STORM WATER POLLUTION PREVENTION PLAN

for

Chaney Enterprises – Lorton RMC Plant (VPDES No. VAG110359)

9520 Gunston Cove Road Lorton, Virginia 22079

Prepared by: Victor Vilece, Environmental Project Manager Chaney Enterprises, LP 2410 Evergreen Rd., Suite 201 Gambrills, MD 21054

January 2019

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1. Introduction

Business Office Location: 2410 Evergreen Rd., Suite 201

Gambrills, MD 21054

Primary Emergency Contact

Name: Chris McCoy
Title: Safety Director
Cell: (240) 299-7172

Email: cmccoy@chaneyenterprises.com

Secondary Contact

Name: Jeff Slagle

Title: Concrete Ops. General Manager

Cell: (540) 710-0075

Email: <u>jslagle@chaneyenterprises.com</u>

State Agency:

Virginia Dept. of Environmental Quality

(804) 698-4000

Specific Contact: Rebecca Vice Title: Compliance Auditor Office Number: 1-800-332-6542

Cell/Direct: (703) 583-3922

Federal Agency:

National Response Center

(800) 424-8802

Storm Water Pollution Prevention Plan (SWPPP) Purpose Statement:

This SWPPP has been prepared by Chaney Enterprises for the Lorton RMC Plant in Lorton, Fairfax County, Virginia. The SWPPP has been prepared in accordance with the requirements of COMAR 26.17.02 as described in the "Virginia General Discharge Permit" No.VAG110359.

2. Facility Overview

Description:

The facility produces concrete and stores sand and gravel for use in the ready-mix concrete batching operations. The site contains a four (4) tier settling basin, fuel and water storage tanks, aggregate and sand bins, a batch office, a storage garage, and a storm water retention pond.

Location:

The batch plant is located at 9520 Gunston Cove Rd, Lorton, Virginia, 22079.

SIC/NAICS Codes:

SIC – 3273 Ready-Mix Concrete Facilities
NAICS – 327320 Ready-Mix Concrete Manufacturing

Site Drainage:

The site is composed of the above described buildings, tanks, and storage area. These structures are located in Drainage Zone 1 (**DZ-1**), all run off is directed to the four (4) tier settling basin in the southwest corner of the site (See **Figure 3**). There is one Discharge Point (**DP-1**) at the facility. Water is directed into the settling basin where it is given time for sediments to settle out and pH is corrected by a Fortrans Model 5000B pH Control and Monitoring System. The settling basin discharges into an on-site dry storm water retention pond located in Drainage Zone 2 (**DP-2**). The discharge point is a storm drain located in the retention pond in the northeast corner of the site that ties into a municipal storm structure.

Industrial Activities and Potential Pollution Sources:

Industrial activities at the site which potentially may impact water quality from the introduction of pollutants include:

- Concrete batch production and admixtures
- Leaking petroleum from delivery and storage
- Aggregate storage

Material Inventory - Present:

Serval types of aggregate are stored on-site (**Table 2**). The aggregate is used in concrete batch production and resale. The materials stored include:

| Material | Quantity |
|-----------|----------------|
| Cement | 180 Tons |
| Aggregate | 1,100 Tons |
| Sand | 1,100 Tons |
| Diesel | 10,000 Gallons |

^{*}All aggregate/sand piles described above are exposed to storm water. Most gravelsized aggregate does not present a realistic run off threat. Sand likewise is not a major concern since it can be retrieved and placed back into storage if eroded.

Material Inventory – Past:

The existing inventory accurately represents the inventory of materials stored at this location in the past.

Facility Security:

The facility is located within industrial area situated between Route 95 and a CSX rail line. The facility has adequate lighting. Entry is by a driveway at the eastern edge of the property and secured by a gate. There is a chain link fence surrounding the back of the facility and a solid wood fence along the frontage with Gunston Cove Road. The site is gated and locked during non-working hours.

Discharge Information:

There is one (1) discharge point that handles both storm water and process water (Figure 3).

Sampling Data:

This site is permitted and is therefore required to be sampled quarterly. The parameters sampled for are pH, Total Suspended Solids (TSS), and flow. These constituents are analyzed according to direction provided by VADEQ. Discharge monitoring reports will be submitted on a quarterly basis to:

Virginia Department of Environmental Quality Northern Regional Office 13901 Crown Court Woodbridge, VA 22193

3. Best Management Practices (BMP's)

Operational Controls:

This facility has been evaluated for all applicable Operational Source Controls BMP's as established by the Virginia Department Quality in the Virginia Erosion and Sediment Control Handbook, Second and Third Edition.

Housekeeping

Employees of Chaney Enterprises, LP are responsible for maintaining the facility in a clean and orderly manner. Areas which could contribute to storm water pollution will be kept so as to minimize its' potential to contribute contaminants.

Good housekeeping includes:

- -Neat and orderly storage of chemicals
- Chemical storage containers labeled
- Containment of sediment on site.
- Prompt cleanup and removal of spillage, and
- Storage of garbage and trash in a tight dumpster.

Preventive Maintenance

This site is inspected on a routine, periodic basis. Maintenance issues which are identified are addressed in a timely manner. Facility equipment and storm water drainage structures are inspected monthly and serviced as needed.

Spill Prevention and Cleanup

Potential exists for petroleum spills during vehicle transfer and removal. Spills at this time could contribute to contamination of receiving waters, Virginia regulations require proper design, and maintenance of all tanks and storage areas. Monitoring and record keeping is required, as is on-site spill response capability.

Sediment and Erosion Control

The facility is partially paved and during storm events there is the possibility for sediment transport to the settling basins on-site. Materials that could potentially be eroded are checked daily. If issues are found they are addressed immediately.

Employee Training

Employees of Chaney Enterprises, LP will undergo yearly training. This training includes:

- Environmental awareness
- Site Knowledge
- State regulations and permit requirements
- Plant contents
- Pollution prevention overview
- Spill response procedures
- Housekeeping procedures
- Treatment system functions
- Importance of compliance

Pollution Prevention Committee

Victor Vilece, Environmental Project Manager, is responsible for overseeing, implementing, and maintaining this plan. In addition he is responsible for assisting plant personnel in the full and continual adherence to the plan. This includes making management aware of resource needs. He also oversees all sampling of discharges on a quarterly basis and prepares and submits all DMR's.

Fernando Rodriquez, Virginia Regional Concrete Operation Manager, is also part of the Committee. His responsibility is to make the Plant Manager aware of new potential sources of storm water contamination as well as overseeing adherence to policy.

(Enter PM's Name Here) is the plant manager and is responsible for monitoring treatment systems and implementing BMP's on a daily basis.

All employees at this location are encouraged to bring to the attention of the committee members any deficiency they encounter, or any ideas for storm water protection they may have.

Source Controls:

This facility has been evaluated for all applicable Source Control BMP's as established by the Virginia Department of Environmental Quality in the Virginia Erosion and Sediment Control Handbook, Second and Third Edition.

Treatment BMP's

One pH control system is located on-site at the Lorton Facility (**Figure 3**). It is located at the settling basin. It functions as an automated pH neutralizing system for washout/wastewater and storm water runoff. It utilizes non-hazardous carbon dioxide gas with proper storage on-site. This system is checked on a daily basis (during plant operations hours) and on-site personnel ensure that it is functioning properly. Any issues with the system will be reported to the pollution prevention committee members for immediate correction.

Run-Off BMP's

Storm water run-off from the property discharges into an existing municipal storm water structure. There is no evidence of any erosional or depositional problems associated with this drainage – therefore addition flow controls have not been necessary.

Enhanced and / or Additional BMP's

In case enhanced or additional BMP's are deemed necessary, a schedule for implementation will be developed and incorporated into this plan within 30 days of determination. The new BMP's will be implemented with all due diligence. Unless otherwise directed by VADEQ, all newly required operational BMP's will be implemented within 15 days of direction. BMP's that require capital expenditures will be implemented within six months.

4. Monitoring Plan

Discharge Points and Flow Characteristics:

There is surface water discharge from the ready mix concrete operation into the Pohick Creek watershed. The sampling and analytical methods, if used, shall conform to procedures for the analysis of pollutants as identified in 40 CFR Part 136 – "Guidelines

Establishing Test procedures for the Analysis of Pollutants" unless otherwise directed by VADEQ.

Sampling Data Summary:

Sampling is done quarterly as described in the "Virginia General Discharge Permit" No. VAG110359.

Visual Monitoring:

The surface water discharge point is visually inspected quarterly. This is done in conjunction with review of any maintenance issues regarding the treatment structures. A comprehensive inspection is done every year by onsite personnel or a member of the Pollution Prevention Committee.

Unintended Discharges:

There have been no reported incidents of unauthorized discharges at this location.

5. Inspections

Comprehensive Site Compliance Evaluations:

A comprehensive site review will be conducted at the end of each year, along with a visual site inspection. Deficiencies identified will be scheduled for correction. When necessary, changes to the Storm Water Pollution Prevention Plan will be made. Records of all monitoring information, inspection reports, and any other compliance documentation will be kept for three (3) years onsite as well as at the corporate office. All information described above is available for review by contacting the Plant Manager or the Environmental Project Manager.

Routine Inspections and Record Keeping:

Visual inspections are performed daily by plant staff and are documented with checklists (see Appendix C, D). Comprehensive site inspections are preformed quarterly by the Environment Project Manager or other designated staff. These inspections are documented with the CEEIP Inspection Form (see Appendix B). Inspection reports are retained for three (3) years onsite as well as in the corporate office. Signatures on the form signifies certification that the site is in compliance with the SWPPP and the "Virginia General Discharge Permit" No. VAG110359.

6. Compliance with SARA Title III

Chemicals subject to SARA Title III. Section 3 includes diesel fuel. Diesel fuel is subject to the SPCC Plan requirements of the Clean Water Act. The SPCC Plan addresses compatibility, secondary containment, spill prevention, spill control, and drainage. The facility does not have a P.E. certified SPCC Plan. There have been no discharges of any material covered under SARA Title III at this facility for the past three (3) years.

7. Consistency With Other Statutes and Plans

Chaney Enterprises, LP is subject to certain requirements and schedules that pertain specifically to its reclamation areas. They do not impact the requirements under the Virginia Discharge Permit" No.VAG110359. Vehicle maintenance and fueling are currently done off-site, if this were to change the facility would obtain proper VADEQ permitting.

8. Administration of SWPPP

Access to SWPPP:

This plan will be retained on-site in the batch plant office and at the Corporate Head Quarters located at 2410 Evergreen Road Suite 201, Gambrills, MD 21054. Upon request it shall be made available to VADEQ. Any requests for a current copy or updates will be honored within two weeks of formal receipt of the request.

Amendments to the SWPPP:

The Plan shall be amended whenever there is a change in design, construction, operation, or maintenance of any BMP's that causes the Plan to be less effective in preventing storm water pollution. It will also be amended upon direction by VADEQ or when visual monitoring indicated a need for an amendment.

Storm Water Pollution Prevention Plan Changes:

| Date | Individual Responsible for | Nature of Change |
|---------|----------------------------|------------------------------|
| | Change | |
| 4/30/19 | Victor Vilece | Update to Material Inventory |
| | | |
| | | |

Inspection and Record Keeping:

Inspections as required by the Virginia Department of Environmental Quality as described in the "Virginia General Discharge Permit" No. VAG110359 will be conducted by the Plant's Manager or his authorized representative. Visual inspections of the pH treatment system and outfall are performed daily. Site wide comprehensive walk through inspection are done quarterly and a comprehensive review of all BMP's is done annually. Reports of visual monitoring done by facility staff will be submitted to the Plants/Environmental Manager. Deficiencies identified will be scheduled for correction. When necessary, a schedule of compliance will be developed and submitted into this Plan. Records of all monitoring information, inspection reports, and any other compliance documentation will be kept for three (3) years onsite as well as at the

corporate office. All information described above is available for review by contacting the Plants/Environmental Manager.

Signatures:

All reports required by the Virginia Department of Environmental Quality as described in the "Virginia General Discharge Permit" No. VAG110359, the applicable regulations and this Plan, and other documentation requested by the Virginia Department of Environmental Quality shall be signed by the Plant's/Environmental Manager or an employee or agent under his direct supervision. The Plant's/Environmental Manager has been given overall responsibility for these matters by a principal executive officer. All persons signing documents a described above must make the following 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 fine and imprisonment for knowing violations."

| Sign: _ | | _ Date: _ | <u>4/30/19</u> |
|---------|-------------------------------|-----------|----------------|
| | | | |
| | | | |
| Title: | Environmental Project Manager | | |

FIGURE 1 Map of Facility

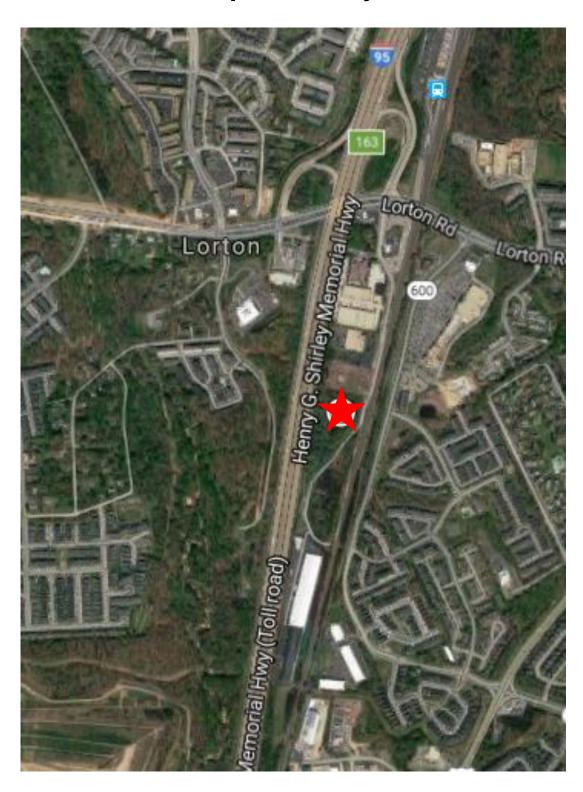


FIGURE 2 TOPOGRAPHIC MAP

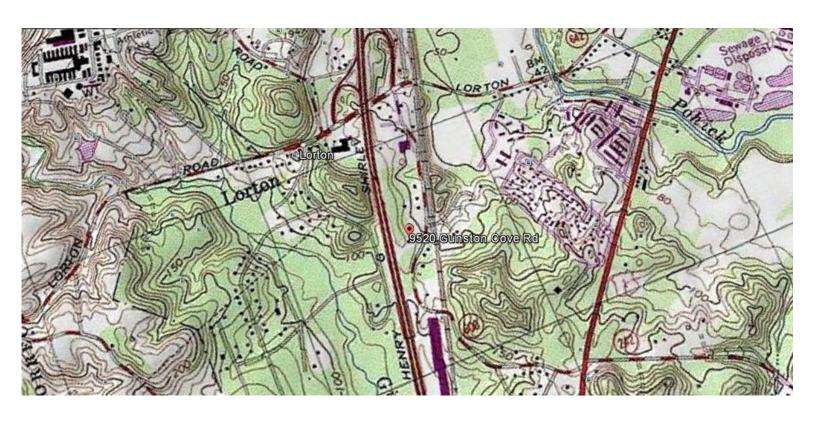


Figure 3
Diagram of Facility

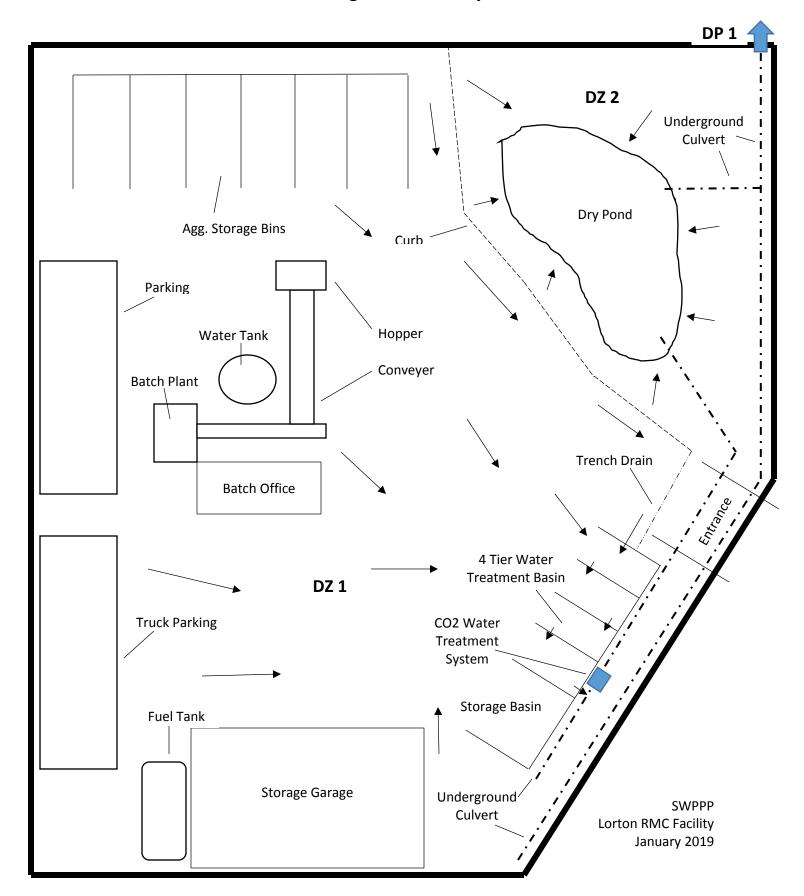


Table 1

<u>EXISITING STORM WATER DRAINAGE AND DISCHARGE POINTS</u>

| DRAINAGE ZONE/ | STORM WATER DRAINAGE | POTENTIAL | POTENTIAL PROBLEMS |
|------------------|---|---|---|
| DISCHARGE POINTS | DESCRIPTION | POLLUTION | |
| DZ-1 | Drainage flows southeast, directed by a curb and trench drain where it is collected for treatment in a four (4) tier basin. The collected water will be treated using a Fortrans Water Treatment System before being allowed to discharge into underground culvert that directs it to DZ-2. | Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment | Diesel fuel/fluids may leak from trucks and equipment. High pH water may be discharged without being treated. Improper loading may result in sediment discharge. Overflow from collection basin may result. |
| DZ-2 | Drainage is directed to a dry pond. An underground culvert connects the dry pond to DP-1. | Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Propane, Sediment, High pH Water | Sediment from storm events and high pH water from the treatment basins. |
| DP-1 | The lone discharge point is located in an underground culvert in the northeast corner of the site, adjacent to Gunston Cove Rd. | Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Propane, Sediment, High pH Water | Sediment from storm events and high pH water from the treatment basins is the main concern. |

Table 2

MATERIAL INVENTORY

| TRADE NAME MATERIAL | PHYSICAL DESCRIPTION | STORM WATER POLLUTANTS | | | | |
|---|---|---|--|--|--|--|
| Cleaning Solvents | Colorless, blue, or yellow-green liquid | Perchloroethylene, methylene, chloride, trichloroethylene, petroleum distillates | | | | |
| Waste Water | Clear or gray | Oil, grease, concrete | | | | |
| Concrete | White or gray solids | Limestone, sand | | | | |
| Sand, Gravel | Solid particles | Silicon, suspended solids, turbidity, sediment | | | | |
| Hydraulic oil/fluids | Brown oily petroleum hydrocarbon | Mineral oil | | | | |
| Gasoline | Colorless, plae brown pr pink petroleum hydrocarbon | Benzene, ethyl benzene, toluene, xylene, MTBE | | | | |
| Diesel Fuel | Clear, blue-green to yellow liquid | Petroleum distillate, oil & grease, naphthalene, xylenes | | | | |
| Antifreeze/coolant | Clear green/yellow liquid | Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc) | | | | |
| Polarset | Light green, clear liquid | Calcium Bromide, Calcium Nitrate, Diethyle Gycol, Methyldiethanolamine, Calcium Nitrite | | | | |
| Daracel | | Naphthalenesulfonic acid, polymer with formaldehyde | | | | |
| All Safety Data Sheets can be viewed on the Chaney website: | | | | | | |

All Safety Data Sheets can be viewed on the Chaney website: https://www.chaneyenterprises.com/resources/safety-data-sheets

TABLE 3

SWPPP IMPLEMENTATION SCHEDULE

| SWPPP FEATURE | TARGET IMPLEMENTATION DATE |
|---|-----------------------------------|
| Environmental compliance inspections (CEEIP) | Quarterly |
| Implementation of SWM Control Measures | Daily |
| Inspection of Water Treatment System Appendix C | Daily |
| Visual Inspection of Batch Plant Air Filtration Systems Appendix D | Daily |
| Employee Environmental Education Appendix E | Annually: 4 th quarter |
| Environmental Education Program Evaluation Appendix F | Annually: 4 th quarter |

APPENDIX B EMERGENCY CONTACT INFORMATION

IN THE EVENT OF A SPILL CONDUCT THE FOLLOWING STEPS:

- 1. LOCATE SPILL KIT
- 2. CONTAIN SPILL
- 3. CONTACT CHANEY SAFTEY DIRECTOR

Chris McCoy (240) 299-7172

4. CONTACT THESE AGENCIES

NATIONAL SPILL RESPONSE CENTER (800) 424-8802



Appendix B

I. General Information

ENTERPRISES

| CEEIP | Inspection | 1 Form |
|-------|------------|--------|
|-------|------------|--------|

| Facility: | | | | | | | Permit #: | | |
|-----------------------------------|---|---|----------|-----------------|----------------|--------|---------------|-----------|-------------------|
| Date: | | Time | e: | | Weather: | | | Phone: | |
| Facility | | | | | | Site | | | |
| Address: | | | | | | | Manager: | | |
| Inspector: | | | | | | | | | |
| II. Site Condition | าร | | SWPI | PP On Site: Ye | es No | | DMR's On S | Site: Yes | No |
| E & S Controls | | | BMP's | | | Dis | scharge | | Roadways |
| Berms: | | | Fuel Sta | ition: | | Co | lor: | | Entrance: |
| | | | | | | | | | |
| Traps: | | | Chamic | al Storage: | | Cla | arity: | | Haul Roads: |
| παρδ. | | | CHEITIC | ai Storage. | | Cic | arity. | | Tiaul Noaus. |
| | | | | | | | | | |
| Basins: | | | Agg Sto | rage: | | So | lids: | | Yard: |
| | | | | | | | | | |
| Gutters: | | | House k | Ceeping: | | Od | dor: | | Msc: |
| | | | | | | | | | |
| | | | | | | | | | _ |
| Curbs: | | | Msc: | | | Oil | l Sheen: | | |
| | | | | | | | | | |
| Additional Co. | | | 0 - 1111 | | | | | | |
| Additional Cor | nments c | on Site | Conditio | ons: | | | | | Site Corrections: |
| | | | | | | | | | Site Corrections. |
| | | | | | | | | | |
| | | | | | | | | | |
| III. pH Treatmen | t System | 1 | | | | | Ţ | | |
| | | | | Questio | | | | Answer | |
| Washout/Settl | ınσ | | | ns/ponds been | | | | | |
| Ponds | vvn | What is the pH in the settling area w/handheld probe? What is the pH on the pH System display? | | | | | | | |
| | | | | | | | | | |
| | | Is probe covered in residue and dirty? | | | | | | Due Date: | |
| pH Probe | | Was probe cleaned with cleaning solution? What are readings before/after calibration with solution 7.0? | | | | | | | Days 1wk 2wk 3wk |
| | | | | pefore/after ca | | | | | |
| | | | | | alibration wit | tii St | olution 10.0? | | |
| Piping | | | | | | Sign: | | | |
| Cammantaan | | | | unctionar: | | | | | |
| Comments on pH System Conditions: | | | | | | | | | |
| | | | | | | | | | |
| Inspector | | | | | | | | | |
| Name: | | Signature | | | | | | Data: | |
| 1101110. | Signature: Date: POURING OUR HEART & SOUL INTO EVERY JOB | | | | | | | | |
| ją | POURING OUR HEART & SOUL INTO EVERY JOB | | | | | | | | |
| | | | 10 F | D 1.1 | 0 1 001 | | 1 111 84 1 | 101051 | |

APPENDIX C <u>Daily pH Treatment System Inspection Log</u>

| Date | Time | Weather | рН | Freeboard | Pump / Probe | Signature |
|------|------|---------|----|-----------|--------------|-----------|
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APPENDIX D AIR EMISSIONS LOG

| Date | Observer | Time | Differential Pressure Reading | Visible Emissions Yes/No | If Visible Emissions: Date/Time of Corrective Actions |
|------|----------|------|----------------------------------|-----------------------------|---|
| | | | <u> </u> | , | |
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APPENDIX E ENVIRONTMENTAL EDUCATION SEMINAR SIGN-IN SHEET

| Date | Employee Name | Employee Signature |
|------|---------------|--------------------|
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APPENDIX F SWPPP COMPLIANCE ASSESSMENT

| SWPPP Feature | Y/N | Comments |
|--|-----|----------|
| Have daily and quarterly inspections been conducted and have forms been completed and filed? | | |
| Have BMP's been implemented and has the implementation schedule been adhered to? | | |
| Has employee training been implemented? | | |
| Has the Environmental Education Program been evaluated and forms filed? | | |
| Have all changes to site function been addressed in the SWPPP? | | |
| Name: | | Date: |
| Signature: | | |
| Title: | | |
| | | |