffey
O&M Manager

cc: Marie Krien-Schmidt
file

P.O. Box 38 Newport News, VA 23607 757/928-1520 757/928-1560 Fax

KINDER MORGAN

ENERGY PARTNERS, L.P.

KINDER MORGAN BULK TERMINALS/PIER IX

O&M MANUAL

OCTOBER, 2001

O & M MANUAL

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Table of Contents

October, 2001

Storm Water Collection and Treatment System

I. Introduction

KMBT's Pier IX Terminal is a bulk material handling terminal located in downtown Newport News. The products transferred through Pier IX Terminal are coal and Portland cement. The coal is stockpiled on our 60-acre site with a total storage capacity of 1.2 million tons. 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. VA0057142.

II. State Discharge Requirements

Wastewater discharges from the Pier IX Terminal are authorized under VPDES Permit No. VA0057142. Discharges are monitored regularly as required by the permit.

III. Description of Waste Water Treatment Facility

There are two separate storm water collection systems at Pier IX. The first system collects storm water runoff from the coal storage yard and the second collects storm water runoff from the pier and immediately adjacent shore area. Both of the storm water collection systems allow the storm water to flow to the settling pond. See Appendix 2 for a detailed flow chart of the two systems.

Storage Yard Storm Water Collection

The storage yard system collects water from the area inside the facility's perimeter drainage ditch. The storm water is collected and flows into the perimeter drainage ditch. The storm water collected is from coal pile runoff, the tunnel sump, the shop floor drain, the area adjacent to the maintenance building and warehouse building, and from the area adjacent to the dumper building.

The perimeter ditch is located around the coal storage area so storm water from the coal piles drains directly into the ditch and then flows to the settling pond. The automobile access tunnel has a sump, and pumps the storm water to the perimeter drainage ditch on the inside of the railroad track. The storm water runoff from the area adjacent to the facility buildings that are inside of the railroad tracks also drains to the perimeter ditch.

The perimeter ditches are graded to provide drainage toward the southern end of the facility. The only inlet to the pond (see drawing in Appendix 2) is located at the southern end of the facility.

Oil booms are used in the perimeter ditch as a precaution for preventing any oil from entering the pond. The oil booms are located at the dozer parking area and at the pond inlet.

Pier Storm Water Collection System

The Pier area system handles storm water runoff from the pier and the shoreward area immediately adjacent to the pier. Storm water runoff from the pier is contained within a ten-inch curb around the pier. The storm water runoff from the shoreward area drains to an underground tank located on shore. All the storm water is collected and stored in theses areas and is pumped to the perimeter ditch on the other side of the road and allowed to gravity drain to the settling pond.

Settling Pond

Storm water is collected in the settling pond, which provides the time necessary for reducing suspended solids. The pH can be adjusted, if necessary, with caustic soda or other basic materials such as soda ash.

The pond water is pumped from the pond and sprayed over the coal piles to provide dust suppression.

IV. Specific/Detailed Description of the Equipment & Facility

The storm water collection system for the coal yard is comprised of perimeter ditches and a concrete lined pond. The pond has a storage capacity of 4.5 million gallons. The pond pump station consists of a 1000 gpm pump (150 Hp) and a 1900 gpm pump (125 Hp). These pumps are used for dust suppression and for discharging the pond water to the river.
The pier storm water collection system consists of four submersible pumps, two wet wells on the pier, one underground tank on shore, a ten-inch concrete curb around the pier, and associated piping for the pumps.

V. Description of the Industrial Operation in Connection with Which Such Facility is Used

Pier IX Terminal is a bulk marine cargo handling terminal (sic 4491) located in downtown Newport News. The products transferred through Pier IX Terminal are coal and Portland cement. The coal is stockpiled on our 60-acre site with a total storage capacity of 1.2 million tons. The Portland Cement is stored in three silos with a total capacity of 35,000 tons.

VI. Personnel Responsibilities

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

VII. Operation of the Treatment Facility

Storm water is collected by means of the two collection systems described above and flows into the settling pond. The pond provides the capacity to collect and treat large quantities of storm water from the facility area. The pond also provides water needed for controlling dust emissions from the coal stockpiles.

Storm water enters the pond where suspended solids settle to the bottom of the pond. The water in the pond is recycled via pumps to overhead sprays that disperse the water over the coal piles for dust suppression.

Appendix 2 contains a map that shows the storm water outfalls for the terminal.

The water level in the pond is maintained to supply water for dust suppression spray. If the water level in the pond gets too low, the well is used as a supplemental water supply. The lowest level for the dust suppression pumps to continue pumping 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 for some reason, the well is out of commission, then it is possible to switch to the City of Newport News water supply. The procedures for switching to the city water supply are given in Appendix 4 and a copy of the procedures are posted at the dumper building pump house where the valves for switching over are located. When switching to city water, the O&M Manager is to be notified and he is to notify the City of Newport News Waterworks.

If excessive rain increases the water level to within two feet from the top of the pond's retaining wall, then the O&M Manager or the shift Facility Manager must be notified. Either person will monitor the weather conditions to determine if a discharge is necessary.

If a discharge is necessary then the O&M Manger or the Facility Manager must:

- ❖ Check to make sure there isn't any foreign material or petroleum residue in the water.
- ❖ Check pumping systems to ensure proper operation.
- ❖ Record start and stop times in the daily operations log book.

If it is necessary to have the discharge sampled, then the O&M or the facility manager must:

- ❖ Call the laboratory to come out and collect a sample.
- ❖ Begin pumping from the pond.
- ❖ Collect a one-quart grab sample after 30 minutes of flow. (The 30 minutes will provide a representative sample.) Be sure the sample container is clean.
- ❖ Check the pH of the grab sample.
- ❖ Place the grab sample in an ice bucket for preservation.

The procedures explaining which valves must be turned and how to turn the pumps on are given in Appendix 5. Appendix 6 also includes a schematic diagram of the piping for the pumps.

The operating procedures for the Pier Area Water System are as follows:

The storm water collection system is automated. There are four pumping locations, two pump locations on the pier and two located on shore. Appendix 6 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 tank. The shore tank pumps then transfer the water over the road to transfer tower T-8 and then down to the perimeter ditch.

The controls for the pumps are located in the lean-to building on the west side of the sampling building. The pump control panel has six switches, each switch has three 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.

Pond Monitoring & Capacities

The settling pond water level is monitored by the O&M Manager or the Facility Managers 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 billion 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, then the Pier Storm Water Collection System must be turned off. All pier control switches must be turned off.

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.

O&M Manager or the shift Facility Manager is required to determine if it is necessary to make a discharge from the pond or if he should turn the Pier Storm Water Collection System pumps off. If the pier storm water pumps are turned off, the curbing around the pier and shore would hold more than a 10year, 24-hour storm event until pumping to the pond could be resumed.

Facility Managers and employees are trained on the location and the operation of the controls for the Pier Storm Water Collection System.

VIII. Maintenance

Pier IX's preventive maintenance program is organized using a computer software program call Preventive Maintenance Information System (PMIS).

Refer to the PMIS manual for details on how the system works. The maintenance manager is responsible for maintaining and monitoring the system.

IX. Sampling and Laboratory Testing

Pier IX Terminal has a total of three point source outfalls, one from the settling pond and two from parking and road storm water collection.

A. Settling Pond (Outfall 001)

A sample for outfall 001 (Settling Pond) is taken only when a discharge is made to the river.

The sample of the settling pond outfall (001) is collected and analyzed by a selected laboratory. The characteristics, which must be analyzed, are listed on the DMR sheet provided by the State DEQ.

If a discharge is necessary, follow the procedures in Section VII of this manual.

B. Storm Water Outfalls (Outfalls 002 & 003)

Outfalls 002 and 003 are sampled and tested semi-annually as required by Permit No. LA0057142. Samples are collected by contract laboratory personnel. Outfalls 004 & 005 do not require monitoring because they do not discharge "storm water associated with industrial activity." (Outfall 004 was blocked off due to the installation of the inshore pumping station for the pier Stormwater run off. Outfall 005 was blocked off in order to treat the Stormwater runoff for pH and suspended solids. Both have been removed from the permit requirements. The water is pumped to the holding pond and is treated with the storage facility Stormwater.)

X. Equipment Records

All equipment records are stored in the computer software program (PMIS) as described in Section VIII of this manual or in hard copy files in the maintenance building and OMS office.

XI. Plant Safety

The storm water can be treated with caustic soda or soda ash to raise the pH of the water. Caustic soda is stored in the pond pump building; Appendix 2 shows the location of this building. Employees must exercise caution when working around this area. Refer to the MSDS book or the Material Safety Data Sheet posted next to the caustic storage tank.

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

XII. 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) 926-8700

Newport News Fire & Emergency Medical Services
EMERGENCY 911
2400 Washington Avenue
Newport News, VA 23607
Information: (757) 926-8404

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

United States Coast Guard
Marine Safety Center
Suite 700
200 Granby Mall
Norfolk, VA 23510
Information: (757) 441-330

Appendix 1

PERSONNEL RESPONSIBILITIES

I. O&M Manager

1. Keep this manual updated
2. Responsible for operation of the storm water collection and treatment system.
3. Calls testing lab
4. Monitors pond level
5. Authorizes Start/Stop of well
6. Authorizes Start/Stop of Pier Collection System
7. Monitors Safety of System Operations
8. Maintains and monitors maintenance of system

II. Operation & Facility Managers

1. Starts and stops Pier Pumps as needed.
2. Starts and stops pond pumping to the river during off hours and on weekends.
3. Records all start and stop times during his shift of operations.
4. Inspects ditchline and settling pond on a shift by shift basis.

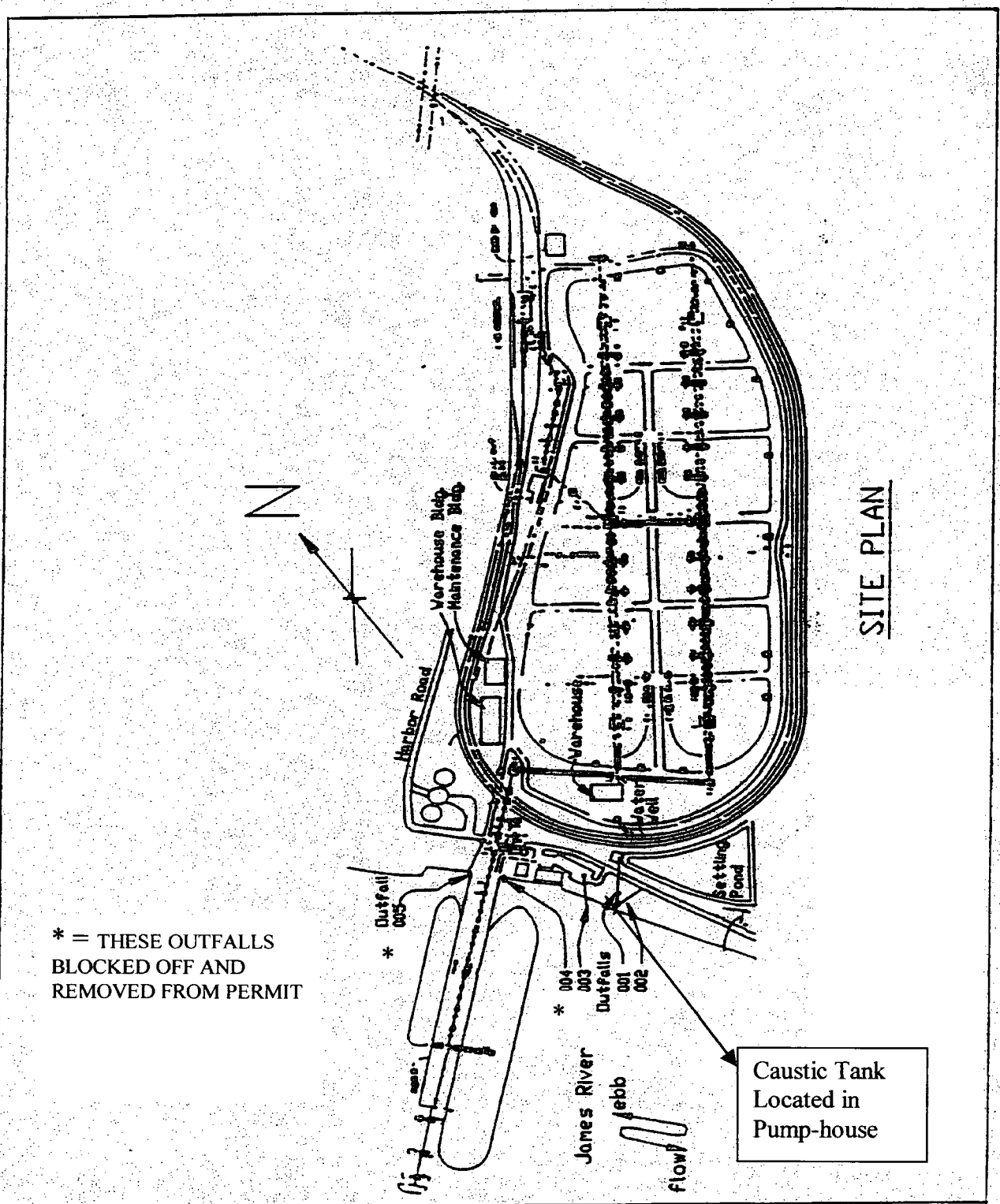
III. Mechanics & Electricians

1. Make repairs and adjustments as required

Appendix 2

Facility map showing the following.

- **Five Outfalls**
- **Well Location**
- **Caustic Storage Tank Location**



DEQ

State Water Control Board

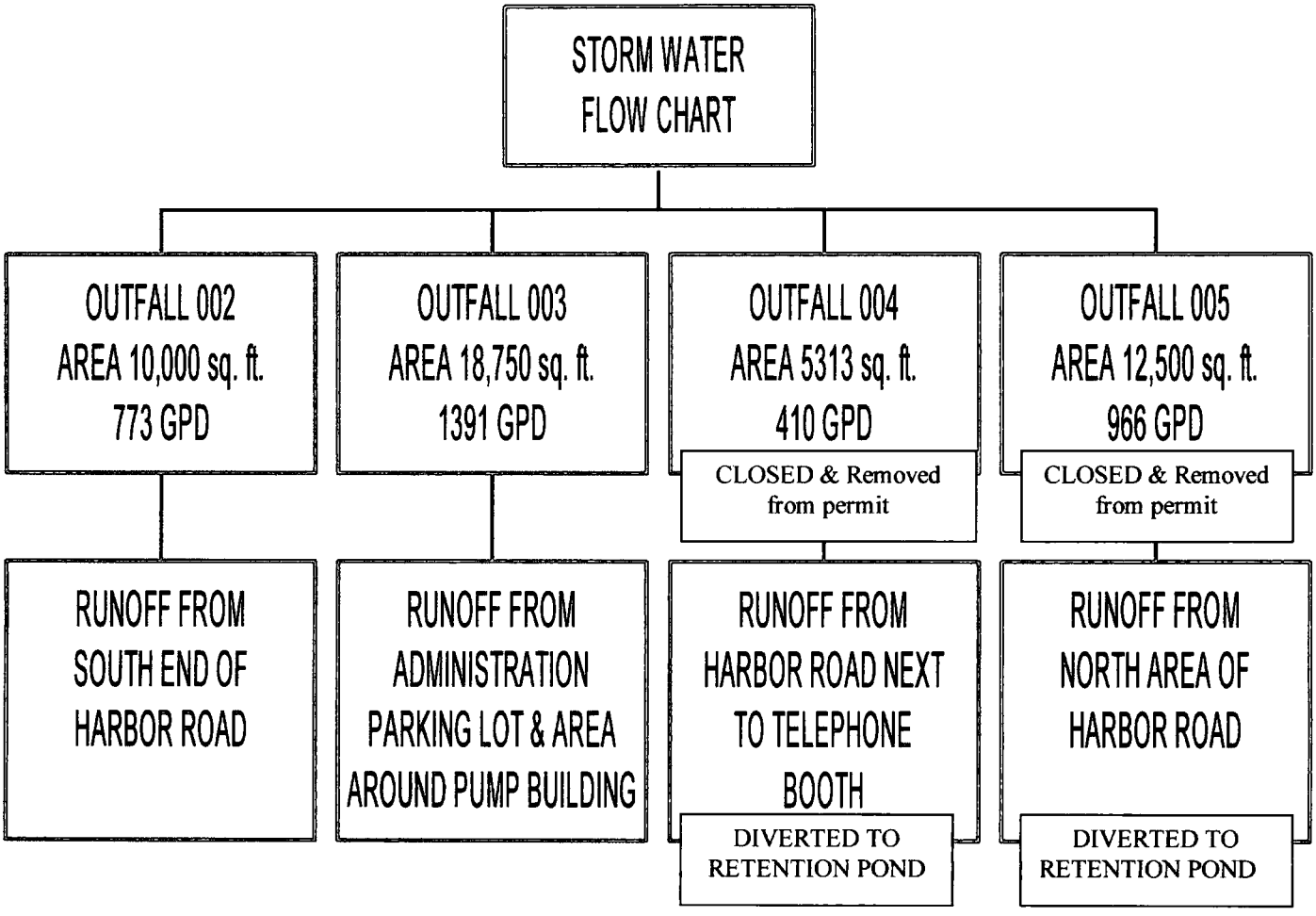
Facility Outfalls

Pier IX Terminal Company

Facility Site Plan

Appendix 3

Storm Water Flow Chart



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

Appendix 4

PROCEDURES FOR SWITCHING DUST CONTROL SYSTEM FROM POND WATER TO CITY WATER

To switch the water supply from the pond pumps to the city water main, the following procedure is used:

1. Turn the dust suppression "local/off/remote" switches located in the dumper and reclaim dust suppressions rooms to the "Off" position.
2. Turn the pond pump "remote/of f /local" switches located at the pond to the "Off" position.
3. Close the two yellow main gate valves to each of the two pumps.
4. Open the white by-pass valve and insure that all pressure has been relieved from the water line to facility by checking pressure gauge on the main header.
5. Close the white by-pass valve.
6. Switch the pond water/city water selector switch located in stakeout MCC near the northwest man door to "city water" position.
7. Record the time, date and enter this information in the supervisor's shift log.
8. Unlock and open the city water main stop located on Terminal Avenue.
9. Close the white 3-inch air gap valve located between the fire pump and the yellow 8-inch butterfly valve in the dumper valve room.
10. Open the two red 10-inch gate valves on either side of the 10-inch backflow prevention device.
11. Open the yellow butterfly valve located on the right hand side of the white 10 inch air gap valve.
12. Turn the dust suppression system "local/of f /remote" switches to the "remote" position.
13. The system is now set to operate the dust suppression systems from the city waster fire main.
14. Notify the City Water Billing department that we have had to switch our dust suppression systems to the city water supply and estimate the amount of time we will be using city water.
15. In the event of a fire, the above procedure should be used and then open the red post indicator valve located on Terminal Boulevard labeled "fire main" and close the blue post indicator valve labeled "potable water."

NOTE: When water for fire fighting is not needed, close the red post indicator valve Labeled "fire main" and open the blue post indicator valve labeled "potable water.

CITY WATER SUPPLY TO POND WATER SUPPLY INSTRUCTIONS

To switch the water supply from the city water supply to the pond water supply water, the following procedure is used:

1. Turn the dust suppression "local/of f /remote" switches located in the dumper and
2. reclaim dust suppressions rooms to the "Off" position.
3. Close the two red 10-inch gate valves on either side of the 10-inch backflow prevention device.
4. Close the yellow butterfly valve on the right hand side of the white 3-inch air gap valve in the dumper valve room.
5. Record the time and date and then log in supervisor's shift log.
6. Open the while 3-inch air gap valve located on the left-hand side of the yellow butterfly valve.
7. Close and lock city water main stop valve on Terminal Avenue.
8. Place the pond water/city water switch located in stakeout MCC in the "pond water" position.
9. Open the two yellow main gate valves to the pond pumps.
10. Place the system's pond pumps in the "remote" position.
11. Turn the dust suppression system local/off/remote switches to the "remote" position.

The system is now set to operate from the pond water supply.

Notify the City Water Billing Department of the time we switched off of the city water supply and the total time using the city water system.

Appendix 5

PROCEDURES FOR DISCHARGING TO THE RIVER USING 1000 GPM PUMP

- Turn valve V1 to the open position.
- Turn the "150 HP" switch to the "L" position for local start.
- Push start button.

PROCEDURES FOR DISCHARGING TO THE RIVER USING 1900 GPM PUMP

- Turn valve V3 to the open position.
- Turn the "125 HP" switch to the "L" position for local start.
- Push start button.

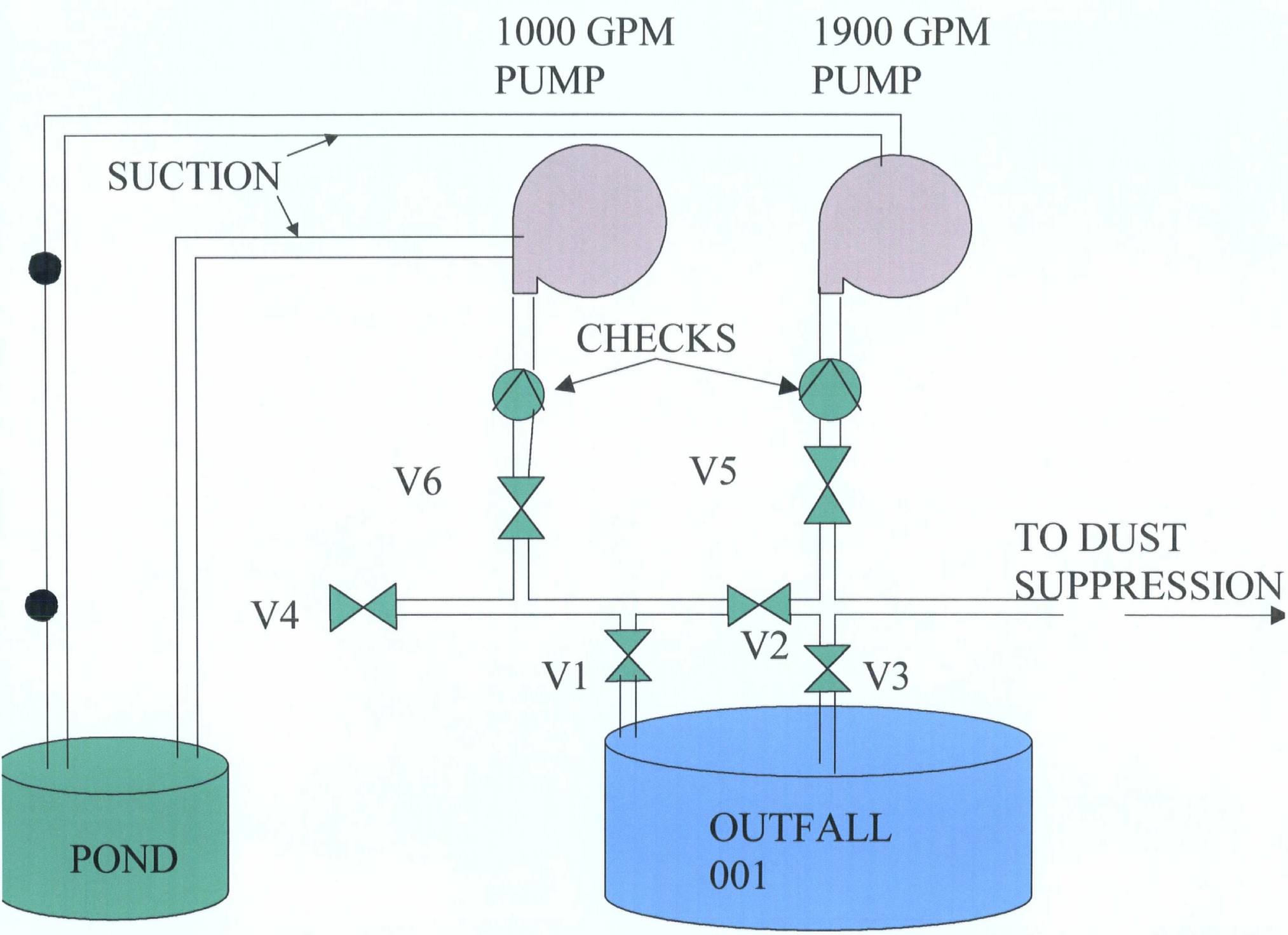
Note: **DO NOT RUN BOTH PUMPS AT THE SAME TIME.**

STANDARD VALVE SETTINGS FOR DAILY OPERATION OF DUST CONTROL SYSTEM

The following procedures are for opening the proper valves for everyday operation of the dust suppression system.

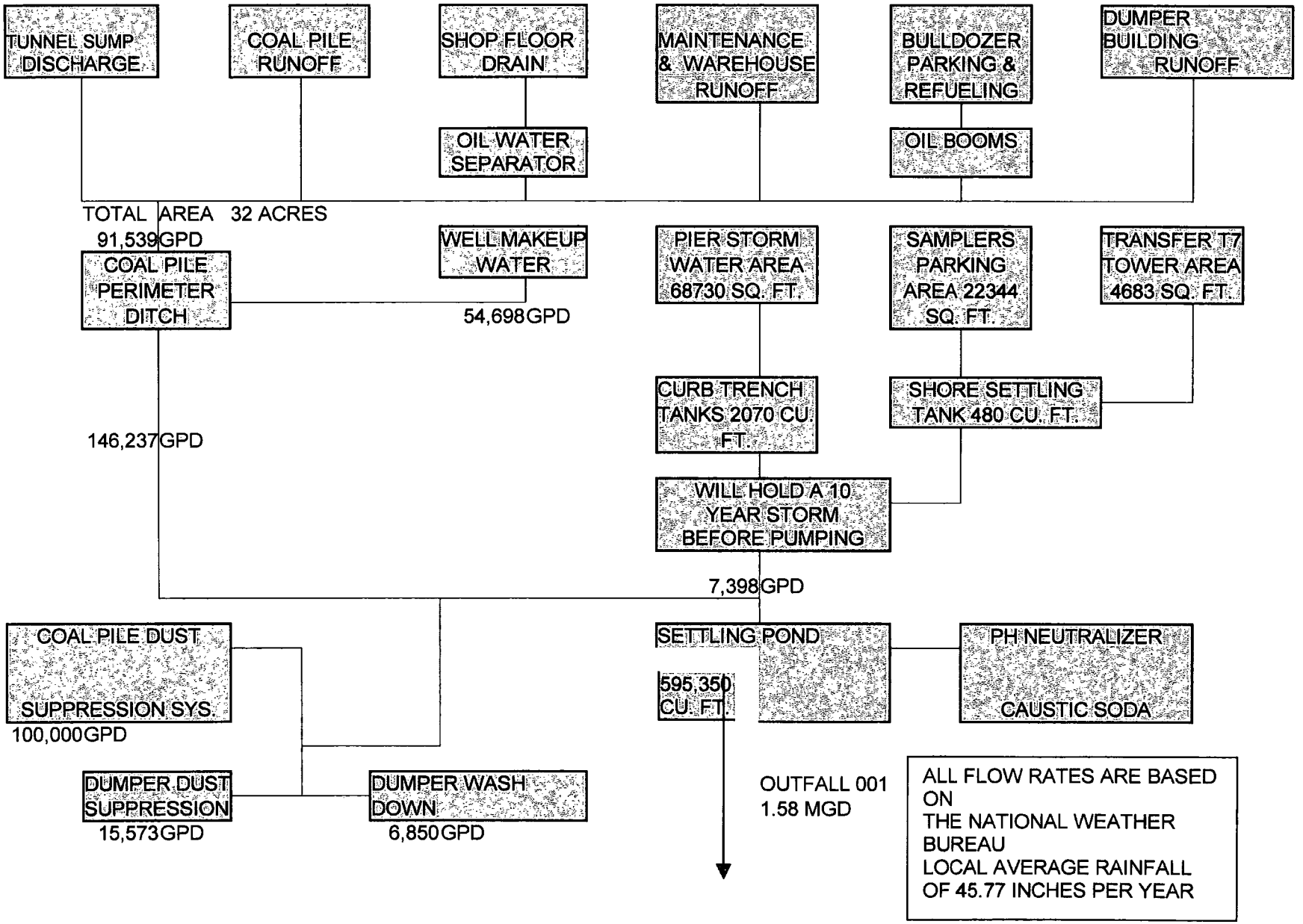
- Turn valves V1, V2, V3 and V-4 to the closed position.
- Make sure valves V-5 and V-6 are in the open position .
- Go to the control panel next to the pumps and place the switch labeled "150 HP" in the off position and the switch labeled "125 HP" to the auto position.
- The "125 HP" pump shou;ld automatically start.

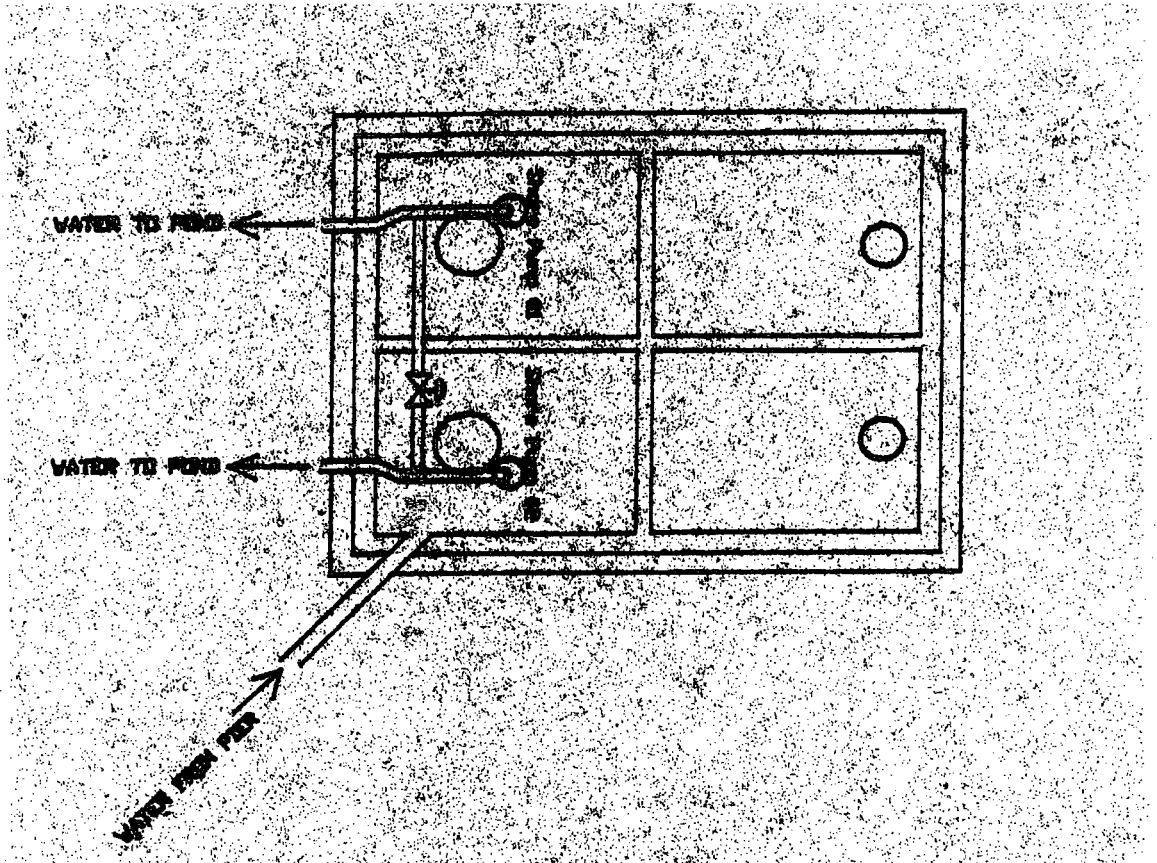
VALVES V5 &V6 ARE NOMALLY OPEN



Appendix 6

Pier Area Storm Waster Collection System

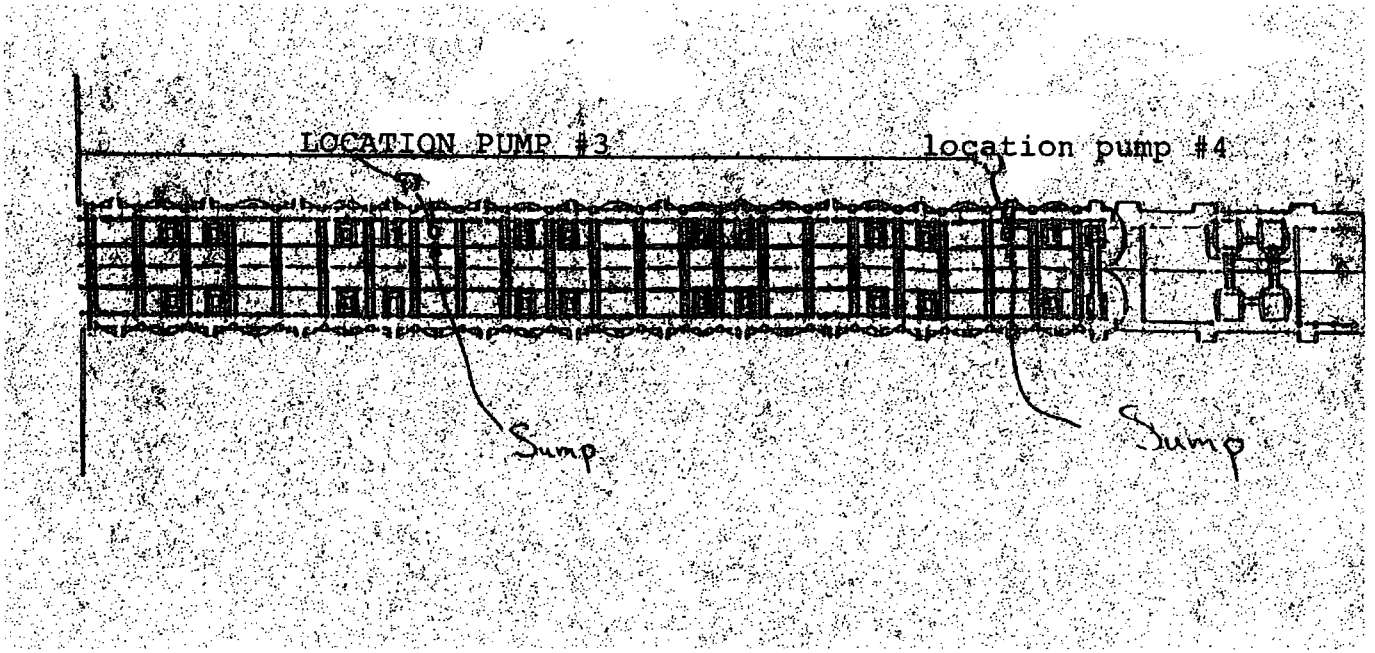


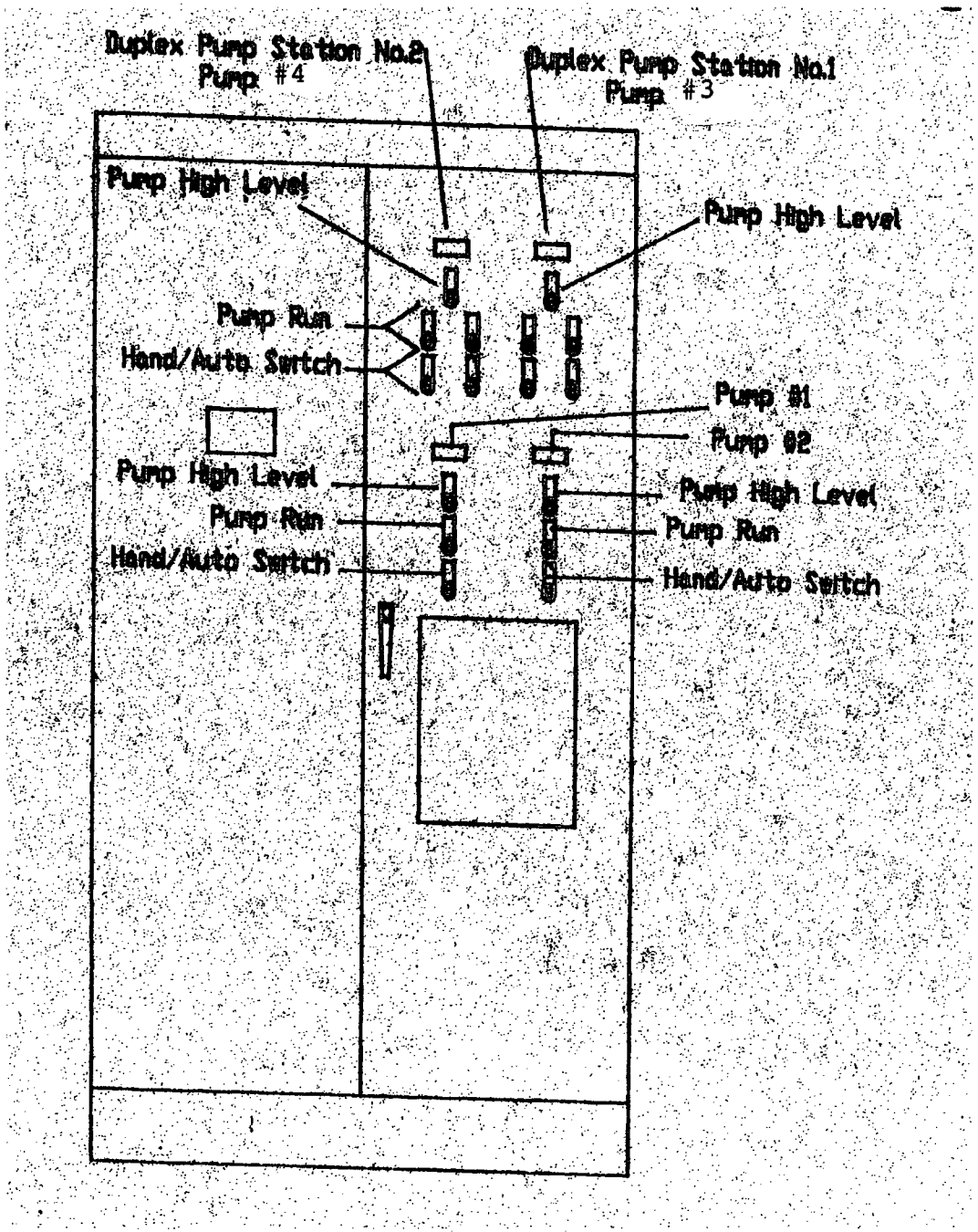


OPERATING INSTRUCTIONS:

- Check Pond level and make sure well pump is not on.
- Turn Pier Pumps (#3 & #4) to 'Auto'
- Turn both Shore Pumps (1&2) to 'Hand'

NOTE: Green lights indicate pump is on.


LOCATION PUMP #3
location pump #4
Sump
Sump


Duplex Pump Station No.2
Pump #4
Duplex Pump Station No.1
Pump #3
Pump High Level
Pump High Level
Pump Run
Hand/Auto Switch
Pump #1
Pump #2
Pump High Level
Pump Run
Hand/Auto Switch
Pump High Level
Pump Run
Hand/Auto Switch