Integrated Contingency Plan

Rockydale – Roanoke Quarry 4592 Franklin Road, SW Roanoke, Virginia 24014

Prepared for: Rockydale Quarries Corporation 2343 Highland Farm Road, NW Roanoke, Virginia 24017

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INTEGRATED CONTINGENCY PLAN (ICP) FACILITY INFORMAION (9VAC 25-91-170 A.2)

OWNER: Rockydale Quarries Corporation

OWNER ADDRESS: 2343 Highland Farm Road, NW

Roanoke, Virginia 24017

OPERATOR: Rockydale - Roanoke Quarry

NAME OF FACILITY: Rockydale - Roanoke Quarry

PRIMARY SIC CODE: 1422 – Crushed and Broken Limestone

ADDRESS: 4592 Franklin Road, SW

Roanoke, Virginia 24014

POLLUTION PREVENTION TEAM (PPT):

Pollution Prevention Coordinator: See page i-1.

Position:

Contact Number:

Team Member: See page i-1.

Position:

Contact Number:

Team Member: See page i-1.

Position:

Contact Number:

The ICP is maintained in the Environmental, Health & Safety Coordinator's Office and is also available for onsite inspection during normal working hours in the Mine Manager's Office. Please contact the Pollution Prevention Team, which includes the Mine Manager, Environmental, Health & Safety Coordinator, or Foreman at the phone number listed on PPT Members contact information (Ref. page i-1).

Pollution Prevention Team

| Mike Chopski | Mine Manager | 540-705-7150 |
|--------------------|----------------------------|--------------|
| Dallas Satterfield | E, H & S Coordinator | 540-597-5017 |
| Rusty Epperson | General Foreman | 540-588-1457 |
| Brian Glisson | Plant Foreman | 540-682-0554 |
| Steve Muncy | Pit Foreman | 540-204-7443 |
| Lee Thomas | Maintenance Foreman | 540-769-7367 |
| Jerry Price | Mobile Maintenance Manager | 540-676-3291 |

INTRODUCTION

This Integrated Contingency Plan (ICP) provides a comprehensive document to assist in the prevention of discharges of oil, chemicals, and other types of potential pollutants from the Rockydale - Roanoke Quarry (Roanoke Quarry) facility located at 4592 Franklin Road, SW in Roanoke, Virginia. In the event of a discharge, the ICP also provides a strategy for spill control that is designed to minimize the impact on the navigable waters of the United States or adjoining shorelines as well as all State waters. The Plan was prepared and will be implemented in accordance with 1) Code of Federal Regulations 40 CFR Part 112 - Oil Pollution Prevention; 2) the Virginia Administrative Code, 9VAC 25-91. – Aboveground Storage Tanks; and 3) the Virginia Administrative Code, 9VAC 25-115. – VPDES General Permit for Discharges of Storm Water.

40 CFR 112 - Spill Prevention, Control, and Countermeasure (SPCC) Plan

Pursuant to 40 CFR 112, facilities that store oil in excess of 1,320 gallons; that could discharge harmful quantities of oil to navigable waters, are required to have an Spill Prevention, Control, and Countermeasure (SPCC) Plan. Since the Roanoke Quarry has a storage aboveground storage capacity that exceeds the regulatory limit, the Roanoke Quarry is subject to the regulation. Also, in accordance with 40 CFR 112, the Roanoke Quarry will amend the plan within six months of a change in facility design, construction, operation or maintenance that affects the facility's potential for discharge; further, the Roanoke Quarry will complete a review and evaluation of this plan at least once every five years and amend the ICP as required.

9VAC 25-91 – Aboveground Storage Tanks

Under 9VAC 25-91-10 et seq, facilities located in the Commonwealth of Virginia with aboveground storage tanks (ASTs) having an aggregate aboveground oil storage capacity of 25,000 gallons or more are required to prepare an Oil Discharge Contingency Plan (ODCP). The Roanoke Quarry currently has an aggregate aboveground storage capacity of more than 25,000 gallons of oil. The term oil refers to liquid hydrocarbons, but excludes non-petroleum based vegetable oils and oils stored in electrical transformers and other process equipment. Also excluded is any petroleum derived oil that is specifically listed or designated as a hazardous substance under paragraphs (A) through (F) of Section 101 (14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA; 42 U.S.C. 9601) and is subject to the provisions of that act. 9 VAC 25-91-10 et seq also allows Federally approved oil discharge contingency plans (i.e. SPCC Plan) to satisfy portions of Virginia's requirements.

The overall purpose of the SPCC Plan and ODCP are to address uncontrolled oil discharges offsite. The Virginia Administrative Code addresses the potential discharges to all State waters where the Federal program is limited to potential discharges to navigable waters of the United States. This document includes all tanks at the facility subject to the Virginia Administrative Code requirements for AST registration.

9VAC 25-115 - VPDES General Permit for Discharges of Storm Water

The Virginia Department of Environmental Quality (DEQ) has issued the facility a Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Nonmetallic Mineral Mining to Rockydale Quarries Corporation, which owns and operates the Rockydale - Roanoke Quarry. This facility was issued General Permit No. VAG840067, which became effective July 1, 2014 and expires June 30, 2019.

As a requirement of the General Permit, the Roanoke Quarry must develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The purpose of the SWPPP is to identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility, and to describe the best management practices (BMPs) developed and implemented to minimize potential sources of pollution. This includes outside storage of raw materials and/or finished products that are exposed to storm water as well as interior storage of materials that have a potential to become exposed to storm water. In addition, the SWPPP describes and ensures the implementation of these practices.

The ICP has been developed to provide a concise document that incorporates all the content requirements of the SPCC Plan, ODCP, and SWPPP while eliminating redundancies inherent to each plan.

ROSS A. WARD No. 028379

PROFESSIONAL ENGINEER'S CERTIFICATION (40 CFR 112(3)(d))

I hereby certify that I am familiar with the requirements of the SPCC rule; that the facility has been visited and examined under my supervision; that this document which includes an SPCC Plan has been prepared in accordance with good engineering practice including consideration of applicable industry standards, and with the requirements of the SPCC rule. Procedures for required inspections and testing have been established and this document is adequate for the facility.

This certification does not relieve the owner/operator of the responsibility to prepare and fully implement this document in accordance with all applicable requirements.

Signature of Registered Professional Engineer

Ross A. WARD

Printed Name of Registered Professional Engineer

Registration No. 028379

State: Virginia

CONTAINMENT CERTIFICATION

(40 CFR 112(7)(c)) (NFPA 30) (29 CFR Part 1910.106(b)(2)) (9 VAC 25-91-10)

I hereby certify attest the aboveground storage tank containment for this facility is in compliance with the applicable provisions of 40 CFR Part 112(7)(c)(1) - Oil Pollution Prevention; NFPA 30 - Flammable and Combustible Liquids Code; 29 CFR Part 1910.106(b)(2) - Drainage, Dikes, and Walls for Aboveground Storage Tanks; and 9 VAC 25-91-10 et seq - Facility and Aboveground Storage Tank Regulation.

Signature of Registered Professional Engineer

ROSS A. WARD

Printed Name of Registered Professional Engineer

Registration No. 028379

State: Virginia

ROSS A. WARD No. 028379

ROSS A. WARD No. 028379

ROSS A. WARD No. 028379

SEAL

OWNER CERTIFICATION (VA5052307)

The Virginia Department of Environmental Quality (DEQ) has issued the facility a Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Nonmetallic Mineral Mining. This permit requires all reports required by permit to be signed by a Responsible Corporate Officer who will 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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for known violations."

| | (/ | | |
|-----------|----|--|--|
| Signature | 8 | | |

Printed /

AMENDMENT BY OWNERS OR OPERATORS (40 CFR 112.5(a)(b)&(c))

The owner or operators must complete a review and evaluation of this ICP at least once every five years. This ICP must be amended whenever there is a change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for discharging oil. A Professional Engineer (PE) certification is required for technical amendments only. PE certification is not required for non-technical amendments, such as changes to phone numbers, names, etc.

Reviews and Evaluations

| Plan Reviewer(s) | Reviewer's Signature | Date | Comments | PE Certification required? |
|---------------------|-------------------------|------|----------|----------------------------------|
| | | | | |
| | | | | |
| | | | | |

The Local Emergency Planning Committee (LEPC) for Northumberland County and the local fire department may also request a copy of this ICP. Contact information for the LEPC is provided below:

Roanoke Valley Joint LEPC
Marci Stone, Emergency Management Coordinator
713 3rd Street
Roanoke, VA 24016
(540) 853-2426

MANAGEMENT REVIEW AND APPROVAL

This ICP is fully approved by the management of the Rockydale - Roanoke Quarry and the necessary resources have been committed to implement the ICP as described.

Keith Holt

Environmental, Health & Safety Coordinator

Rockydale Quarries Corporation

Mike Chopski

Mine Manager

Rockydale - Roanoke Quarry

Chris Willis

Regional Manager

Rockydale Quarries Corporation

1/16/19

Date

Date

Date

DIRECTIONS TO THE FACILITY

Rockydale Quarries Corporation Rockydale - Roanoke Quarry 4592 Franklin Road, SW Roanoke, Virginia 24014 (540) 774-1696

To facility from Interstate 81:

- 1. Take Exit 143 onto Interstate 581/U.S. Route 220 South.
- 2. I-581 will become Roy Webber Expressway then Franklin Road.
- 3. Follow for approximately 7 miles.
- 4. Turn left onto mine entrance. 4592 Franklin Road SW
- 5. At "T' intersection, turn right towards Scalehouse.

1.0 - GENERAL REQUIREMENTS FOR INTEGRATED CONTINGENCY PLANS

1.1 SPCC Plan Conformance (40 CFR 112.7(a)(1))

On July 17, 2002, the EPA issued a final rule amending the Oil Pollution Prevention regulation, which addresses requirements for SPCC Plans. The new SPCC rule became effective August 16, 2002. According to the final rule, this regulation no longer applies to the following:

- Completely buried tanks that are subject to all Underground Storage Tank technical requirements in 40 CFR parts 280 and 281; and
- Containers with a storage capacity of less than 55 gallons.

A summary of the recent SPCC amendments and a copy of the regulations are included in **Appendix A**.

1.2 Deviations from the Requirements (40 CFR 112.7(a)(2))

The SPCC Plan does not deviate from the requirements for an onshore nonproduction facility under 40 CFR 112.1 to 40 CFR 112.8.

1.3 Facility Description and Layout (40 CFR 112.7(a)(3))(VAG840067)(9VAC 25-91-170 A.3)

The Roanoke Quarry is located at 4592 Franklin Road, SW in Roanoke, Virginia. The facility is a multi-bench, nonmetallic mine manufacturing a variety of construction aggregates including erosion control products such as riprap, specialty products such as decorative stone, and agricultural lime. The Virginia Department of Mines, Minerals, and Energy (DMME) has issued the facility Mining Permit No. 05761AA, effective May 14, 2015. The main process area include overburden removal, drilling/blasting, loading/hauling, crushing, conveying, screening, shipping/receiving, maintenance, and stockpiling storage areas.

Figure 1, General Location Map, shows the graphical location and access routes to the facility. Coordinates for the facility are 37°12'43.38"N, 79°57'10.95"W at an approximate altitude of 1,130 feet above mean sea level. The Roanoke Quarry property consists of approximately 148 acres with the active mining pit encompassing approximately 83 acres. Less than one percent of the ground surface at the facility is covered with impervious structures.

The local topography is characterized by steep-sided hills and narrow drainage valleys. The storm water drainage pathway for potential pollutant areas at the facility is shown on **Figure 2**, the Facility Site Plan. There is no surface water drainage at the facility.

1.4 Material Stored and Capacity of Each Container (40 CFR 112.1(d))(40 CFR 112.7(a)(3)(i))(9VAC 25-91-170 A.5)

The Roanoke Quarry's potential pollutant storage is entirely outdoor and includes a multiple aboveground storage tanks (ASTs) and product storage areas (stockpiles). There are no underground storage tanks located at the facility. SWPPP planning requires the development of a list of significant materials that were exposed to storm water during the past three years and/or are currently exposed. Exposure includes any lack of complete shelter from rainfall contact even if the materials are stored within a piece of equipment, pile, drum, tank, etc. Significant materials as defined in 40CFR Part 122.26(b)(12) are substances related to industrial activities such as process chemicals, raw materials, petroleum products, paints, solvents, pesticides, fertilizers, and associated waste products.

Figure 2 shows the layout of the facility, including the location of all potential pollutant areas. Table 1 on the following page lists the outdoor potential sources of storm water pollution and corresponding BMP.

| Out | Table 1 door Potential Sources of Storm V Rockydale – Roanoke Qua | | |
|-----------------------------|---|---|--|
| Potential Pollutant Area | Contents | BMP(s) | |
| | 275-Gallon Single Wall Steel AST Oil (30 Wt.) | | |
| | 275-Gallon Single Wall Steel AST Oil (50 Wt.) | | |
| | 1,000-Gallon Single Wall Steel AST Heating Oil/Used Oil (Usd 02) | Concrete Secondary Containment Dike Covered Storage Area Good Housekeeping Periodic Visual Inspections Spill Kits Used Oil 04 AST is Located Inside Adjacent Welding Shop All 275-gallon ASTs have Visual Level Gauges Used Oil 04 AST has Visual Level Gauge | |
| | 3,500-Gallon Single Wall Steel AST Heating Oil/Used Oil (Usd 03) | | |
| | 1,000-Gallon Single Wall Steel AST Used Oil 04 (Welding Shop) | | |
| Upper Maintenance Shop | 1,000-Gallon Single Wall Steel AST (PMI-68 Hydraulic Oil) | | |
| | 1,000-Gallon Single Wall Steel AST Lubricating Oil (PMI 10 Wt.) | | |
| | 1,000-Gallon Single Wall Steel AST Lubricating Oil (PMI 15-40) | | |
| | 55-Gallon Steel Drums Various Oils | Covered Concrete Storage Area Good Housekeeping | |
| | 275-Gallon HDPE Tote Transmission Fluid | Periodic Visual Inspections Spill Kits | |

| Ou | Table 1 tdoor Potential Sources of Storm W Rockydale – Roanoke Qua | |
|-----------------------------|--|---|
| Potential Pollutant Area | Contents | BMP(s) |
| Upper Grease Pad | 6,000-Gallon Single Wall Steel AST Diesel Fuel (Maintenance D-01) | Steel Secondary Containment Dike (Maintenance D-01 AST) Good Housekeeping Periodic Visual Inspections Spill Kits Visual Level Gauge |
| | 3,000-Gallon Double-Walled Steel AST Gasoline (G-02) | Integrated Steel Double Walled AST Good Housekeeping Periodic Visual Inspections |
| | 10,000-Gallon Double-Walled Steel AST Diesel Fuel (R-01) | Spill Kits Visual Level Gauges Interstitial Leak Detection Tubes |
| | 250-Gallon Double-Walled Steel AST Oil (Motor Oil 5w20) | Integrated Steel Double Walled AST |
| Truck Maintenance Shop | 250-Gallon Double-Walled Steel AST Oil (HD SAE 10W) | Good Housekeeping Periodic Visual Inspections Spill Kits |
| | 250-Gallon Double-Walled Steel AST Oil (HDEO 15W-40) | Visual Level Gauges Interstitial Leak Detection Tubes on |
| | 250-Gallon Double-Walled Steel AST Used Oil | 250-gallon ASTs Covered Storage Area |
| | 55-Gallon Steel Drums Various Oils | Drums Situated on HDPE Secondary Containment Spill Pallet |
| | Equipment Lube Reservoirs | Good Housekeeping Dust Control Methods |
| | 10,000-Gallon Double-Walled Steel AST Diesel Fuel (Pit D-02) | Reduce Vehicle Speed Integrated Steel Double Walled AST |
| | 6,000-Gallon Single Wall Steel AST | (Pit D-02 AST) |
| | Diesel Fuel (Pit D-01) | Steel Secondary Containment Dike |
| Lower Grease Pad | 275-Gallon Single Wall Steel AST Lubricating Oil (HDEO 15w40) | (Pit D-01 AST) |
| Lower Grease Pad | 275-Gallon Single Wall Steel AST Oil (Trans HD 10w) | Good Housekeeping Periodic Visual Inspections Spill Kits |
| | 275-Gallon Single Wall Steel AST Oil (Nutro H46) | Covered Storage Area (55-gallon Drum). |
| | 55-Gallon Steel Drum Gear Oil | Drum Situated on HDPE Secondary Containment Spill Pallet |

1.5 Discharge Prevention Measures (40 CFR 112.7(a)(3)(ii))

Aboveground Storage Tanks

General facility containment from refueling releases and piping releases is provided by active containment measures, good housekeeping, and periodic inspections. These measures include following the safe-filling and pumping procedures, having spill kits immediately accessible, and training individuals to stop releases before they reach the nearest outfall.

Handling and Storage of Aggregate Materials

Although minimal, handling and storage of crushed aggregate has the potential to contribute particulate pollutants to storm water through contact with the materials. Additionally, there is a potential for storm water contamination through incidental leaks and spills from the mobile material handling equipment. Transport of materials over haul roads also has the potential to contribute pollutants to storm water. Off-site discharge of impacted storm water will be minimized through the use of sediment and erosion controls and preventive maintenance of the facility's equipment.

Processing Equipment and Maintenance

Processing equipment will be inspected daily prior to start up to assure no unusual conditions exist, and is to be maintained in accordance with the manufacturer's and/or the facility's recommended preventive maintenance procedures. Personnel are to be present and alert, and proper procedures are to be employed during fueling activities. Observed leaks are to be immediately controlled with drip pans and absorbents and the cause of release is to be promptly corrected. To minimize the potential for exposure, fueling areas are subject to inspection and best management practices.

Bulk Fluid Loading and Unloading

Bulk fluid loading and unloading (fuel, lubes, and hydraulic tanks) will be performed at the site of the storage tank, or at the location of the mobile equipment. Personnel are to be present and alert, and proper procedures are to be employed during fueling activities. Observed leaks are to be immediately controlled with drip pans and absorbents and the cause of release is to be promptly corrected. To minimize the potential for exposure, fueling areas are subject to inspection and best management practices.

Traffic on Unpaved Surfaces

Trucks delivering and shipping materials, and mobile processing equipment operating on unpaved surfaces (access and haul roads) have the potential to contribute particulate matter to storm water. To minimize this potential, the main access roads at the facility will be subject to water spray or other dust control methods.

The area of the active pit and haul roads are prone to erosion. Daily visual inspections of this areas are performed to ensure the integrity of the erosion and sediment controls. If areas of erosion are noted, immediate repair of the controls will be performed.

Solid Waste Handling and Disposal

Solid wastes are stored in approved containers serviced by First Piedmont Corporation. Removal is done at the facility's request, usually once per week.

Wastewater Handling and Disposal

Wastewater is not generated at this facility. No municipal storm systems are located on the property.

1.6 Discharge or Drainage Controls (40 CFR 112.7(a)(3)(iii))

As listed in **Table 1**, potential container releases and associated piping releases from the ASTs are provided by passive containment measures, primarily the use of secondary containment dikes and double-walled containers.

Other active containment measure include administrative protocols, good housekeeping, and periodic inspections. These measures include following the safe-filling and pumping procedures, having spill kits immediately accessible, and training individuals to stop releases before they reach the nearest outfall. Spill response procedures, notification requirements and AST specifications are detailed in the **Appendix B**.

1.7 Pollution Prevention Team (VAG840067)

The Rockydale - Roanoke Quarry has identified a Pollution Prevention Team (PPT) that is responsible for the implementation of the ICP. The PPT for the facility will be responsible for overseeing storm water pollution prevention activities. The ICP identifies points of contact and individuals that have a role in the facility's spill response.

Responsibilities of the Team

The team is the driving force behind the future development, implementation, maintenance and revision of the ICP. The team will perform annual evaluations to measure the effectiveness of the ICP. To ensure effectiveness, the team will document changes to facilities operations and determine if changes need to be made within the ICP. The Roanoke Quarry management will designate the Pollution Prevention Coordinator. These responsibilities of the Pollution Prevention Coordinator include but are not limited to the following:

- Overall responsibility for ICP implementation;
- Signs documents and forwards to E,H&S Coordinator for submission to DEQ.
- · Approves ICP modifications and updates;
- · Coordinates preparation, review and approval of the ICP;
- Prepares cost estimates of implementation of plan for BMPs;
- Maintains updated records of spills;
- Conducts or contracts annual inspection and certification of dry weather discharges from outfalls;
- · Conducts or contracts periodic inspections;
- Updates the Standard Operating Procedures;
- · Coordinates the management and disposal of hazardous materials; and
- Develops appropriate training program.

Team members are selected by the Pollution Prevention Coordinator. Their responsibilities include but are not limited to the following:

- Responsible for the implementation of the ICP;
- Attend annual Storm Water Pollution Prevention training;
- · Ensure personnel receive annual training;
- · Review the ICP annually; and

Notify Team Leader of any significant changes.

PPT Team Activation

To activate the PPT, the Pollution Prevention Coordinator will notify all team members of their duties and responsibilities. The team members will be trained and able to perform all assigned duties.

PPT members include:

- Mine Manager (Pollution Prevention Coordinator):
- Environmental, Health & Safety Coordinator (Member):
- Assistant Mine Manager or Foreman (Member);

1.8 Countermeasures and Response (40 CFR 112.7(a)(3)(iv))(VAG840067)(9VAC 25-91-170 A.8)

<u>Small Spills</u> - Small spills will be contained and cleaned up by facility personnel using spill response equipment and materials. Facility personnel have been trained on the use and proper disposal of spill equipment, which is located at all container locations.

<u>Large Spills</u> - In the event of a "reportable oil spill or discharge," the following procedures will be initiated:

- 1. Notify facility personnel, spill response contractor, the local fire department, and federal, state and local organizations as appropriate.
- 2. Deploy booms or other absorbent materials down gradient from the spill.
- 3. Oil collected or standing along drainage ditches should be collected and prevented from flowing or being carried off-site.

After the source of the spill has been stopped, and the released product is contained, clean-up of the impacted areas should begin. Quick clean-up of a released substance substantially reduces the potential for the product to migrate downward through the soil or migrate off site.

Free product should be collected and properly recycled or disposed. Contaminated soils should be excavated and placed in drums or roll-off containers depending on the quantity of product spilled. After excavation has been completed to the satisfaction of supervisory personnel at the facility, the remaining soils should be sampled to ensure that all impacted soils were removed. Soils placed in drums and roll-off containers should also be sampled to determine the proper method of disposal. DEQ guidelines should be followed for characterization and disposal of all excavated soils.

In the event oil or oil products from a spill at the site reach a navigable body of water, the facility should contact the local emergency response group and an appropriate cleanup contractor. The DEQ should be consulted, as necessary, during clean-up operations to ensure that cleanup actions taken by facility personnel satisfy DEQ requirements.

1.9 Spill Containment and Cleanup Compliance Responsibility (9 VAC 25-91-170 A.9)

The Roanoke Quarry personnel listed in **Appendix B** are responsible for compliance with local, state, and federal regulations during spill response and cleanup activities.

1.10 Spill Response Notifications (9 VAC 25-91-170 A.7)

In general, if there is an event that may cause hazardous conditions or threaten human health in any way, immediately contact the Roanoke City Fire-EMS using the 911 emergency call system. This call will activate needed emergency services and contacts.

If a spill event occurs, facility personnel have a responsibility to ensure that the notifications of the appropriate Rockydale Quarries Corporation management and operational personnel are made in a timely manner. The title or position of the facility's management and operational personnel who have the authority for making the required notifications are provided in **Appendix B**.

1.11 Spill Response Contractor (9 VAC 25-91-170 A.10)

In addition to Rockdale Quarries Corporation's internal immediate response to petroleum releases, the Roanoke Quarry uses a designated spill response (clean-up) contractor to mitigate the substantial threat of discharges and to cleanup accidental spills. W.E.L. Inc. is the designated contractor.

- Emergency spill response and environmental remediation services (as requested). Services include 24/7 hazardous materials/waste spill response and restoration, bus/light rail incident response, and AST release response; including but not limited to, any necessary ground water/surface water/soil remediation, fluid/vapor recovery, dewatering, waste packaging, transportation, analyses, fate determination, documentation, and disposal of waste.
- Vacuum (skimmer) services (as required/requested). Services may include supervision.
- Management, equipment, materials, supplies and appropriately trained personnel to pump out and clean oil/water separators, underground storage/waste tanks, maintenance lift/containment pits, poly-drain systems, and bus wash recycling tanks, including testing and characterization, transportation and disposal of collected waste.
- Hazardous and toxic waste disposal services (as requested). Services include pick-up, transportation, labeling, analyses, fate determination, documentation, and audit trails until ultimate treatment or disposal of hazardous or toxic waste.
- Non-hazardous waste removal services (as requested). Services include pick-up, transportation,
- · documentation, and recycling of used non-hazardous waste (e.g., used oil) for credit
- Bulk used oil material services. Services include providing labeled containers for containment of used oil filters, oily bottles/rags, and oil-soaked absorbents (including used oil dry); along with pickup, transportation, and disposal of waste (as requested).

Contact information for clean-up contractor:

W.E.L. Inc. 12263 Richmond Highway Concord, VA 24538 (434) 993-2210

For emergency response, W.E.L. Inc. provides labor, equipment, supplies and other services (such as transportation and management of waste for disposal). A copy of the pertinent section of this contract showing all of the scope elements and contractor responsibilities can be found in **Appendix G**.

1.13 Spill Response Equipment (9VAC 25-91-170 A.12)

This Roanoke Quarry maintains response equipment for small occupational spills. The following lists typical response equipment located at various spots within the facility:

- Floor dry Clay material absorbent;
- Shovel To clean-up spilled and absorbent material;
- · Squeegees To clean up spilled and absorbent material;
- · Broom To clean up spilled and absorbent material;
- · Absorbent socks/booms; and
- · Earth moving equipment (i.e. bulldozers, front-end loaders, etc.).

1.14 Methods of Disposal of Recovered Materials (40 CFR 112.7(a)(3)(v))

Any spent absorbent materials as well as disposable protective equipment should be placed in drums and properly disposed. Reusable equipment can be decontaminated prior to storage. Rinse from the decontamination procedure should be contained and placed into drums for proper disposal.

1.15 Contact List and Phone Numbers (40 CFR 112.7(a)(3)(vi))(VAG840067)(9VAC 25-91-170 A.6)

A Quick Notification Checklist provided in **Appendix B** of this document provides a complete list of Roanoke Quarry Responsible Personnel for use in the event of a spill.

2.0 SPILL RESPONSE PLAN

2.1 Spill Reporting Procedures (40 CFR 112(a)(4))(VAG840067)

Response plan procedures in the event of a spill are listed below. Requirements for reporting to the National Response Center are provided on the Oil Spill Report in **Appendix B**. As required by 40 CFR 112.7a.4, the information to be gathered and reported when a spill occurs includes:

- · Location and phone number of the facility
- · Date and time of the discharge;
- Type of material discharged;
- · Estimate of the total quantity discharged;
- Source of the discharge;
- Description of affected media;
- · Cause of the discharge;
- · Damages or injuries caused by the discharge;
- · Actions being used to stop, remove, and mitigate the effects of the discharge;
- · Whether an evacuation may be required; and
- Names of individuals and/or organizations who have been contacted.

2.2 Oil Spill Emergency Plan (40 CFR 112.7(a)(5))

In the event of a small oil spill (25 gallons or less), Roanoke Quarry personnel should follow the emergency spill response guidelines below.

- 1) Evacuate area;
- 2) Assess chemical hazard;
- Assess environmental conditions;
- 4) Establish site control;
- Absorb spilled material;
- 7) Containerize solid waste; and
- 8) Decontaminate.

The response to a larger oil spill (greater than 25 gallons) should consist of the following steps:

- 1) Evacuate area;
- 2) Eliminate ignition sources;
- 3) Contact 911 (Fire Department);
- 4) Assess chemical hazard;
- 5) Assess environmental conditions;
- 6) Assess volume of spill;
- 7) Establish site control;
- 8) Select PPE;
- Conduct air monitoring. If explosive gas concentrations are less than 10% of the lower exposure level (LEL), continue normal operations. If explosive gas concentrations are greater than 10% of the LEL, retreat from the work area;
- 10) Contain spill;
- 11) Absorb spilled material;
- 12) Containerize solid waste;

- 13) Obtain outside assistance from contractors, if needed; and
- 14) Decontaminate.

It should be noted that some of these actions may involve equipment not maintained at the facility, and therefore need to be undertaken by a contractor or the Fire Department.

NOTIFY THE VIRGINIA DEQ (during normal working hours) OR THE VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT (24-hours) WHEN:

A discharge of oil from a facility is reportable to the Virginia DEQ if it is 25 gallons or greater or if the spill reaches state waters. All releases, regardless of size, should be cleaned up immediately and incident records retained as required by Article 11 of Virginia's State Water Control Law.

NOTIFY THE NATIONAL RESPONSE CENTER WHEN:

- · You have a discharge of oil that violates applicable water quality standards; or
- A discharge of oil causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or
- A discharge causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

The National Response Center will notify the Coast Guard and the EPA, if necessary. See **Appendix B** for the and Notification Checklist, which provides name and contact information for the local, State, and Federal emergency agencies that should be notified in case of a release.

SUBMIT THE SPCC PLAN AND INFORMATION ON THE SPILL TO THE EPA WHEN:

- More than 1,000 U.S. gallons of oil into or upon the navigable waters of the United States or adjoining shorelines in a single spill event, or
- Over 42 gallons of oil into or upon the navigable waters of the United States or adjoining shorelines in two spill events occurring within any 12-month period.

2.3 Discharge Detection

2.3.1 Potential Equipment Failure (40 CFR 112.7(b))

Potential causes of spillage at the facility include:

- · Leaking outer wall or secondary containment structure of container or piping, and/or
- Overfill of containers.

As listed in Table 1, all containers have secondary containment. All containers are filled manually as needed.

2.3.2 Direction of Flow

Surface water runoff from the facility sheet flows both to the north and south sides of the quarry via natural and/or constructed drainage swales. The flow then concentrates and is conveyed to storm water retention basins before being discharged via permitted outfalls into unnamed tributaries to Back Creek and Ore Branch. Storm water flows within the quarry processing areas accumulate and eventually evaporate within the quarry's rock walls or is pumped to Basin #4.

2.3.3 Quantity

Capacities of the aboveground storage tanks are listed in **Table 1**. The maximum potential quantity of oil that could be released in a single incident is from the 10,000-gallon diesel fuel AST.

2.4 Diversionary Structures (40 CFR 112.7(c))

The owner of an onshore facility must meet the General Requirements for SPCC Plans, 40 CFR §112.7(c) According to §112.7(c), containment and/or diversionary structures or equipment must be provided for any oil storage containers that could reasonably be expected to discharge into or upon the navigable waters of the United States.

Best Management Practices (BMPs) are measures used to prevent or reduce the potential for pollution from any type of activity. BMPs are a broad class of measures and include processes, procedures, schedules of activities, prohibitions on practices, and other management practices to prevent or reduce the potential for pollution of storm water runoff. The following section describes *baseline* BMPs that are to be implemented under the ICP.

2.5 Baseline Best Management Practices (BMPs) Identification (VAG840067)

Best Management Practices (BMPs) are measures used to prevent or reduce the potential for pollution from any type of activity. BMPs are a broad class of measures and include processes, procedures, schedules of activities, prohibitions on practices, and other management practices to prevent or reduce the potential for pollution of storm water runoff. The baseline BMPs that will be implemented are described below.

- Good Housekeeping;
- Preventive Maintenance;
- Quarterly Route Facility Inspections;
- · Sediment and Erosion Control;
- · Management of Runoff;
- Employee Training; and
- Quarterly SPCC Tank Inspections and Recordkeeping.

2.5.1 Good Housekeeping

Good housekeeping is the maintenance of a clean and orderly work environment that contributes to overall facility pollution control efforts. The principal elements in good housekeeping include proper storage of oil, prompt removal of spillage, floor maintenance, and unobstructed pathways and walkways. Housekeeping at this facility also includes all outside areas that are visually inspected for cleanliness by facility personnel.

Poor housekeeping can result in more waste being generated than necessary and an increased potential for storm water contamination. Poor housekeeping can also lead to accidents that might cause spills of significant materials. The following will be completed as part of Good Housekeeping procedures:

- Conducting a formal quarterly inspection for housekeeping procedures and maintaining a log of such inspections (a Good Housekeeping Checklist is maintained in Appendix C);
- Conducting an annual inventory of chemical substances currently used, stored or produced onsite;
- · Safety Data Sheets (SDS) can be accessed via the internet available to all personnel; and
- Labeling of chemical containers in each building per MSHA, OSHA, EPA, DOT or other applicable regulations.

2.5.2 Preventive Maintenance

Preventive maintenance involves the regular inspection and testing of buildings, equipment and the storm water management system. These inspections will identify conditions such as cracks or slow leaks, or other conditions which could cause breakdowns or failures resulting in the potential discharge of pollutants to storm drains and/or surface waters. The preventive maintenance program at the facility will include conducting quarterly inspections of equipment that could results in leaks or spills to be documented in a checklist report listing each facility/system/equipment inspected and any deficiencies noted

2.5.3 Quarterly Routine Facility Inspections

Routine inspections of the facility will be performed on a quarterly basis to ensure that all ICP elements are in place and working properly as well satisfying the facility's preventative maintenance routine inspections discussed above. These inspections are performed by a member of the PPT or other trained personnel. Areas that will be inspected include:

- · Equipment and facilities; and
- · Material handling areas (loading and unloading areas).

The Quarterly Routine Facility Inspections will also include general visual observations of the storm water drainage systems. A list of storm water drainage system observations to be made during the inspection as follows:

- 1. Inspection of grassed swales and ditches for garbage, debris, or eroded areas. Remove garbage and debris as necessary. Seed exposed areas as necessary.
- Inspection of the concrete culvert discharge point for garbage, debris, vegetation, and/or eroded areas. Remove garbage, debris, and vegetation as necessary.

Inspection records will note when inspections were done, who conducted the inspection, what areas were inspected, what problems were found, steps taken to correct any problems and who has been notified. Records of the Quarterly Routine Facility Inspection will be maintained in **Appendix C**.

2.5.4 Sediment and Erosion Control

The property will be inspected for general drainage discharge patterns that may be affecting erosion over time and for the buildup of sediment in the facility's storm water conveyance system.

2.5.5 Management of Runoff

Traditional management practices used to reduce pollutants in storm water runoff include:

- Maintaining grass and vegetative buffers surrounding facility;
- · Spill management methods and materials as covered by the facility ICP; and
- Fuel transfer management. Bulk product loading and unloading BMP's (Ref. page 4).

At this facility, runoff is managed principally via pipes, ditches, culverts and open outfalls that discharge through riprapped, vegetated, and/or grass buffers. These conveyances should be examined visually after major storm events and will be formally inspected on a quarterly basis events to ensure proper operation.

2.6 Contingency Planning (40 CFR 112.7(d))

The facility staff has determined that the use of secondary containment and readily available spill equipment is practical and effective for the facility.

2.7 AST Inspections and Recordkeeping (40 CFR 112.7(e))(9VAC 25-91-170 A.12)

The SPCC regulations require that preventative maintenance of all oil handling equipment be performed on an as needed basis and according to recommended practices. Daily and weekly visual inspections of the ASTs are performed by facility personnel during normal day to day operations. However, detailed and documented quarterly inspections of the facility's oil storage containers are completed by the maintenance staff or an outside contractor. Inspection checklists for all oil storage containers are maintained in the Mine Manager's Office. The inspections must be retained along with the ICP for a minimum of three years. The Quarterly Aboveground Storage Tank Inspection Form included in **Appendix C**.

These quarterly inspections shall include the following:

- A complete walk-through of the facility's oil storage areas to ensure that no hazardous conditions exist.
- An inspection of ground surface for signs of leakage, spillage, or stained or discolored soils.

- 3. A visual inspection of the exterior tank surfaces for signs of leakage or damage.
- 4. An evaluation of the condition of the AST and associated appurtenances.

2.8 Designated Discharge Prevention Person (40 CFR 112.7(f)(2))(VAG840067)

The Mine Manager is the designated point of contact for all spill prevention activities at the Roanoke Quarry.

2.9 Post-Discharge Prevention Procedures and Review Briefings (40 CFR 112.7(f)(3)) (9VAC 25-91-170 A.22)

Following a spill event, all parties involved in the detection, reporting, and mitigation of the discharge would conduct a review at the facility to evaluate the cause of the discharge and the effectiveness of their response actions. This will serve as a critique session in which all parties would be able to comment on the adequacy of the response and cleanup. If deficiencies were noted during this review session, procedural changes would be made to improve response procedures.

Internal review to discuss the effectiveness of in-house procedures and would include all
personnel who were involved in the incident.

2.10 Security (40 CFR 112.7(g))(9VAC 25-91-170 A.21)

The following security measures are implemented at the Roanoke Quarry:

- Normal operations at the facility are 8-10 hour days, Monday thru Friday, some occasional Saturdays. The facility is manned at those times.
- When feasible, all areas handling or storing oil will be fenced and entrance gates locked and/or guarded when the area is not in operation or is unattended.
- The master flow and drain valves and other valves that will permit direct outflow of the tanks contents to the surface will be secured in the closed positions when in nonoperating or standby status.
- The starter control on all fuel pumps are secured by mechanical or electronic means and located at a site accessible only to authorized personnel. Pump power is controlled by electronic key pad.
- The loading/unloading connecting of oil pipelines should be capped or blank flanged when not in service or in standby service for an extended time. This security practice should also apply to pipelines that are emptied of liquid content either by draining or by inert gas pressure.

Facility lighting should be commensurate with the type and location of the facility. Consideration will be given to:

- Discovery of spills occurring during hours of darkness by operating personnel, the general public, local police, etc.
- Prevention of spills occurring through acts of vandalism.

2.11 Loading and Unloading Rack Drainage (40 CFR 112.7(h)(1))

Not applicable.

2.12 Prevention of Departing Before Disconnecting (40 CFR 112.7(h)(2))

See Page 19, Section 4.2 Tanker Unloading Procedures.

2.13 Preventing Leakage in Transit (40 CFR 112.7(h)(3))

Not Applicable

2.14 Field-Constructed AST Brittle Fracture Analysis (40 CFR 112.7(i))

Not Applicable.

2.15 Conformance with State Requirements (40 CFR 112.7(j))

All ASTs that have a capacity greater than 660 gallons must be registered with the Virginia Department of Environmental Quality (DEQ) and in compliance with 9 VAC 25-91-10, the Facility and Aboveground Storage Tank Regulations. Aboveground storage tanks that are 660 gallons and less are exempt from 9 VAC 25-91-10 and are not required to be registered with the DEQ. Copies of the applicable AST registration forms are included in **Appendix H**.

A State General AST Requirements Compliance Matrix for the Roanoke Quarry, as it relates to 9 VAC 25-91-10, the Facility and Aboveground Storage Tank Regulations, is shown in **Appendix H**.

3.0 SPCC PLAN REQUIREMENTS FOR ONSHORE FACILITIES

3.1 Onshore Nonproduction Facilities (CFR 40 112.8(a))

The Roanoke Quarry meets the general requirements for the SPCC Plan listed under 40 CFR 112.7, and the specific discharge prevention and containment procedures for onshore facilities for petroleum oils and non-petroleum oils.

3.2 Facility Drainage for Diked and Undiked Areas (40 CFR 112.8(b))

Drainage patterns for the facility are indicated on Figure 2. A brief description of the facility's outfalls is as follows:

- Storm water runoff from the Truck Maintenance Shop flows into the pit area or into Retention Basin #4 before discharging into an unnamed tributary to Back Creek via Outfall #006, located at 37°12'43"N, 79°57'17"W.
- Storm water runoff from the Upper Maintenance Shop, aggregate storage piles, processing areas flow into Retention Basin #3 before discharging into an unnamed tributary to Back Creek via Outfall #002, located at 37°12'42"N, 79°57'01"W.
- Storm water runoff from the Adams New Plant flow into Retention Basin #5, then to Retention Basin #1 before discharging into an unnamed tributary to Ore Branch via Outfall #003, located at 37°13'8"N, 79°57'22"W.
- Storm water runoff from the Lower Grease Pad and the Adams Old Plant flows into the pit floor.

3.3 Bulk Storage Containers & Oil Compatibility (40 CFR 112.8(c)(1))

All of the containers are composed of steel and/or plastic and are compatible with the product contained within and their conditions of storage.

3.4 Bulk Storage Secondary Containment Requirements (40 CFR 112.8(c)(2))

All tanks and drums are considered bulk storage containers. Secondary containment for the bulk containers is in the form of outer steel/concrete dikes and/or double-walled tank construction.

3.5 Draining Rainwater from Diked Areas (40 CFR 112.8(c)(3))

The Roanoke Quarry includes multiple diked areas that accumulate rainwater over time. Rainwater that has accumulated in the dike area is inspected as needed for any indication of oil contamination (i.e. sheen and/or free product). The inspection is documented on the Dike Discharge Log. Should no oil contamination be observed, a dike drain valve is opened to drain accumulated rainwater within an AST's surrounding secondary containment dike. A copy of the Dike Discharge Log is presented in **Appendix C**.

3.6 Completely Buried Metallic Tanks (40 CFR 112.8(c)(4))

There are no buried metallic tanks at the facility.

3.7 Integrity Testing for Aboveground Storage Containers (40 CFR 112.8(c)(6))

The SPCC regulations require that integrity testing be performed in accordance with accepted industry standards, with the applicable testing standard and schedule being based upon the volume and construction of the ASTs. Typically, shop-fabricated steel ASTs that are less than 50,000-gallons in storage capacity are tested for integrity in accordance with the Steel Tank Institute's "Standard for the Inspection of Aboveground Storage Tanks" STI SP001 4th Edition, July 2006.

In accordance with Section 5.0 of STI SP001, the onsite ASTs are considered a Category 1 AST because it has a continual release detection method (CRDM) and spill control.

In accordance with STI SP001 Table 5.5, *Table of Inspection Schedules*, Category 1 ASTs ranging between 5,001- and 30,000-gallons in volume are required to be subjected to periodic inspections (quarterly visual inspections conducted by authorized facility personnel), and a formal external inspection by a certified STI SP001 once every 20 years. Performing the periodic visual inspections and conducting a formal external inspection for the Category 1 AST satisfies the integrity testing requirements set forth in 40 CRF Part 112.

3.8 Internal Heating Coils (40 CFR 112.8(c)(7))

Not applicable.

3.9 Safe Fill and Shutdown (40 CFR 112.8(c)(8))

The ASTs are equipped with a direct vision gauge as well as with overfill prevention devices. Roanoke Quarry personnel maintain contact with fuel vendors during the tank filling. Vendors are instructed to continually monitor the AST to prevent overfills during fuel transfer activities and immediately shutdown delivery should an overfill or leak occur. The fuel supply vendor is also required to carry a small spill kit and booms on the fuel delivery truck to use in the event of a release.

3.10 Effluent Treatment Facilities (40 CFR 112.8(c)(9))

Not applicable.

3.11 Visible Oil Leaks (40 CFR 112.8(c)(10))

Any oil releases observed should be immediately addressed as outlined in the ICP.

3.12 Mobile or Portable Oil Storage Containers (40 CFR 112.8(c)(11))

Not applicable. There are no mobile or portable oil storage containers at the Roanoke facility.

3.13 Buried Piping (40 CFR 112.8(d)(1))

There is currently no buried fuel transfer piping located at the facility. All AST piping at the facility is located aboveground and as such, no protective wrappings or coatings are required.

3.14 Out-of-Service Piping (40 CFR 112.8(d)(2))

Currently, there is no out-of-service piping at the facility.

3.15 Pipe Supports (40 CFR 112.8(d)(3))

Pipe supports have been designed to minimize abrasion and corrosion and meet the requirements of the regulation.

3.16 Inspection of Aboveground Valves, Piping and Appurtenances (40 CFR 112.8(d)(4))

Detailed visual inspections of AST valves, piping and appurtenances is conducted and logged during detailed quarterly inspections. The Quarterly Aboveground Storage Tank Inspection form included in **Appendix C**. Pressure testing of pipes are performed by an outside contractor on an annual basis. Test results are kept in the Mine Manager's office.

3.17 Warning of Aboveground Piping (40 CFR 112.8(d)(5))

Aboveground piping at the facility is not located where a vehicle may endanger it or other oil transfer operations.

3.18 Substantial Harm Criteria (40 CFR 112.20(e))

According to Appendix A of 40 CFR Part 112, a facility that transfers oil over water or has a total oil storage capacity greater than or equal to 1 million gallons is required to prepare and submit a Facility-Specific Response Plan to the EPA. If the facility does not meet the above criteria, a Certification of the Applicability of the Substantial Harm Criteria (CASHC) must be completed and maintained on file at the facility. Since this facility does not meet the criteria, a CASHC is included in **Appendix E**.

3.19 Past Spill Events

According to EPA Regulations, any facility subject to the requirements of a SPCC Plan must submit information on the spills and their SPCC Plan to the EPA for review if they have discharged:

- more than 1,000 U.S. gallons of oil into or upon the navigable waters of the United States or adjoining shorelines in a single spill event, or
- 2. over 42 gallons of oil into or upon the navigable waters of the United States or adjoining shorelines in two spill events occurring within any 12-month period.

Record of past spill events is included in Appendix C.

4.0 AST OPERATION AND PREVENTIVE MAINTENANCE

This section presents standard procedures for the operation, preventive maintenance and inspection of all petroleum product transfer, storage and use operations at the facility. The Mine Manager is designated as the Spill Coordinator and oversees all petroleum product operations. Other responsible personnel at the facility are identified on **Appendix C**.

4.1 Inventory Control (9 VAC 25-91-170 A.17)

The Roanoke Quarry staff manages all fuel deliveries and usage. The volume of fuel delivered and transferred is recorded and maintained by Roanoke Quarry personnel as part of the facility's operating records. Delivery tickets for fuel orders are compared to the AST fuel dispenser card data. Large discrepancies are investigated for inventory control. Small discrepancies are attributed to fuel temperature differences, which can cause varying fuel levels.

4.2 Tanker Truck Unloading Procedures

The following tanker truck unloading procedures are in place at the Roanoke Quarry:

- All oil unloading is done with the transport vehicle on the unloading pad.
- Employees verify the tank level prior to beginning unloading or transfer operations by checking the visual tank gauges.
- During all filling operations at the facility, Rockydale Quarries Corporation requires that delivery truck personnel accompany the unloading at all times.
- During unloading, catch box is located at tank connection to capture minor leaks from the filling process and drips from oil wetted surfaces during connection and disconnection.
- All tank valves are closed except the tank being filled during filling/transfer operations.
- Concrete bollards have been installed at appropriate locations around the storage tanks and containment area to prevent vehicles from colliding with tanks or the secondary containment structure.
- Fuel vendors are required to chock their wheels prior to fueling as a reminder to disconnect hoses before moving the vehicle to prevent the truck from departing before complete disconnection of flexible or fixed oil transfer lines.

4.3 Fuel Transfer Procedures

The following fuel transfer procedures are in place at the Roanoke Quarry:

- Fuel vendors are checked-in and weighed at the Scale House prior to entering the facility.
 delivers fuel and weighs out. The fuel vendor can contact with facility personnel during
 fuel delivery at any time in case of an emergency. The fuel vendors are then checked-out
 and weighed again at the Scale House prior to leaving the facility.
- Fuel vendors are required to chock their wheels prior to fueling as a reminder to disconnect hoses before moving the vehicle to prevent the truck from departing before complete disconnection of flexible or fixed oil transfer lines.
- Tank-to-tank transfers are monitored by operating personnel to ensure safe transfer.
- · Transfers from the storage area to the operations building are monitored periodically

- by operators for leaks or problems.
- Valves are closed at the end of any transfer operation to protect against unintended fill or transfer.
- A fire extinguisher is located near each AST.

4.4 Leak Detection Systems (9 VAC 25-91-170 A.18)

The Roanoke Quarry utilizes visual monitoring as leak detection for the ASTs. Informal visual monitoring includes daily and weekly inspections of the petroleum containers as well as daily and weekly visual checks of the level gauges during normal operations. Formal inspections of the petroleum containers are performed quarterly. A copy of the Quarterly Aboveground Storage Tank Inspection form is presented in **Appendix C**. The aboveground fuel supply and return lines and associated pumps/valves with the petroleum containers are also inspected for leaks.

The Roanoke Quarry monitors very closely the fuel inventory for the facility as a release is most likely to be detected during these visual inspections. Visual inspections are designed to detect a release in the shortest feasible time. Roanoke Quarry personnel will notify appropriate management in the event of any unusual inventory discrepancy.

4.5 Personnel Training and Drills (40 CFR 112.7(f)(1))(9 VAC 25-91-170 A.16)

At a minimum, Rockydale Quarries Corporation will conduct annual SPCC training for the Roanoke Quarry. Rockydale Quarries Corporation will be responsible for personnel training involving spill prevention, containment, and response procedures that will be instituted at the Roanoke Quarry.

Operations and maintenance personnel will be given annual instruction on the prevention and control of spills. New personnel will be instructed in the proper handling of petroleum products and spill containment and countermeasures. The training will address the physical and chemical hazards of the products stored onsite. Scheduled preventive briefings are conducted to assure adequate understanding of this ICP. A simulated spill may be conducted annually in order to test the effectiveness and response time of the personnel responsible for spill response. Rockydale Quarries Corporation will determine the time and date for this drill. The nature of the drill will vary to enable the facility to evaluate their effectiveness in dealing with a wide variety of spill events. During the drill, the facility personnel will follow actual spill procedures. At this time, new personnel will be instructed in the proper methods of containment and cleanup. If a real spill occurs during the course of the year, this spill and the associated cleanup operations will be used in lieu of the simulation. The following is also to be incorporated into facility procedures:

- · Safe storage and handling of flammable/combustible liquid;
- · Use and operation of fire protection equipment;
- Safe shutdown of operations under emergency conditions;
- · Safe operation of equipment;
- · Proper filling of tanks to prevent injury or release;
- Inspections and identification of releases and the appropriate responses in the event of a spill; and

· Release response procedures, notifications, and actions.

Following the completion of the drill, a debriefing will be conducted with all parties involved to evaluate the effectiveness of the drill. At this session, the entire drill will be discussed to determine the adequacy of:

- Response time;
- Selection of personal protective equipment;
- Stopping the release;
- · Containing the release; and
- · Preventing the released substance from migrating offsite.

The session will be used as a forum for all parties to make recommendations for improving response as well as outlining actions that are conducted properly. Following completion of the debriefing, minutes of the discussions will be distributed to all of the participating individuals. This forum will serve as another tool that is used to improve procedures. Training documentation (attendee sign-in sheet) is included in **Appendix F**.

4.6 Worst-Case Discharge (9 VAC 25-91-170 A.11)

According to ODCP requirements, the worst-case discharge scenario for this facility involves the instantaneous release of the volume of the largest tank on the facility. For the Roanoke Quarry, the worst-case discharge involves the release of 125% of the volume from one of the 10,000-gallon ASTs (diesel fuel or gasoline). Each 10,000-gallon tank has a secondary containment which is be able to capture about 125% of released product, approximately 12,500 gallons. During adverse weather conditions if a fuel release were to occur it is expected that 2,750 gallons (slush factor), may escape from the secondary containment system and spread out around the immediate vicinity of the AST. Immediately upon noticing the release, the Roanoke Quarry staff would take immediate on-site measures to mitigate the situation and notify the spill response contractor, per the oil spill plan, see section 2.2.

On-site immediate measures would include, but not necessarily be limited to: Utility dust/soil to create initial catch berm in the vicinity of the spill, and deploying sorbent booms and pads into the pooled product to help immobilize the spill. If practical, field expedient measures would be taken to stop the source (e.g., leaking line) by turning of the valves and/or installing plugs. If the spill reaches the catch berm then the spill responders (on-site if practical or defer to spill response contractor) would attempt to minimize the flow by installing absorbent booms at the storm water catch berm and all available access points downstream in the storm sewer. Additionally, containment booms, sorbents and skimmers/vacuum pumps will be deployed at the storm sewer outfall to prevent the spreading of diesel/gas into any waterway(s).

4.7 Natural Resources at Risk (9 VAC 25-91-170 A.13)

In the event of a petroleum spill at the Roanoke Quarry, natural resources outside the boundaries of the facility will only be at risk if the mitigation measures described herein fail. In the unlikely event of such a failure, the natural resources at risk of petroleum release from the facility include the following:

- Surface Water: None
- · Ground Water: None
- Public Water Supplies: None
- Public and Private Wells and Springs: None
- State or Federal Wildlife Management Areas: None
- Wildlife Refuges, Management Areas, and Sanctuaries: Blue Ridge Parkway

4.8 Priorities for Protection and Means of Protecting Natural Resources

The means to protect any natural water resource is through quick response on-site prior to a release leaving the facility's boundaries. In the unlikely event that a spill enters the storm water conveyance system, back-up measures to deploy sorbents and containment/removal processes at the outfall(s) will be implemented.

4.9 Municipal and Other Services at Risk

There are no municipal service with the potential to be affected by a petroleum release.

5.0 STORM WATER MONITORING PROGRAM (VAG840067)

5.1 General

The VDEQ has issued the facility a Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Nonmetallic Mineral Mining. Roanoke Quarry was issued General Permit No. VAG840067, which became effective July 1, 2014 and expires June 30, 2019. A copy of the permit is presented in **Appendix F**.

5.2 Storm Water Drainage/Outfalls

Drainage patterns for the facility are indicated on Figure 2. A brief description of the facility's outfalls is as follows:

- Storm water runoff from the Truck Maintenance Shop flows into the pit area or into Retention Basin #4 before discharging into an unnamed tributary to Back Creek via Outfall #006, located at 37°12'43"N, 79°57'17"W.
- Storm water runoff from the Upper Maintenance Shop, aggregate storage piles, processing areas flow into Retention Basin #3 before discharging into an unnamed tributary to Back Creek via Outfall #002, located at 37°12'42"N, 79°57'01"W.
- Storm water runoff from the Adams New Plant flow into Retention Basin #5, then to Retention Basin #1 before discharging into an unnamed tributary to Ore Branch via Outfall #003, located at 37°13'8"N, 79°57'22"W.
- Storm water runoff from the Lower Grease Pad and the Adams Old Plant flows into the pit floor.

5.3 SIC Code Specific Conditions

The VPDES General Permit requires Roanoke to conduct storm water monitoring of their effluent discharges associated with SIC Code 1422 (Crushed and Broken Limestone). The VPDES General Permit does requires the Roanoke Quarry to conduct analytical monitoring of their storm water discharge associated with the mining industry. The facility is also required to conduct quarterly visual examinations of their storm water discharges for pollutants to determine the presence of unauthorized discharges.

5.4 Storm Water Visual Monitoring

Each of the three outfalls must be visually checked four times per year at least once during each of the following intervals:

- 1. January 1 through March 31
- 2. April 1 through June 30
- 3. July 1 through September 30
- 4. October 1 through December 31

Samples shall be collected within the first 30 minutes, but not to exceed an hour, from a storm event that results in an actual discharge from the site (defined as a "measurable storm event"), which occurs at least 72-hours from the previously measurable storm event.

The 72-hour requirement can be waived if previous precipitation events did not result in a discharge from the designated outfall. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first three hours of discharge provided that the permittee explains with the DMR why a grab sample during the first 30 minutes was impracticable.

Forms for recording the inspections are contained in **Appendix C**. The General Permit explains which reports are required to be submitted to the VDEQ. In the case of Quarterly Visual Monitoring, the reports DO NOT need to be submitted unless requested, but all reports must be maintained in the SWPPP.

For each effluent sampled, the following parmeters will be recorded and reported:

- Date, exact place, and time of sampling or measurements;
- The individual(s) who performed the sampling;
- The date(s) and time(s) analyses were performed;
- The individual(s) who performed the analyses;
- · The analytical techniques or methods used; and
- · The results of such analyses, including calculations.

5.5 Storm Water Analytical Monitoring

The Roanoke Quarry will conduct effluent monitoring of each of storm water discharge associated with nonmetallic mineral mining. Monitoring must be performed from July 2019 through June 2024 during the following frequencies:

- Outfall #002 1/Year (Annually)
- Outfall #003 1/Year (Annually)
- Outfall #006 1/3 months (Quarterly)

The Roanoke Quarry will monitor by laboratory analyses the following parameters with their corresponding limitation:

| Limitatio | Limitation for Outfalls 002 and 003 | | | | | | | |
|-------------------------------|-------------------------------------|-------------------|-------|--|--|--|--|--|
| Effluent Monitoring Parameter | Permit Limitation | DMR Limitation | Units | | | | | |
| Flow | No Limits | No Limits | MGD | | | | | |
| pН | No Limits | No Limits | SU | | | | | |
| Total Suspended Solids (TSS) | 100 | No Limits | mg/l | | | | | |

| Limitation for Outfall 006 | | | | | | | |
|-------------------------------|----------------------|-------------------|-------|--|--|--|--|
| Effluent Monitoring Parameter | Permit Limitation | DMR Limitation | Units | | | | |
| Flow | No Limits | No Limits | MGD | | | | |
| pН | 6.0 to 9.0 | 6.0 to 9.0 | SU | | | | |
| Total Suspended Solids (TSS) | 60 | 60 | mg/l | | | | |

For each storm event sampled, the following storm parameters will be recorded and reported:

- · Date, exact place, and time of sampling;
- The individual(s) who performed the sampling;
- Duration of storm event (in hours);
- · Total precipitation received during storm event;
- Time duration since last measurable storm event (greater than 0.1 inch rainfall); and
- Estimate of total runoff volume (in gallons).

Samples shall be collected within the first 30 minutes, but not to exceed an hour, from a storm event that results in an actual discharge from the site (defined as a "measurable storm event"), which occurs at least 72-hours from the previously measurable storm event. The 72-hour requirement can be waived if previous precipitation events did not result in a discharge from the designated outfall. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first three hours of discharge provided that the permittee explains with the DMR why a grab sample during the first 30 minutes was impracticable.

If corrective actions are required to address a deficiency in the handling of storm water runoff, this SWPPP must be updated to indicate the reason for the corrective action, and the action taken. Part 1.B Special Conditions of the General Permit references specific discharges which are permissible under the General Permit. This section also references activities which are prohibited.

5.6 Flow Measurement

The Roanoke Quarry measures flow using a sized container (i.e. 5-gallon bucket) and a timer. The units of measurement must be calculated and reported as million gallons per day (MGD).

5.7 pH Measurement

The field measurement of pH will be performed using the method of analysis prescribed in the 21st Edition of Standard Methods – 4500-H*B-2000. The following guidelines must be followed:

- Verify the pH thermistor annually against a certified reference thermometer over a range of temperatures that bracket the expected range of measurement;
- Calibrate the pH meter using three buffers (pH of 4, 7, and 10) at the same temperature on each day of use;
- Maintain a stock of pH buffer solutions within manufacturer expiration date and batteries sufficient to operate the meter available at all times for pH analysis.
- Conduct a successful completed initial demonstration of capability (IDC) of the pH meter
 that will be used for pH analysis by each analyst that analyzes pH for VDPES
 monitoring. 4 replicates of a secondary source standard (for example testing 4 samples of
 a different pH 7 buffer than the one used to calibrate the meter). Completed IDC forms
 shall be kept on file;
- Analyze the sample within 15 minutes of collection; and
- Clearly document the specific pH sample analysis time, the meter calibration time, and the analyst initials. Calibration and IDC information as well as sample results will be kept in Appendix F.

5.8 Reporting Monitoring Results

The Roanoke Quarry is required to submit effluent monitoring results to the DEQ. One signed Discharge Monitoring Report (DMR) form must be completed and submitted to the DEQ Blue Ridge Regional Office located in Roanoke, VA. The DMR forms will be submitted to the DEQ no later than the 10th day of January for the previous year's sampling event.

Copies of the completed DMR forms submitted to the DEQ will be maintained on-site with the Plan in **Appendix C**.

The General Permit shows no limits for the analytical results associated with the concentration for flow, pH, and TSS. However, if the TSS monitoring results are greater than the evaluation value of 100 mg/l, then the permittee shall perform the inspection for that outfall. Any deficiencies noted during the inspection shall be corrected in a timely manner.

Should analytical results exceed a parameter's limitations, the facility may sample the outfall(s) again after investigating, mitigating, and documenting the probable cause. Should this occur, the average and maximum analytical results for that parameter must be shown on the DMR along with the number of exceedances. Similarly, the minimum and maximum analytical results for pH must be shown on the DMR along with the number of exceedances.

5.9 Reports of Noncompliance

The Roanoke Quarry will report to the DEQ any noncompliance that may adversely affect state waters or many endanger public health.

5.10 Prohibited Dumping into Trash Dumpsters

The Roanoke Quarry prohibits the dumping of materials into the trash dumpsters that may leak from the dumpsters and migrate to the adjacent storm water drainage inlets that eventually discharge into the onsite retention pond. Materials include liquids or solids that may dissolve when in contact with storm water.

The Roanoke Quarry will inspect the trash dumpsters for evidence of the prohibited dumping of materials and include the area surrounding the trash dumpsters for indications of non-storm water discharges. Roanoke Quarry shall also maintain good housekeeping, as described in **Section 2.5.1**, in the area surrounding the trash dumpsters.

5.11 Non-Storm Water Discharges

For other non-storm water discharges not authorized by General Permit VAG840067, the Roanoke Quarry performs or subcontracts monitoring of its discharges annually during a dry period of no rainfall. Conditions indicative of a non-storm water discharge such as color, floating or suspended material, a petroleum sheen, foam, etc., suggesting that the source of the standing water was surface or ground water have not been observed during the inspections.

The Roanoke Quarry will continue to perform or subcontract the inspections to ensure compliance with the non-storm water discharge requirement on an annual basis. A "Non-Storm Water Discharge Assessment and Certification" form, included in **Appendix C**, will be completed to document this activity.

5.12 Annual Comprehensive Site Compliance Evaluation

At least once per year, PPT members must conduct asite compliance evaluations, which are comprehensive inspections. The team members involved should be familiar with facility operations and ICP goals. The compliance evaluations include:

- Reviewing the ICP and listing items, which are part of material handling and storage areas, covered by the plan.
- Reviewing facility operations to determine if new areas or modifications to plant operations have occurred that should be incorporated into the ICP.
- Inspecting storm water drainage areas for evidence of pollutants entering the drainage system.
- Evaluating the effectiveness of storm water pollution prevention measures to reduce pollutant loadings and whether additional measures are needed.
- Observe structural measures, sediment controls and other BMPs to ensure proper operation.
- Inspect equipment needed to implement the plan, such as spill response equipment.
- Revising the ICP as necessary within two weeks if it is determined that potential
 pollutant sources and pollution prevention control measures are not adequate.
- Implementing necessary changes in a timely manner but in no case more than twelve weeks after the evaluation.

The Annual Comprehensive Site Compliance Evaluation (ACSCE) report form summarizing the evaluation, personnel making the evaluation, the date of the evaluation, major observations related to the implementation of the VPDES General Permit, and actions taken is presented in **Appendix C**. The ACSCE shall identify incidents of non-compliance, if any. Where a report does not identify any incidents of non-compliance, the ACSCE shall contain a certification that the facility is in compliance with the ICP and related VPDES permit. The report shall be signed by a Responsible Corporate Officer (Reference VPDES Permit VAG840067 Part III, Page 4, Section K, Signatory Requirements).

APPENDIX F

VPDES GENERAL PERMIT NO. VAG840067
DISCHARGE MONITORING REPORT (DMR) FORMS
QUARTERLY RAINFALL TRACKING
QUARTERLY VISUAL OUTFALL MONITORING FORMS
LABORATORY ANALYTICAL AND PH SAMPLING RESULTS



COMMONWEALTH of VIRGINIA

Matthew J. Strickler Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY Blue Ridge Regional Office

901 Russell Drive, Salem, VA, 24153 (540) 562-6700; Fax (540) 562-6725 www.deq.virginia.gov David K. Paylor Director

Robert J. Weld Regional Director

July 23, 2019

Chris Willis Area Manager 2343 Highland Farm Road NW Roanoke, VA 24017

Re: Coverage under the General VPDES Permit for Nonmetallic Mineral Mining Facilities, Registration Number VAG840067

Dear Permittee:

DEQ staff have reviewed your Registration Statement received on July 19, 2019, and have determined that activities of the nonmetallic mineral mining facility identified in the Registration Statement are hereby covered under the referenced general VPDES permit. Your coverage under this general permit becomes effective as of the date of this letter. The attached copy of the general permit contains the applicable effluent limitations, monitoring requirements and other conditions of coverage.

A Discharge Monitoring Report (DMR) for your process wastewater and commingled stormwater, and stormwater associated with an industrial activity are included with the permit. Each DMR specifies the applicable effluent limitations, monitoring requirements and monitoring frequency (i.e., quarterly or yearly) contained in the permit. You are responsible for obtaining additional copies of the DMR[s].

For quarterly monitoring, the DMR[s] should be submitted by the tenth of January, April, July and October. For yearly monitoring, the DMR[s] should be submitted by the tenth of January. In accordance with the general permit, you are required to submit the DMR[s] to:

DEQ – Blue Ridge Regional Office 901 Russell Drive Salem, VA 24153

Part II of the general permit requires that you review and modify, as appropriate, your existing Stormwater Pollution Prevention Plan to ensure that you are meeting the requirements of the general permit as expeditiously as practicable, but not later than 60 days from the date of

coverage under the general permit. The existing plan should continue to be implemented until a new plan, if required, is developed and implemented.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director of the Virginia Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.

The general permit will expire on June 30, 2024. The conditions of the permit require that you submit a new registration at least 60 days prior to that date if you wish continued coverage under the general permit, unless permission is granted to submit a new registration statement on a later date.

Please contact Leah Revelle at (540) 598-2636 or via email at leah.revelle@deg.virginia.gov.

Sincerely,

Kip D. Foster

Water Permit Manager Blue Ridge Regional Office



DEPARTMENT OF ENVIRONMENTAL QUALITY

General Permit No.: VAG840067 Effective date: July 1, 2019 Expiration date: June 30, 2024

GENERAL PERMIT FOR NONMETALLIC MINERAL MINING

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant to it, owners of nonmetallic mineral mines are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in board regulations that prohibit such discharges.

The authorized discharge shall be in accordance with the information submitted with the registration statement, this cover page, Part I - Effluent Limitations, Monitoring Requirements, and Special Conditions, Part II - Stormwater Management, and Part III - Conditions Applicable to All VPDES Permits, as set forth in this permit.

Effluent Limitations, Monitoring Requirements, and Special Conditions

A. Effluent limitations and monitoring requirements.

1. During the period beginning with the permittee's coverage under this general permit and lasting until the permit's expiration date, the permittee is authorized to discharge process wastewater and commingled stormwater associated with industrial activity from outfalls.

Such discharges shall be limited and monitored by the permittee as specified below:

| FEELLICNT | | DISCHARGE | DISCHARGE LIMITATIONS | MONITORING REQUIREMENTS | JIREMENTS |
|------------------------------------|--------------------|------------------|-----------------------|-------------------------|-------------|
| CHARACTERISTICS | Monthly Average | Daily Minimum | Daily Maximum | Frequency (1) | Sample Type |
| Flow (MGD) | N | NA | N | 1/3 Months | Estimate |
| Total Suspended Solids (mg/l) | 30 | NA | 09 | 1/3 Months | Grab |
| pH (standard units) ⁽²⁾ | NA | 0.9 | 0.6 | 1/3 Months | Grab |

NL = No Limitation, monitoring required

NA = Not Applicable

through September, and October through December. Discharge Monitoring Reports (DMRs) of quarterly monitoring shall be submitted to (1)1/3 Months equals the following three-month periods each year of permit coverage: January through March, April through June, July the DEQ regional office no later than the 10th day of April, July, October, and January.

⁽²⁾Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH, those standards shall be the minimum and maximum pH effluent limits. Part

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2. During theperiod beginning with the permittee's coverage under the general permit and lasting until the permit's expiration date, the permittee is authorized to discharge stormwater associated with industrial activity that does not combine with other wastewaters prior to discharge from outfalls.

Such dscharges shall be limited and monitored by the permittee as specified below:

| | SIC | DISCHARGE LIMITATIONS | SNC | MONITORING R | MONITORING REQUIREMENTS |
|-------------------------------|--------------------|-----------------------|-------------------|---------------|-------------------------|
| EFFLUENT CHARACTERISTICS | Monthly Average | Daily Minimum | Daily Maximum | Frequency (1) | Sample Type |
| Flow (MG) | NA | NA | N | 1/Year | Estimate ⁽²⁾ |
| Total Suspended Solids (mg/l) | NA | NA | NL ⁽³⁾ | 1/Year | Grab |
| pH (standard units) | NA | NL | NL | 1/Year | Grab |

NL = No Limitation, monitoring required

NA = Not applicable

(1) Discharge Monitoring Reports (DMRs) of yearly monitoring (January 1 to December 31) shall be submitted to the DEQ regional office no later than the 10th day of January.

(2) Estimate of the total volume of the discharge during the storm event.

(3) Permittees shall review the results of the TSS monitoring required by Part I A 2 a to determine if changes to the stormwater pollution permittee shall perform a routine facility inspection within five days of becoming aware of the exceedance and maintain documentation prevention plan (SWPPP) may be necessary. If the TSS monitoring results are greater than the evaluation value of 100 mg/l, then the as described in Part II H 3 d for that outfall. Any deficiencies noted during the inspection shall be corrected within 60 days of being identified

observation of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators with the SWPPP rather than submitted to the department. Calendar quarters equal the following three-month periods each year The monitoring shall include examination of stormwater samples representative of storm event discharges from the facility and b. The permittee shall conduct calendar quarterly visual monitoring of stormwater discharges associated with industrial activity snowmet), visual quality of the stormwater discharge and probable sources of any observed stormwater contamination. Part II apply to the taking of samples for visual monitoring except that the documentation required by these sections shall be retained A regarding monitoring instructions, Part II B regarding representative outfalls, and Part II C regarding sampling waivers shall of permit coverage: January through March, April through June, July through September, and October through December. include the examination date and time, examination personnel, outfall location, the nature of the discharge (i.e., runoff or of stormwater pollution. Documentation of visual monitoring of stormwater shall be maintained onsite in the SWPPP and

B. Special conditions.

- 1. Vehicles and equipment utilized during the industrial activity on a site must be operated and maintained in such a manner as to prevent the potential or actual point source pollution of the surface or groundwaters of the state. Fuels, lubricants, coolants, and hydraulic fluids, or any other petroleum products, shall not be disposed of by discharging on the ground or into surface waters. Spent fluids shall be disposed of in a manner so as not to enter the surface or groundwaters of the state and in accordance with the applicable state and federal disposal regulations. Any spilled fluids shall be cleaned up and disposed of in a manner so as not to allow their entry into the surface or groundwaters of the state.
- 2. No sewage shall be discharged from this mineral mining activity except under the provisions of another VPDES permit specifically issued for that purpose.
- 3. There shall be no chemicals added to the discharge, other than those listed on the owner's approved registration statement, unless prior approval of the chemical is granted by the board.
- 4. The permittee shall submit a new registration statement if the mining permit approved by the Division of Mineral Mining (or associated waivered program, or bordering state mine authority) is modified or reissued in any way that would affect the outfall location or the characteristics of a discharge covered by this general permit. Government owned and operated mines without mining permits shall submit the registration statement whenever outfall location or characteristics are altered. The new registration statement shall be filed within 30 days of the outfall relocation or change in the characteristics of the discharge.
- 5. The permittee shall notify the department as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 µg/l) of the toxic pollutant;
 - (2) Two hundred micrograms per liter (200 μ g/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the board.
 - b. That any activity has occurred or will occur that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that 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 μg/l) of the toxic pollutant;
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the board in accordance with 9VAC25-31-220 F.
- 6. Any and all product, materials, industrial wastes, or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, or storage of raw or intermediate materials, final product, by-product, or wastes shall be handled, disposed of, or stored in such a manner and consistent with best management practices, so as not to permit a discharge of such product, materials, industrial wastes, or other wastes to state waters, except as expressly authorized.
- 7. There shall be no discharge of process wastewater pollutants from colocated asphalt paving materials operations. For the purposes of this special condition, process wastewater pollutants are any pollutants present in water used in asphalt paving materials manufacturing that come

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into direct contact with any raw materials, intermediate product, by-product or product related to the asphalt paving materials manufacturing process.

- 8. Process water may be used on site for the purpose of dust suppression. Dust suppression shall be carried out as a best management practice but not as a wastewater disposal method provided that ponding or direct runoff from the site does not occur during or immediately following its application. Dust suppression shall not occur during a storm event that results in an actual discharge from the site.
- 9. Process water from mine dewatering may be provided to local property owners for beneficial agricultural use.
- 10. There shall be no:
 - a. Discharge of floating solids or visible foam in other than trace amounts from process water discharges;
 - b. Solids deposition to surface water as a result of a discharge associated with industrial activity; or
 - c. Oil sheen resulting from petroleum products discharged to surface water as a result of the industrial activity.
- 11. The permittee shall report at least two significant digits for a given parameter. Regardless of the rounding convention used (i.e., five always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently and shall ensure that consulting laboratories employed by the permittee use the same convention.
- 12. Discharges to waters subject to TMDL wasteload allocations. Owners of facilities that are a source of the specified pollutant of concern to waters for which a total maximum daily load (TMDL) wasteload allocation has been approved prior to the term of this permit shall incorporate measures and controls into the SWPPP required by Part II that are consistent with the assumptions and requirements of the TMDL. The department will provide written notification to the owner that a facility is subject to the TMDL requirements. If the TMDL establishes a numeric wasteload allocation that applies to discharges from the facility, the owner shall perform any required monitoring in accordance with Part I A and implement measures necessary to meet that allocation.
- 13. The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards.
- 14. Inactive and unstaffed facilities (including temporarily inactive and unstaffed facilities).
 - a. A waiver of the process and stormwater monitoring and routine inspections may be exercised by the board at a facility that is both inactive and unstaffed as long as the facility remains inactive and unstaffed. Such a facility is required to conduct an annual site inspection in accordance with the requirements in Part II H 4 d 3. No DMR reports will be required to be submitted when a facility is approved as inactive and unstaffed.
 - b. An inactive and unstaffed sites waiver request shall be submitted to the board for approval and shall include the name of the facility; the facility's VPDES general permit registration number; a contact person, phone number, and email address (if available); the reason for the request; and the date the facility became or will become inactive and unstaffed. The waiver request shall be signed and certified in accordance with Part III K. If this waiver is granted, a copy of the request and the board's written approval of the waiver shall be maintained with the SWPPP.
 - c. To reactivate the site the permittee shall notify the department within 30 days or an alternate timeframe if written approval is received in advance from the board, and all process and stormwater monitoring and routine inspections shall be resumed immediately. This notification must be submitted to the department, signed in accordance with Part III K, and retained on site at the facility covered by this permit in accordance with Part III B.

- d. The board retains the authority to revoke this waiver when it is determined that the discharge causes, has a reasonable potential to cause, or contributes to a water quality standards violation.
- 15. Process wastewater systems designed to operate as "no discharge" shall have no discharge of wastewater or pollutants, except in storm events greater than a 25-year, 24-hour storm event. In the event of such a discharge, the permittee shall report an unusual or extraordinary discharge per Part III H of this permit. No sampling or DMR is required for these discharges as they are considered to be discharging in emergency discharge conditions. These discharges shall not contravene the Water Quality Standards (9VAC25-260), as adopted and amended by the board, or any provision of the State Water Control Law. Any other discharge from this type of system is prohibited, and shall be reported as an unauthorized discharge per Part III G of this permit.
- 16. Best management practices for blasting. The permittee shall utilize best management practices to ensure that contaminants do not enter surface water as a result of blasting at the site.
- 17. Notice of termination.
 - a. The owner may terminate coverage under this general permit by filing a complete notice of termination. The notice of termination may be filed after one or more of the following conditions have been met:
 - (1) Operations have ceased at the facility and there are no longer discharges of process wastewater or stormwater associated with the industrial activity;
 - (2) A new owner has assumed responsibility for the facility. A notice of termination does not have to be submitted if a VPDES Change of Ownership Agreement Form has been submitted:
 - (3) All discharges associated with this facility have been covered by a VPDES individual permit or an alternative VPDES permit; or
 - (4) Termination of coverage is being requested for another reason, provided the board agrees that coverage under this general permit is no longer needed.
 - b. The notice of termination shall contain the following information:
 - (1) Owner's name, mailing address, telephone number, and email address (if available);
 - (2) Facility name and location;
 - (3) VPDES general permit registration number for the facility; and
 - (4) The basis for submitting the notice of termination, including:
 - (a) A statement indicating that a new owner has assumed responsibility for the facility;
 - (b) A statement indicating that operations have ceased at the facility, and there are no longer discharges from the facility;
 - (c) A statement indicating that all discharges have been covered by a VPDES individual permit; or
 - (d) A statement indicating that termination of coverage is being requested for another reason (state the reason).
 - c. The following certification:
 - "I certify under penalty of law that all wastewater and stormwater discharges from the identified facility that are authorized by this VPDES general permit have been eliminated, or covered under a VPDES individual or alternative permit, or that I am no longer the owner of the facility, or permit coverage should be terminated for another reason listed above. I understand that by submitting this notice of termination, that I am no longer authorized to discharge nonmetallic mineral mining wastewater or stormwater in accordance with the general permit, and that discharging pollutants to surface waters is unlawful where the

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discharge is not authorized by a VPDES permit. I also understand that the submittal of this notice of termination does not release an owner from liability for any violations of this permit or the Clean Water Act."

d. The notice of termination shall be submitted to the DEQ regional office serving the area where the facility discharge is located and signed in accordance with Part III K.

Part II

Stormwater Management

A. Monitoring instructions.

- Collection and analysis of samples. Sampling requirements shall be assessed on an outfallby-outfall basis. Samples shall be collected and analyzed in accordance with the requirements of Part III A.
- 2. When and how to sample.
 - a. In the case of snowmelt or a discharge from a stormwater management structure, a representative sample shall be taken at the time the discharge occurs.
 - b. For all other types of stormwater discharges, a minimum of one grab sample shall be taken resulting from a storm event that results in a discharge from the site (defined as a "measurable storm event"), providing the interval from the preceding measurable storm event is at least 72 hours. The 72-hour storm interval is waived if the permittee is able to document with the discharge monitoring report (DMR) that less than a 72-hour interval is representative for local storm events during the sampling period. The grab sample shall be taken during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first three hours of discharge provided that the permittee explains with the DMR why a grab sample during the first 30 minutes was impracticable and maintains that documentation with the SWPPP.
- B. Representative outfalls. If a facility has two or more exclusively stormwater outfalls that discharge substantially identical effluents, based on similarity of industrial activity, significant materials, frequency of discharges, and management practices and activities within the area drained by the outfalls, then the permittee may submit information with the registration statement substantiating the request for only one DMR to be issued for the outfall to be sampled that represents one or more substantially identical outfalls. The permittee shall document representative outfalls in the SWPPP and list on the DMR of the outfall to be sampled all outfall locations that are represented by the discharge. The representative outfall monitoring provisions apply to Part I A 2 a monitoring and quarterly visual monitoring.

The permittee must include the following information in the SWPPP:

- 1. The locations of the outfalls; and
- 2. An evaluation, including available monitoring data, indicating why the outfalls are expected to discharge substantially identical effluents.
- C. Sampling waivers. When a permittee is unable to conduct quarterly stormwater monitoring required under Part I A 2 b within the specified sampling period due to no measurable storm event or adverse weather conditions, documentation shall be submitted explaining the permittee's inability to conduct the stormwater monitoring. The documentation must include the dates and times that the outfalls were viewed and sampling was attempted. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.). Acceptable documentation includes National Climatic Data Center weather station data, local weather station data, facility rainfall logs, and other appropriate supporting data. All documentation shall also be maintained with the SWPPP. This waiver is not applicable to annual monitoring required under Part I A 2 a.
- D. Stormwater pollution prevention plans (SWPPP). An SWPPP shall be developed and implemented for the facility. The plan shall include best management practices (BMPs) that are reasonable, economically practicable, and appropriate in light of current industry practices. The BMPs shall be selected, designed, installed, implemented, and maintained in accordance with good engineering practices to eliminate or reduce the pollutants in all stormwater discharges from the facility. The SWPPP shall also include all control measures necessary for the stormwater discharges to meet applicable water quality standards.

The SWPPP requirements of this general permit may be fulfilled, in part, by incorporating by reference other plans or documents such as an erosion and sediment control plan, a mine drainage plan as required by the Virginia Division of Mineral Mining, a spill prevention control and countermeasure (SPCC) plan developed for the facility under § 311 of the federal Clean Water Act or BMP programs otherwise required for the facility provided that the incorporated plan meets or exceeds the SWPPP requirements of Part II H (contents of SWPPP). All plans incorporated by reference into the SWPPP become enforceable under this permit. If a plan incorporated by reference does not contain all of the required elements of Part II H, the permittee must develop the missing SWPPP elements and include them in the required SWPPP.

- E. Deadlines for SWPPP preparation and compliance.
 - 1. Owners of existing facilities that were covered under the 2014 Nonmetallic Mineral Mining General Permit that are continuing coverage under this general permit shall update and implement any revisions to the SWPPP within 60 days of the board granting coverage under this permit.
 - 2. Owners of new facilities, facilities previously covered by an expiring individual permit, and existing facilities not currently covered by a VPDES permit that elect to be covered under this general permit shall prepare and implement the SWPPP prior to submitting the registration statement.
 - 3. Where the owner of an existing facility that is covered by this permit changes, the new owner of the facility shall update and implement any revisions to the SWPPP within 60 days of ownership change.
 - 4. Upon a showing of good cause, the director may establish a later date in writing for the preparation and compliance with the SWPPP.
- F. Signature and SWPPP review.
 - 1. The SWPPP shall be signed in accordance with Part III K (signatory requirements), and be retained on site at the facility covered by this permit in accordance with Part III B (records) of this permit. When there are no on-site buildings or offices in which to store the plan, it shall be kept at the nearest company office.
 - 2. The permittee shall make the SWPPP, routine inspection documentation, or other information available to the department upon request.
 - 3. The director, or an authorized representative, may notify the permittee at any time that the SWPPP, BMPs, or other components of the facility's stormwater program do not meet one or more of the requirements of this part. Such notification shall identify specific provisions of the permit that are not being met and may include required modifications to the stormwater program, additional monitoring requirements, and special reporting requirements. Within 60 days of such notification from the director, or as otherwise provided by the director, or an authorized representative, the permittee shall make the required changes to the plan and shall submit to the department a written certification that the requested changes have been made.
- G. Maintaining an updated SWPPP. The permittee shall review and amend the SWPPP as appropriate whenever:
 - 1. There is construction or a change in design, operation, or maintenance that has a significant effect on the discharge or the potential for the discharge of pollutants to surface waters;
 - 2. Routine inspections determine that there are deficiencies in the BMPs;
 - 3. Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;
 - 4. There is a spill, leak, or other release at the facility; or
 - 5. There is an unauthorized discharge from the facility.

SWPPP modifications shall be made within 60 calendar days after discovery, observation, or an event requiring an SWPPP modification. Implementation of new or modified BMPs (distinct from regular preventive maintenance of existing BMPs described in Part II H 3 b (preventative maintenance) shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the director. The amount of time taken to modify a BMP or implement additional BMPs shall be documented in the SWPPP.

If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of Part III G of this permit.

- H. Contents of SWPPP. The SWPPP shall include, at a minimum, the following items:
 - 1. Pollution prevention team. Each plan shall identify the staff individuals by name or title who comprise the facility's stormwater pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, implementing, maintaining, revising, and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team shall be identified and listed.
 - 2. Summary of potential pollutant sources. The SWPPP shall identify where industrial materials or activities at the facility are exposed to stormwater. The description shall include:
 - a. Site map. The site map shall document:
 - (1) An outline of the drainage area of each stormwater outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in stormwater runoff, surface water bodies, locations where materials are exposed to precipitation, locations where major spills or leaks identified under Part II H 2 c (spills and leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle or equipment degreasing, cleaning areas, loading or unloading, locations used for the treatment, storage or disposal of wastes and wastewaters, liquid storage tanks, processing areas, and storage areas. The map must indicate all outfall locations. The types of discharges contained in the drainage areas of the outfalls must be indicated either on the map or in an attached narrative.
 - (2) For each area of the facility that generates stormwater discharges associated with industrial activity, locations of stormwater conveyances, including ditches, pipes, swales, and inlets, and the directions of stormwater flow and an identification of the types of pollutants that are likely to be present in stormwater discharges associated with industrial activity. Factors to consider include the toxicity of the chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with stormwater; and history of significant spills or leaks of toxic or hazardous pollutants. Flows with a potential for causing erosion shall be identified.
 - b. Inventory of exposed materials. A list of the industrial materials or activities, including material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, by-products, final products, and waste products. Material handling activities include to the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product, or waste product.
 - c. Spills and leaks. A list of significant spills and leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a stormwater conveyance at the facility after the date of three years prior to the date of coverage under this general permit. Such list shall be updated as appropriate during the term of the permit.
 - d. Sampling data. A summary of existing stormwater sampling data taken at the facility. The summary shall include, at a minimum, any data collected during the previous three years.

- 3. Stormwater controls. Control measures shall be implemented for all areas identified in Part II H 2 b (inventory of exposed materials) to prevent or control pollutants in stormwater discharges from the facility. All reasonable steps shall be taken to control or address the quality of discharges from the site that may not originate at the facility. The SWPPP shall describe the type, location, and implementation of all BMPs for each area where industrial materials or activities are exposed to stormwater. The BMPs shall also address the following minimum components, including a schedule for implementing such controls:
 - a. Good housekeeping. Good housekeeping requires the clean and orderly maintenance of areas that may contribute pollutants to stormwater discharges. The SWPPP shall describe procedures performed to minimize contact of materials with stormwater runoff. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks, vehicle fueling and maintenance areas, loading or unloading areas, and vehicle entrance and exits. The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants in stormwater. The permittee shall sweep or vacuum paved surfaces of the site that are exposed to stormwater at regular intervals or use other equivalent measures to minimize the potential discharge of these materials in stormwater. Indicate in the SWPPP the frequency of sweeping, vacuuming, or other equivalent measures.
 - b. Preventive maintenance. A preventive maintenance program shall involve regular inspection, testing, maintenance, and repairing of all industrial equipment and systems to avoid breakdowns or failures that could result in leaks, spills, and other releases. All BMPs identified in the SWPPP shall be maintained in effective operating condition. The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance and observation of all BMPs and shall include a description of the back-up practices that are in place should a run-off event occur while a BMP is off line or not operating effectively. The effectiveness of nonstructural BMPs shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained). If site inspections required by Part II H 3 d (routine facility inspections) identify BMPs that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. Documentation shall be kept with the SWPPP of maintenance and repairs of BMPs, including the dates of regular maintenance, dates of discovery of areas in need of repair or replacement, dates for repairs, dates that the BMPs returned to full function, and the justification for an extended maintenance or repair schedules. The maintenance program shall require periodic removal of debris from discharge diversions and conveyance systems. Permittees using settling basins to control their effluents must provide maintenance schedules for such basins in the SWPPP.
 - c. Spill prevention and response procedures. The SWPPP shall describe the procedures that will be followed for preventing and responding to spills and leaks, including barriers between material storage and traffic areas, secondary containment provisions, procedures for material storage and handling, response procedures for notification of appropriate facility personnel, emergency agencies, and regulatory agencies and procedures for stopping, containing, and cleaning up spills. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals shall be a member of the pollution prevention team. Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP and in other locations where it will be readily available.
 - d. Routine facility inspections.

- (1) Personnel who are familiar with the mining activity, the best management practices, and the SWPPP shall be identified to conduct routine facility inspections. Such inspections must include all areas where industrial materials or activities are exposed to stormwater as identified in Part II H 2 b (inventory of exposed materials), including material storage and handling areas, areas where aggregate is stockpiled outdoors, liquid storage tanks, hoppers or silos, material handling vehicles, equipment, and processing areas; off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site; vehicle and equipment maintenance areas and cleaning and fueling areas; best management practices; and discharge points.
- (2) The inspection frequency shall be specified in the SWPPP based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly. Inspections of best management practices shall include inspection of stormwater discharge diversions, conveyance systems, sediment control and collection systems, containment structures, vegetation, serrated slopes, and benched slopes to determine their adequacy and effectiveness, the integrity of control structures, if soil erosion has occurred, or if there is evidence of actual or potential discharge of contaminated stormwater.
- (3) Site inspection and best management practices inspection results must be documented and maintained on-site with the SWPPP.
- (4) A set of tracking or followup procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Such actions must include updating pollution sources, updating pollution prevention measures and controls, and updating the SWPPP as appropriate based on information developed during the inspections.
- (5) The requirement for routine facility inspections is waived for facilities that have maintained an active VEEP E3/E4 status.
- e. Employee training. Employee training shall be conducted at least annually at active mining sites and at those temporarily inactive sites that are staffed. Employee training programs shall inform personnel responsible for implementing activities identified in the SWPPP or otherwise responsible for stormwater management at all levels of responsibility of the components and goals of the stormwater pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. All employee training shall be documented in the SWPPP.
- f. Recordkeeping and internal reporting procedures. A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of stormwater discharges shall be included in the SWPPP required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the SWPPP. Ineffective best management practices must be recorded and the date of their corrective action noted in the SWPPP.
- g. Sediment and erosion control. The plan shall identify areas that, due to topography, land disturbance (e.g., construction, landscaping, site grading), or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative, or stabilization BMPs to prevent or control on-site and off-site erosion and sedimentation.
- h. Management of runoff. The SWPPP shall describe the stormwater runoff management practices (i.e., permanent structural BMPs) for the facility. These types of BMPs are typically used to divert, infiltrate, reuse, or otherwise reduce pollutants in stormwater discharges from the site. Appropriate measures may include: vegetative swales and practices, reuse of collected stormwater (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention or retention devices.
- I. Authorized nonstormwater discharges. The following nonstormwater discharges are authorized by this permit:

- 1. Discharges from emergency firefighting activities;
- 2. Fire hydrant flushing, managed in a manner to avoid an instream impact;
- 3. Potable water, including water line flushing, managed in a manner to avoid instream impact;
- 4. Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
- 5. Irrigation drainage;
- 6. Landscape watering, provided all pesticides, herbicides, and fertilizers have been applied in accordance with approved labeling;
- 7. Routine external building washdown that does not use detergents or hazardous cleaning products;
- 8. Pavement wash waters where no detergents or hazardous cleaning products are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed). Pavement wash waters shall be managed in a manner to avoid instream impacts;
- 9. Uncontaminated groundwater or spring water;
- 10. Foundation or footing drains where flows are not contaminated with process materials; and
 - 11. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

Part III Conditions Applicable to All VPDES Permits

A. Monitoring.

- 1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
- 2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
- 3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.
- 4. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records.

- 1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individuals who performed the sampling or measurements;
 - c. The dates and times analyses were performed;
 - d. The individuals who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
- 2. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the registration statement for this permit, for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the board.

C. Reporting monitoring results.

- 1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.
- 2. Monitoring results shall be reported on a discharge monitoring report (DMR) or on forms provided, approved or specified by the department.
- 3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.
- 4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- D. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information that the board may request to determine whether cause exists for terminating coverage under this permit or to determine compliance with this permit. The board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may

be necessary to determine the effect of the wastes from its discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the department, upon request, copies of records required to be kept by this permit.

- E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- F. Unauthorized discharges. Except in compliance with this permit or another permit issued by the board, it shall be unlawful for any person to:
 - 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
 - 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.
- G. Reports of unauthorized discharges. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part III F (unauthorized discharges); or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part III F, shall notify the department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department within five days of discovery of the discharge. The written report shall contain:
 - 1. A description of the nature and location of the discharge;
 - 2. The cause of the discharge;
 - The date on which the discharge occurred;
 - 4. The length of time that the discharge continued;
 - The volume of the discharge;
 - 6. If the discharge is continuing, how long it is expected to continue;
 - 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
 - 8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

- H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify (see NOTE in Part III I), in no case later than 24 hours, the department after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part III I 2. Unusual and extraordinary discharges include any discharge resulting from:
 - 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
 - 2. Breakdown of processing or accessory equipment;
 - 3. Failure or taking out of service some or all of the treatment works; and
 - 4. Flooding or other acts of nature.
 - I. Reports of noncompliance.
 - 1. The permittee shall report any noncompliance that may adversely affect state waters or may endanger public health.

- a. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information that shall be reported within 24 hours under this subdivision:
- (1) Any unanticipated bypass; and
- (2) Any upset that causes a discharge to surface waters.
- b. A written report shall be submitted within five days and shall contain:
- (1) A description of the noncompliance and its cause;
- (2) The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- (3) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The board may waive the written report on a case-by-case basis for reports of noncompliance under Part III I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

2. The permittee shall report all instances of noncompliance not reported under Parts III I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part III I 2.

NOTE: The immediate (within 24 hours) reports required in Part III G, H and I may be made to the department's regional office. Reports may be made by telephone, FAX, or online at http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.

- J. Notice of planned changes.
 - 1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under § 306 of the federal Clean Water Act that are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with § 306 of the federal Clean Water Act that are applicable to such source, but only if the standards are promulgated in accordance with § 306 within 120 days of their proposal:
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit registration process or not reported pursuant to an approved land application plan.
 - 2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.
- K. Signatory requirements.
 - 1. Registration statement. All registration statements shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purposes of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of

the corporation in charge of a principal business function, or any other person who performs similar policy- making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit registration requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) the chief executive officer of the agency or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 2. Reports and other information. All reports required by permits, and other information requested by the board, shall be signed by a person described in Part III K 1 or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part III K 1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
 - c. The written authorization is submitted to the department.
- 3. Changes to authorization. If an authorization under Part III K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part III K 2 shall be submitted to the department prior to or together with any reports or information to be signed by an authorized representative.
- 4. Certification. Any person signing a document under Part III K 1 or 2 shall 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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the federal Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the federal Clean Water Act. Permit noncompliance is grounds for enforcement action, for permit coverage termination, or for denial of permit coverage.
- M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain coverage under a new permit. All permittees with currently effective permit coverage shall submit a new registration statement at least 60

days before the expiration date of the existing permit, unless permission for a later date has been granted by the board. The board shall not grant permission for registration statements to be submitted later than the expiration date of the existing permit.

- N. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights or any infringement of federal, state or local laws or regulations.
- O. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to, any other state law or regulation or under authority preserved by § 510 of the federal Clean Water Act. Except as provided in permit conditions on "bypass" (Part III U) and "upset" (Part III V), nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.
- P. Oil and hazardous substance liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.
- Q. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.
- R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.
- S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.
- T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions of Parts III U 2 and U 3.

2. Notice.

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted if possible at least 10 days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III I (reports of noncompliance).

Prohibition of bypass.

- a. Bypass is prohibited, and the board may take enforcement action against a permittee for bypass, unless:
- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

Page 6 of 7

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part III U 2.

b. The board may approve an anticipated bypass, after considering its adverse effects, if the board determines that it will meet the three conditions listed in Part III U 3 a.

V. Upset.

- 1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of Part III V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part III I; and
 - d. The permittee complied with any remedial measures required under Part III S.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- W. Inspection and entry. The permittee shall allow the director or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
 - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - 4. Sample or monitor at reasonable times, for the purposes of ensuring permit compliance or as otherwise authorized by the federal Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

- X. Permit actions. Permit coverage may be terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
 - Y. Transfer of permit coverage.
 - 1. Permit coverage is not transferable to any person except after notice to the department.
 - 2. Coverage under this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the department at least 30 days in advance of the proposed transfer of the title to the facility or property unless permission for a later date has been granted by the department;

VPDES Permit No. VAG840067

Page 7 of 7

b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

- c. The board does not notify the existing permittee and the proposed new permittee of its intent to deny the permittee coverage under the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part III Y 2 b.
- Z. Severability. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

PERMITTED FACILITY

Rockydale Quarries Corporation - Rockydale Plant 2343 Highland Farm Rd NW, Roanoke VA 24017

Permit Number: VAG840067

No Discharge:

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY NONMETALLIC MINERAL MINING DISCHARGE MONITORING REPORT (DMR)

| | | M | ONITO | RING | PERIO | 0 | |
|------|------|----|-------|------|-------|----|-----|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | | | | то | | | |

RETURN TO

Department of Environmental Quality Blue Ridge - Roanoke Regional Office 901 Russell Drive, Salem VA 24153

(540) 562-6700

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM AND RETURNING IT.

| outfall Num: 002 | Reporting F | requency: Ann QUAN | UAI TITY OR LOADING | g I | (| QUALITY OR CON | CENTRATION | | NO. | FREQUENCY OF | sample |
|-------------------------|-------------|-----------------------|---------------------|-------|---------|----------------|------------|-------|-----|--------------|--------|
| PARAMETER | | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | EX. | ANALYSIS | TYPE |
| rest state | REPORTO | ******** | ********* | | | ******** | | | | | |
| 002 pH | REQRMNT | ******** | ******* | | NL | ******** | NL. | SU | | 1/YR | GRAB |
| portage: | REPORTO | ******* | ******** | | ******* | ******* | | | | | |
| 004 TSS | REQRMNT | ******* | ******** | | ******* | ********* | NL | MG/L | | 1/YR | GRAB |
| 199 FLOW, PRECIPITATION | REPORTD | ******** | | | ******* | ******* | ********* | | | | |
| EVENT | REQRMNT | ******** | NL | MG | ******* | ******* | ******* | | | 1/YR | EST |

Additional Permit Requirements (Outfall 002):

Comments:

PERMITTED FACILITY

Rockydale Quarries Corporation - Rockydale Plant 2343 Highland Farm Rd NW, Roanoke VA 24017

Permit Number: VAG840067

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COMMONWEALTH OF VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NONMETALLIC MINERAL MINING
DISCHARGE MONITORING REPORT (DMR)

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RETURN TO

Department of Environmental Quality Blue Ridge - Roanoke Regional Office 901 Russell Drive, Salem VA 24153 (540) 562-6700

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM AND RETURNING IT.

| Run D | ate: Jul | 23 | 2019 |
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| | | | |

| n.n | | QUAN | TITY OR LOADING | 3 | | QUALITY OR CON | CENTRATION | | NO. | FREQUENCY OF | SAMPLE |
|-------------------------|---------|----------|-----------------|-------|----------|----------------|------------|-------|-----|--------------|--------|
| PARAMETER | | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | EX. | ANALYSIS | TYPE |
| 4406 | REPORTD | ******* | ******* | | | ******* | | | | | |
| Q02 pH | REGRMNT | ******** | | | NL | ******* | NL | SU | | 1/YR | GRAB |
| 44.1 7700 | REPORTD | ******** | ******** | | ******* | ******** | | | | | |
| 004 TSS | REGRMNT | ******** | ********* | | | | NL | MG/L | | 1/YR | GRAB |
| 199 FLOW, PRECIPITATION | REPORTD | ******** | | | ******** | ******* | ******** | | | - | |
| EVENT | REQRMNT | ******** | NL. | MG | ******** | ******** | ******** | | | 1/YR | EST |

Additional Permit Requirements (Outfall 003): Comments:

PERMITTED FACILITY

Rockydale Quarries Corporation - Rockydale Plant 2343 Highland Farm Rd NW, Roanoke VA 24017

Permit Number: VAG840067

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|) Discharge: | |

COMMONWEALTH OF VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NONMETALLIC MINERAL MINING
DISCHARGE MONITORING REPORT (DMR)

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| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | | | | TO | - | | |

RETURN TO

Department of Environmental Quality Blue Ridge - Roanoke Regional Office 901 Russell Drive, Salem VA 24153 (540) 562-6700

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM AND RETURNING IT.

Outfall Num: 006 Reporting Frequency: Quarter

| PARAMETER | | QUANTITY OR LOADING | | | QUALITY OR CONCENTRATION | | | | NO. | FREQUENCY OF | SAMPLE |
|-----------|---------|---------------------|----------|-------|--------------------------|----------|----------|-------|-----|--------------|--------|
| | | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | EX. | ANALYSIS | TYPE |
| 001 FLOW | REPORTD | | | | ******** | ******** | ******** | | | | |
| | REGRMNT | NL | NL | MGD | | ******* | ******** | | | 1/3M | EST |
| 002 pH | REPORTD | ******* | ******** | | | ******* | | | | | |
| | REGRMNT | ******* | ******** | | 6.0 | ******* | 9.0 | SU | | 1/3M | GRAB |
| 004 TSS | REPORTO | ******* | ******** | | ******** | | | | | | |
| | REQRMNT | ******* | ******** | | ******** | 30 | 60 | MG/L | | 1/3M | GRAB |

Additional Permit Requirements (Outfall 006): Comments:

PERMITTED FACILITY Rockydale Quaries Corporation - Rockydale Plant

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NONMETALLIC MINERAL MINING DISCHARGE MONITORING REPORT (DMR)

Department of Environmental Quality Blue Ridge - Roanoke Regional Office 901 Russell Drive, Salem VA 24153

(540) 562-6700

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM AND RETURNING IT.

2343 Highland Farm Rd NW, Roanoke VA 24017 Permit Number: VAG840067

JERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

| BYPASS AND OVERFLOWS | | | | | | |
|----------------------|------------------|------------------|--|--|--|--|
| TOTAL OCCURRENCES | TOTAL FLOW(M.G.) | TOTAL BOD5(K.G.) | | | | |
| | | | | | | |
| | | | | | | |

| OF | PERATOR IN RESPONSIBLE CHARGE | | | DATE | |
|---|-------------------------------|-----------------|------|------|-----|
| TYPED OR PRINTED NAME | SIGNATURE | CERTIFICATE NO. | YEAR | MO. | DAY |
| PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | | TELEPHONE | | | |
| TYPED OR PRINTED NAME | SIGNATURE | | YEAR | MO. | DAY |

This report is required by your VPDES permit and by law. (See, e.g., the Code of Virginia of 1950 §62.1-44.5 and 9 VAC 25-31-50.) Failure to report or failure to report truthfully can result in civil penalties of \$32,500 per violation, per day and felony prosecutions which can carry a 15 year term.

DISCHARGE MONITORING REPORT (DMR) - GENERAL INSTRUCTIONS

- Complete this form in permanent ink or indefible pencil.
- Be sure to enter the dates for the first and last day of the period covered by the report on the form in the space marked "Monitoring Period"
- For those parameters where the REQUIREMENT spaces have a benchmark or limitation, provide data in the REPORTED spaces in accordance with your permit.
- Enter maximum, minimum, and/or average concentrations and units in the "reported" spaces in the columns marked "Quality or Concentration"
- 5 For all parameters enter the number of samples which do not comply with the maximum and/or minimum permit requirements in the "reported" space in the column marked "No. Ex." (Number of Exceedances). If none, enter "0". Do NOT include monthly average violations in this field. Include any maximum violations in this field.
- 6 You are required to sample (at a minimum) according to the Sample Frequencies and Sample Types specified in your perm. If you sample more often than the Sample Frequency specified in your permit than all data must be used when completing the DMR.
- Enter the actual frequency of analysis for each parameter (number of times per day, week, month, etc.) in the "reported" space in the column marked "Frequency of Analysis"
 Enter the actual type of sample (Grab, 8HC, 24HC, etc) collected for each parameter in the "reported" space in the column marked "Sample Type.
- 9. Enter additional required data or comments in the space marked "additional permit requirements or comments." If additional required data or comments are appended to the DMR, reference appended correspondence in this field.
- 10. Storm Event Information * (i.e., a "measurable storm event" is a storm event that results in an actual discharge from the site, providing the interval from the preceding measurable storm event is at least 72 hours): a. Enter the number of days and hours from the preceding "measurable storm event" * Storm event information not applicable to discharges from a storm water management structure.
- 11 The principal executive officer then reviews the form and must sign in the space provided and provide a telephone number where he/she can be reached. The final page of the DMR must have an original signature.
- 12. Send the completed form(s) with original signatures to your Department of Environmental Quality Regional Office on or before the 10th of April, July, October and January for quarterly monitoring and on or before the 10th of January for annual monitoring.
- 13. You are required to retain a copy of the report for your records.
- 14. Where violations of permit requirements are reported, attach a brief explanation in accordance with the permit requirements describing causes and corrective actions taken. Reference each separate violation by date.
- 15. If you have any questions, contact the Department of Environmental Quality Regional Office listed on the DMR

COMMONWEALTH OF VIRGINIA STATE WATER CONTROL BOARD

FACT SHEET REISSUANCE OF A GENERAL VPDES PERMIT FOR NONMETALLIC MINERAL MINING 2019 REISSUANCE

Revised June 2019

The State Water Control Board (board) has authorized the reissuance of the Virginia Pollutant Discharge Elimination System (VPDES) general permit for point source discharges from nonmetallic mineral mining facilities. This general permit will replace VAG84, which expires June 30, 2019. Owners covered under the expiring general permit, who wish to continue to discharge under a general permit, must register for coverage under the new general permit.

Permit Number:

VAG84

Name of Permittee:

Any owner of a qualifying nonmetallic mineral mining facility with point source

discharges that obtains coverage under the terms of this general permit.

Facility Location:

Commonwealth of Virginia

Receiving Waters:

Surface waters within the boundaries of the Commonwealth of Virginia, except those

specifically named in board regulations that prohibit such discharges.

Discharge to surface waters may be through a municipal separate storm sewer system.

Based on preliminary review and application of lawful standards and regulations, the board has proposed to reissue the general permit subject to certain conditions and has prepared a general permit. The board has determined that this category of discharges is appropriately controlled under a general permit as it involves facilities with the same or similar types of operations that discharge the same or similar types of wastes. The general permit requires that all covered facilities meet standardized effluent limitations, conditions and monitoring requirements and that all covered facilities develop a site-specific stormwater pollution prevention plan.

The staff contact for questions or obtaining information about this general permit may be reached at:

Peter Sherman
Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218
TEL: (804) 698-4044
FAX: (804) 698-4032

E-mail: peter.sherman@deq.virginia.gov

I. Activities Covered by This General Permit

The general permit will cover point source discharges associated with nonmetallic mineral mining operations classified in Standard Industrial Classification Major Group 14. The general permit will cover stormwater discharges for all qualifying facilities within this major group that have stormwater discharges only and, for specific SIC Codes, it will also provide coverage for process wastewater. Some of the Major Group 14 SIC codes or specific mining activities are excluded from the process wastewater coverage because the mining activities are subject to more stringent effluent limits under EPA effluent guidelines at 40 CFR Part 436. These facilities will require a separate, individual VPDES permit to discharge process wastewater.

Facilities for which the discharge of process wastewater is covered are those classified under SIC Codes 1411, 1422, 1423, 1429, 1442, 1455, 1459 except bentonite and magnesite mines, 1475 and 1499 except gypsum, graphite, asbestos, diatomite, jade, novaculite, wollastonite, tripoli and asphaltic mineral mining operations. For 2019, DEQ is including in the regulation North American Industry Classification Codes (NAICS) since these reflect the current classification system maintained by the federal government.

This general permit does not cover coal mining, metal mining, or oil and gas extraction.

Nonmetallic mineral mines may have other industrial activities co-located within the mine permit area. These activities may involve further processing of the mined material and discharges associated with them have characteristics similar to those of the mining operation. If the mineral mine is the primary industrial activity on the site and the characteristics of the wastewater from co-located industrial activities are similar to those of the mineral mine, the co-located activity discharges are also regulated under the general permit.

This permit does not allow discharge of process wastewater pollutants from co-located asphalt paving materials operations. For the purposes of this special condition, process wastewater pollutants are any pollutants present in water used in asphalt paving materials manufacturing which come into direct contact with any raw materials, intermediate product, by-product or product related to the asphalt paving materials manufacturing process.

No owner or operator of a mineral mine will be covered under the general permit until a mineral mining permit has been issued to the relevant facility by the Virginia Department of Mines, Minerals, and Energy, Division of Mineral Mining (DMM). In Virginia, mining activities that disturb the land surface and remove minerals at any site are required to have a mineral mining permit under the requirements of the Minerals Other Than Coal (MOTC) Surface Mining Law, Chapter 16, Title 45.1 of the Code of Virginia. The mineral mining permits are administered by DMM. The Surface Mining Law requires that no operator shall engage in mining without having first obtained from DMM an operating permit that covers the affected land. The exception to this requirement is for mineral mines owned and operated by governmental bodies, which are not required to have a mining permit, but will be eligible for coverage under VAG84. Mineral mining permits require the implementation of an erosion and sedimentation control plan as an enforceable part of the permit. The mineral mining permit application also requires the applicant to provide an acceptable mine reclamation plan that provides for adequate measures to prevent erosion and sedimentation from the reclaimed site. The mining permit and its requirements for erosion and sedimentation control are administered and enforced in such a manner as to provide protection of water quality and beneficial uses in the receiving waters from pollution caused by eroding material from mining activities. These requirements in the mineral mining permit satisfy many of the stormwater pollution prevention plan requirements of the general permit.

II. Effluent Limitations and Monitoring Requirements

The effluent limitations and monitoring requirements specified in the general permit are depicted in items A and B below.

A. Discharge of process wastewater and commingled stormwater runoff:

| Parameter | Limitation |
|------------------------|--|
| Flow | Report average and maximum |
| Total Suspended Solids | 30 mg/L monthly average, 60 mg/L daily maximum |
| pH | 6.0 minimum, 9.0 maximum ¹ |

Discharge Monitoring Reports (DMRs) of quarterly monitoring shall be submitted to the applicable DEQ regional office no later than the 10th day of April, July, October and January. Monitoring frequency of once per every three months (1/3 Months) equals the following three-month periods each year of permit coverage: January through March, April through June, July through September, and October through December.

B. Discharge of stormwater associated with industrial activity that does not combine with other wastewater:

| Parameter | Monitoring Requirement |
|------------------------|---|
| Flow | Report volume discharged during monitored storm event |
| Total Suspended Solids | Report maximum |
| pH | Report minimum and maximum |

Monitoring and reporting of grab sample analysis results are required once per year for a storm event that produces a discharge from the site. A discharge from a stormwater management structure must be sampled at the time the discharge occurs and must be representative. All other stormwater discharges must be taken when the discharge occurs, provided the interval from the preceding measurable storm event is at least 72 hours. The sample must also be taken during the first 30 minutes of the discharge. There are some exemptions to these timing requirements.

DMRs of yearly stormwater monitoring (January 1st to December 31st) must be submitted to the applicable DEQ regional office no later than the 10th day January.

For stormwater that is not combined with other wastewater, if total suspended solids (TSS) monitoring results exceed 100 mg/L daily maximum, the stormwater pollution prevention plan (SWPPP) must be reviewed for necessary changes, a routine facility inspection must be performed within five days of becoming aware of the exceedance, documentation must be maintained as specified, and any deficiencies must be corrected.

Permittees also must conduct calendar quarterly visual monitoring of discharges of stormwater associated with industrial activity. This monitoring must include examination of representative storm event discharges from the facility including observations regarding color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. This permit condition has been relocated in the general permit regulation to follow the stormwater effluent limits table (I A 2) from the conditions addressing routine facility inspections.

III. Basis for Part I Effluent Limits and Monitoring Requirements for Commingled Wastewater

Mining area wastewaters are recycled as a source of processing water, lost by evaporation or discharged. The discharges that are not recycled are controlled by limitations in this general permit. These discharges may consist of stormwater associated with industrial activity which has come in contact with overburden, raw material, intermediate product, finished product, byproduct or waste product; process wastewater which may include water used in the process of washing mined materials, vehicle or equipment degreasing wastewater,

¹ Where the Water Quality Standards establish alternate standards for pH, those standards shall be the minimum and maximum pH effluent limits.

miscellaneous plant cleanup wastewater and mine pit dewatering, which may include the above collected discharges along with accumulated groundwater that enters the mine. Treatment usually consists of sedimentation.

The discharge parameters to be limited are pH and TSS.

The pH limitation is based upon Virginia's water quality standards and federal effluent guidelines (40 CFR Part 436). Effluent guidelines (40 CFR Part 436) require pH limits of 6.0 - 9.0 Standard Units (SU). Stream standards for pH are in most cases in the range of 6 to 9 SU; however, there are special standards in effect in some areas (e.g., 6.5 - 9.5 in some valley streams or 3.7 - 8.0 in some swamp waters). However, because DEQ comports with federal effluent guidelines for its general permits, pH limits cannot go below 6.0 or above 9.0. For example, a 6.5 to 9.5 special stream standard will necessitate a 6.5 to 9.0 effluent limit and a 3.7 - 8.0 special stream standard will necessitate a 6.0 - 8.0 effluent limit.

TSS limitations are based on federal effluent guidelines for some of the industrial categories covered by the general permit and at levels that, based on the Department's experience with individual VPDES permits, will protect receiving waters from solids impacts.

TPH monitoring is not retained in this reissuance for outfalls that convey discharges from vehicle or equipment degreasing activities (normally through an oil-water separator). Review of TPH data from the last two permit cycles indicated negligible levels (i.e., generally below detection levels) of TPH being discharged.

The monitoring frequency and sample type have been established after considering the consistency and nature of these operations, the existing analytical data and the potential environmental risk and consequences of the discharges. Reporting of monitoring data is required quarterly.

IV. Basis for Part I Storm Event Monitoring Requirement

Stormwater associated with industrial activity that is not combined with process wastewater may be discharged from mining activities covered by this permit subject to the applicable conditions of the permit, including annual monitoring for TSS and pH. This stormwater may have come in contact with or been exposed to overburden, raw material, intermediate product, finished product or byproduct and it may contain sediments eroded from the exposed surfaces of the mine, stockpiles, overburden storage, processing areas, or overburden disposal areas. It is necessary for the protection of water quality in the streams receiving the stormwater runoff from a mining operation that appropriate erosion and sedimentation controls and practices be designed and implemented at these facilities. The erosion and sedimentation control practices mandated by the DMM regulations and imposed on the owners or operators of a mineral mine through their mining permit include adequate drainage, erosion and sediment control measures installed and maintained in accordance with a mandated and approved drainage plan, as well as requirements that temporary and permanent control facilities for mining operations be designed with outlets that can accommodate the rainfall from at least the 50-year and 100-year storm event, respectively. In addition, DMM regulations require that mineral mining sediment basins provide for 0.125 acre-feet per disturbed acre of storage capacity. This general permit also includes stormwater management requirements (see Section VI).

Under this general permit, permittees are required to monitor stormwater discharges for pH and TSS once per year over the term of the general permit and report the results to the Department. If TSS levels exceed an evaluation value, follow-up actions are specified. These stormwater monitoring requirements are comparable to benchmark provisions under the U.S. EPA 2015 Multi-sector General Permit (MSGP).

V. Basis for Special Conditions

The VPDES permit regulation (9VAC25-260-31) delineates the procedures and requirements applicable in VPDES permits pursuant to the Clean Water Act and the State Water Control Law. All special conditions protect water quality as required by the VPDES permit regulation. Additional explanations and citations are below.

Special Condition No. 12 from the 2014 general permit, which required the review of TSS monitoring data and potential follow-up for stormwater that does not combine with other wastewaters, has been moved to follow the table in I A 2 a in this general permit. This permit condition is similar to a condition of the EPA 2015 MSGP. This has been deemed a more appropriate location in the general permit since this provision addresses monitoring. See the discussion under section II of this fact sheet.

Special Condition No. 14 from the 2014 general permit has been removed in the reissued general permit. This condition required dischargers to the Chickahominy watershed to meet special effluent limitations for BOD5, TSS, total phosphorus, ammonia and settleable solids. The basis for removing this permit condition is the fact that the applicability of the special Water Quality Standards at 9VAC25-260-310 m was revised so that the standards are only applicable to wastewater treatment facilities that treat an organic nutrient source. Nonmetallic mineral mines do not characteristically discharge an organic nutrient source. VPDES antibacksliding guidance² identifies the Chickahominy standards as technology limits (established by regulation) and indicates that antibacksliding restrictions do not apply to this category of limits. The guidance indicates that such standards are regulations and, thus, when applicable, no alternatives can be accepted; however, with the change in applicability, these regulations no longer apply to nonmetallic mineral mining.

- A. Special Condition No. 1 requires that vehicles and equipment used in the industrial activity are to be operated and maintained in a manner that prevents pollution of surface or ground water. Petroleum products and other fluids are to be stored and handled in such a manner that the discharge of pollutants to state waters is prevented. The basis for this condition is the state water quality standards (9VAC25-260).
- B. Special Condition No. 2 prohibits sewage discharges to surface waters under this general permit. Any sewage discharges would require coverage by a separate, individual permit. This condition is based on the typical characteristics of discharges from nonmetallic mineral mines and the corresponding absence of federal secondary sewage treatment standards in this permit.
- C. Special Condition No. 3 prohibits the discharge of chemical additives other than those identified in the registration statement unless prior approval is granted by the board.
- D. Special Condition No. 4 requires that the permittee submit a new registration statement if the DMM mining permit is modified or renewed in any way that would affect the location or characteristics of any discharge covered by the general permit. Any change to the mining facility that could impact discharge quality requires additional review before coverage under the general permit is continued. The basis for the condition is state water quality standards.
- E. Special Condition No. 5 is a requirement for notification of discharges of any toxic pollutants not limited by the permit. The basis for the condition is 40 CFR 122.42(a) and 9VAC25-31-200 A.
- F. Special Condition No. 6 requires that all materials, products and wastes resulting from the purchase, sale, mining, traction, transport, preparation, or storage of raw or intermediate materials, final product, by-product, or

² Guidance Memo No. 00-2011; Guidance on Preparing VPDES Permit Limits; To: Regional Directors; From: Larry Lawson; August 24, 2000. Pgs. 32-42.

wastes, be handled and stored or disposed of consistent with best management practices and so as to not permit a discharge of such product, materials industrial wastes, or other wastes to state waters, except as expressly authorized. The basis for the condition is state water quality standards.

- G. Special Condition No. 7 prohibits the discharge of process wastewater pollutants from co-located asphalt operations. The basis is 40 CFR Part 443.
- H. Special Condition No. 8 allows process water to be used for dust suppression on site. The basis for the condition is that, when implemented as a BMP, the use of process water as a dust suppressant can control or abate the discharge of pollutants. This condition also prohibits dust suppression during a storm event that results in an actual discharge from the site.
- 1. Special Condition No. 9 allows process water from mine dewatering to be provided to local property owners for beneficial agricultural use. This language is included in keeping with DEQ's pollution prevention philosophy.
- J. Special Condition No. 10 prohibits the discharge of floating solids or visible foam in other than trace amount from process water discharges. This condition also prohibits solids deposition to surface water as a result of discharges associated with industrial activity. It further prohibits an oil sheen resulting from petroleum products discharged to surface water as a result of the industrial activity. Housekeeping and on site BMPs should maintain this requirement. The prohibition of oil sheen was added to a similar general permit (concrete products) in response to staff concerns that petroleum products are on the site and could lead to an oil discharge. Accidental spills of petroleum products are cleaned up immediately so as not to enter surface waters as per special condition No. 1. This special condition is an added measure of protection and something the inspector can look for to ensure proper BMPs, clean up measures or treatment is occurring. The citation in the water quality standards is 9VAC25-260-20.
- K. Special Condition No. 11 requires all effluent limitations to be written using two significant figures. The basis for this condition is Guidance Memo No. 06-2016, Significant Figures for Discharge Monitoring Reports.
- L. Special Condition No. 12 requires permittees subject to total maximum daily load (TMDL) waste load allocations established prior to this permit issuance to include measures and controls in the SWPPP that are consistent with the assumptions and requirements of the TMDL. If the TMDL establishes a numeric wasteload allocation that is applicable to discharges from the facility, the owner must conduct monitoring in accordance with Part I A and implement measures necessary to meet the allocation. The basis for this condition is Section 303(d) of the Clean Water Act, which requires that TMDLs be developed for streams listed as impaired, and 9VAC25-31-220 D.
- M. Special Condition No. 13 requires discharges to be controlled as necessary to meet applicable water quality standards. This condition is consistent with VPDES regulations (9VAC25-220) and EPA recommendations.
- N. Special Condition No. 14 provides a waiver for monitoring and routine quarterly inspections at sites that are inactive and unstaffed (temporarily closed). An annual site inspection is still required. The waiver request must be submitted to the board for approval. Reactivation of the site also requires board notification within 30 days unless approval for an alternate timeframe is received in advance from the board. Inactive and unstaffed facilities covered under are not required to meet the "no industrial materials or activities exposed to stormwater" standard to be eligible for this waiver, consistent with the conditional exemption requirements established in Part 8 Sector J (Non-Metallic Mineral Mining and Dressing) of the EPA 2015 MSGP.

- O. Special Condition No. 15 describes how process water systems designed to operate as "no discharge" must be implemented. These systems may not discharge except in storm events greater than a twenty-five-year, 24-hour storm event. In the event of such a discharge, the permittee must report an unusual or extraordinary discharge per Part III H of the permit. No sampling or DMR is required for these discharges as they are considered to be discharging in emergency discharge conditions. These discharges may not contravene the water quality standards, or any provision of the State Water Control Law. Any other discharge from this type of system is prohibited, and shall be reported as an unauthorized discharge per Part III G of this permit. This special condition, which is a different design standard than the overflow provision in the pertinent ELGs, is based on best professional judgment of the staff and is consistent with the standard in Virginia's Pollution Abatement permit regulation (9VAC25-32-30 A).
- P. Special Condition No. 16 requires that permittees must use best management practices to ensure that contaminants do not enter surface waters as a result of blasting at the mining site. This condition addresses concerns with ammonia and nitrate deposition resulting from the use of explosives.
- Q. Special Condition No. 17 describes how terminations of coverage under a general permit will be implemented. Permittees need to know this is an option available to them. This is being added to all general permits as they are reissued.

It is believed that the above effluent limitations and special conditions will maintain state water quality standards.

VI. Basis for Requirements for Stormwater Management

Stormwater management is required to reduce the potential for pollutants to reach state waters via stormwater discharges. Stormwater management requirements in Part II are generally current with stormwater management requirements in the VPDES General Permit for Discharges of Stormwater Associated with Industrial Activity (VAR05) and the EPA 2015 MSGP, while taking into account the characteristics of the industry to be regulated under this general permit.

Management of stormwater is to be achieved through the development of a stormwater pollution prevention plan (SWPPP). The SWPPP is intended to identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges as well as describe and ensure the implementation of practices that will reduce the pollutants in stormwater discharges. The SWPPP requirement maintains the flexibility for a site-specific plan to be developed and implemented but identifies specific components that the plan must address. These components include the pollution prevention team, a description of pollutant sources, and a description of stormwater controls (including BMPs, good housekeeping measures, preventative maintenance, spill prevention and response, routine inspections, employee training, recordkeeping and internal reporting, sediment and erosion control, and run-off management). As part of the contents of the SWPPP, the good housekeeping provisions in the general permit have been revised to include some additional language based on the EPA 2015 MSGP.

Quarterly inspections are required to identify sources of pollution and to evaluate whether the pollution prevention measures are being effectively implemented. The inspections are considered a means of determining compliance with permit conditions without requiring extensive sampling programs. The permittee is required to maintain records summarizing the results of inspections. The annual comprehensive site evaluation requirement has been removed in this reissued general permit and unique aspects of the comprehensive evaluation have been merged into the quarterly inspection requirements. This change is based on EPA's 2015 MSGP, which consolidated the comprehensive site inspection and routine facility inspection procedures into one set of procedures to eliminate redundancies and reduce burden. In addition, this permit provides that where a facility has an E3 (Exemplary Environmental Enterprise) or E4 (Extraordinary Environmental Enterprise) status under Virginia's Environmental Excellence Program (VEEP), routine inspection requirements are waived. This is

consistent with the VPDES General Permit for Discharges of Stormwater Associated with Industrial Activity and is based on the fact that such facilities are required under the VEEP program to implement an environmental management system (EMS), which includes implementation and evaluation components, as well as have a pollution prevention program and a record of sustained compliance with environmental requirements.

In its 2015 MSGP, U.S. EPA also included new provisions that address pre-mining earth-disturbing activities (i.e., section 8.J.4). Under Virginia law (§ 62.1-44.15:34) land-disturbing activities associated with surface mining are exempt from stormwater regulation provided such activities are conducted pursuant to a mining permit under Title 45.1. In addition, under § 62.1-44.15:55, permitted surface mining conducted under Title 45.1 is exempt from Virginia's erosion and sediment control law. Under state regulations, mining permits, which are required as a condition of this general permit, include an operation plan, drainage plan (including erosion and sediment control) and reclamation plan, and must meet performance standards that address topics including impoundments, drainage and sediment control, sediment basins, diversions, and water quality (4VAC25-31-10 through 570). These mining permit regulations apply starting with the first disturbance of any part of a site. Based on the statutory exclusions noted above and the existing state DMM permit regulations applicable to mineral mining, new pre-mining provisions have not been added to VAG84.

VII. Administrative

The general permit will have a fixed term of five (5) years. Every authorization to discharge under this general permit will expire at the same time and most existing covered owners' authorizations to discharge will be renewed on the same date.

All persons desiring to be covered by this general permit must register with the Department by filing a registration statement and submitting applicable fees. Owners of nonmetallic mineral mining facilities that are discharging on the effective date of this general permit, and which have not been covered under the previous general permit or an individual VPDES permit and desire to be covered under this general permit, are required to submit the registration statement.

The reissued general permit includes a requirement to include on the registration statement a list of chemicals added to wastewater or stormwater and that could be discharged, including Safety Data Sheets (SDS), the maximum proposed dosing rates, and a demonstration that the application or use will not result in aquatic toxicity to protect water quality in receiving streams. The use of chemicals, including cationic chemicals, by nonmetallic mineral mining facilities is a potential concern due to the potential aquatic toxicity of certain chemicals in particular settings (e.g., see 8.J.4.1.8 in the federal 2015 MSGP. This provision reflects EPA concerns regarding the aquatic toxicity of cationic chemicals, as discussed in the fact sheet to EPA's 2012 Construction General Permit). The additional information being requested is to ensure that permit staff have adequate information to evaluate the potential toxicity of any added chemicals that could be discharged and to approve, restrict or condition such use as appropriate. A demonstration that chemical use will not result in aquatic toxicity is somewhat flexible but must include information that allows DEQ to make informed judgements that discharges from these facilities will not contain chemicals at levels that pose aquatic toxicity. Such a demonstration should include a description of when, where and how the chemicals will be used, the manufacturer's specification regarding the use or recommended concentration of the chemical, and calculations of the maximum concentration expected in the effluent or other documentation showing that the maximum concentration expected in the effluent is not expected to adversely affect aquatic life. Additional information that could potentially support a demonstration includes why the chemical use is appropriate for the site conditions, whether the chemical is or is not a cationic polymer, if the chemical is used internally or as part of final treatment, controls or implementation procedures that protect water quality, and available toxicity data other than the SDS.

Owners of existing operations covered under an individual VPDES permit that wish to seek coverage under the general permit must file a registration statement at least 240 days prior to the expiration date of the individual VPDES permit. Owners of existing operations covered under the previous general permit seeking to retain coverage under the reissued general permit must file a new registration in accordance with the reissued general permit requirements at least 60 days prior to the expiration of the existing permit. For all new facilities that will begin activities after the effective date of this permit, the registration statement must be filed at least 60 days prior to the commencement of discharge.

This general permit does not cover activities or discharges covered by an individual VPDES permit until the individual permit has expired or has been terminated. Any person conducting an activity covered by an individual permit which could be covered by this general permit may request that the individual permit be terminated and register for coverage under this general permit. Any owner or operator not wishing to be covered or limited by this general permit may make application for an individual VPDES permit in accordance with VPDES permit application procedures.

To gain coverage under this general permit an owner must submit the registration information required in 9VAC25-190-60 (a registration statement form will be provided by the board), submit the required permit fee and comply with the applicable effluent limitations and other requirements of the permit. An additional requirement for this general permit is that the owner must have a mineral mining permit approved by the Virginia Department of Mines, Minerals and Energy, Division of Mineral Mining under provisions and requirements of Title 45.1 of the Code of Virginia. Owners of mineral mines in bordering states with discharges in Virginia must provide documentation that they have a mining permit from the appropriate state authority. Mineral mines owned and operated by governmental bodies not subject to the provisions and requirement of Title 45.1 are exempt from this requirement.

Coverage under this general permit will not be issued for any new or increased discharge that will result a violation of the board's antidegradation policy contained in the Virginia Water Quality Standards at 9VAC25-260-30 or to a facility where the discharge is not consistent with the assumptions and requirements of an approved TMDL for the receiving stream. Coverage under the general permit is also not available to owners that discharge to state waters that are specifically named in other board regulations that prohibit such discharges (e.g., exceptional or tier 3 waters).

Consistent with U.S. EPA regulations, DEQ is in the process of implementing electronic reporting requirements (see generally, 9VAC25-31-1020). As electronic reporting is implemented, these requirements are expected to affect the process and potentially some requirements for the submittal of registration statements, notices of termination, discharge monitoring reports, and select other reports. For this general permit, start dates for any electronic reporting requirements will be provided in a schedule approved by the department, along with additional information as deemed appropriate.

QUARTERLY VISUAL OUTFALL MONITORING

OUTFALL#

| | | Rockydale - Roanoke Qu | uarry | VPDES Permit #: | VAG | 840067 |
|--|--|--|---|----------------------|--|---------------------------------------|
| Calendar Year: | | 1st Qtr: | 2 nd Qtr: | 3 rd Qtr: | 4 th Qtr: | |
| Name of Individu | ual conducting Visual | Monitoring: | | | | |
| Monitoring Date | /Time (use am/pm or | 24-hr time): | | *(Must be du | uring dayligi | ht hour. |
| A. Qualifying Ru | noff Event met (i.e. s | torm event greater than | n 0.1 inches and at leas | t 72 hours from the | last qualify | ing |
| the state of the s | | vithin 30 minutes of firs | | Yes | | No |
| Amount on R | ainfall: | Inches | | | | |
| Describe the | storm event (e.g. ligh | nt rain, heavy rain, snow | ı/ice melt): | | | |
| B. Was there no | qualifying storm eve | nt resulting in runoff du | uring this quarter? | | | Yes* |
| | | on site rainfall records, | | | | |
| Note: For the qu | estions below include | e probable sources/cau | ses of stormwater poll | ution observed. | | |
| Color | None | Light Tan | Light Brown | Brown | | Other |
| 2. Odor | None | Earthy | Gas/Oil | Chemical | | Other |
| 3. Clarity | Clear | Almost Clear | Cloudy | Very Cloudy | | Other |
| | of quart glass contained | solids that settle within er, 50% of quart glass co | | | | |
| on bottom of after 60 min | of quart glass containd outes) | er, 50% of quart glass co | ontainer after 30 minu | tes and 25% of quar | rt glass cont | |
| on bottom of after 60 min | of quart glass containd outes) | | ontainer after 30 minu | tes and 25% of quar | | ainer |
| on bottom of after 60 min | of quart glass containdutes) nded Solids present (| er, 50% of quart glass co | ettle within 30-60 minu | tes and 25% of quar | rt glass cont | ainer |
| on bottom of after 60 min 6. Were Suspe 7. Was any For | of quart glass containentes) Inded Solids present (Indem present (if so, des | i.e. solids that do <u>not</u> so | ettle within 30-60 minu | tes and 25% of quar | Yes | N N |
| on bottom of after 60 min Were Suspe Was any Foa | of quart glass containd nutes) nded Solids present (am present (if so, des | (i.e. solids that do <u>not so</u> | ettle within 30-60 minutent)? | tes and 25% of quar | Yes Yes | N N |
| on bottom of after 60 min 6. Were Suspe 7. Was any Foa 8. Was an Oil S 9. Were any ot certify under penal seed on my inquiry from knowledge a | of quart glass contained tutes) Inded Solids present (if so, desemble present (if so, desemble present (if, so contained to a solution of the person or person delief, true and according to the system designed to a solution of the person or person delief, true and according to the system designed to a solution of the person or person delief, true and according to the system designed to a solution of the person or person delief, true and according to the system designed to a solution of t | (i.e. solids that do not so cribe color, amount/ext | ettle within 30-60 minutentle | utes)? | Yes Yes Yes Yes Yes The strict of the s | N N N N N N N N N N N N N N N N N N N |

QUARTERLY RAINFALL TRACKING

| Facility Name: | Rockydale - Roa | noke Quarry | VPDES Permit #: | VAG840067 |
|-----------------------------|----------------------------|------------------------|----------------------|----------------------|
| Calendar Year: | 1st Qtr: | 2 nd Qtr: | 3 rd Qtr: | 4 th Qtr: |
| Quarterly storm water out | fall checks completed?: | | | |
| (If still pending, note why | samples weren't obtained/ | conditions not met for | rain event) | |
| *Separate inspection/sam | pling forms must be comple | eted | | |

| Date of Rain Event | Rain Event Amount of Precipitation | Visual Outfall Monitoring Conducted? (Y/N) | Benchmark Samples Collected? (Y/N) |
|--------------------|------------------------------------|--|--|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | 8 | | |
| 26 | | | |

IDC Instruction Assistance for pH Analysis

- An initial demonstration of capability must be conducted and documented for each operator/analyst that performs pH analysis for VPDES monitoring.
- The results must be documented and maintained on file for each analyst and retained for three years after the analyst has stopped doing the testing.
- The IDC records need to be on site available for inspection by DEQ.
- Any new operator/analyst must complete an IDC prior to generating VPDES monitoring data for reporting.

Refer to the attached form for documenting an IDC for pH

- Document the test method reference for your EPA-approved test method.
 - For example, you might reference <u>Standard Methods for the Examination of Water and Wastewater</u>, 4500-H⁺B-2000 (this is the current Standard Method reference for electrode method in 40 CFR 136). Standard Methods 4500-H⁺B-2011 has also been approved by EPA.
- Document the analyst and the date.

Buffers used for Calibration

- List the three buffers used for calibrating the meter (normally a 4, 7, and 10 buffer) and identification for each (manufacturer, lot number, etc.).
- · Calibrate the pH meter per manufacturer's instructions using a three point calibration.
 - o Document the calibration time
 - Document the analysis of the pH 7 buffer check sample after calibration including the result, temperature and analysis time.

Alternate Source Standard

Document the buffer value of the alternate source standard buffer and an identification for the standard (manufacturer, lot number, etc.) demonstrating that it is a different standard from any of the ones used to calibrate the meter (for example a pH 7 buffer with a different lot number than the pH 7 buffer used to calibrate the meter or a pH 9 buffer when a pH 4, 7, and 10 were used for meter calibration).

Analysis of Alternate Source Standard

- Pour the alternate source standard into 4 beakers (you will have 4 identical samples).
- Analyze each of the samples and document the pH result, temperature, and analysis time.
- Indicate if the sample result is within +/-0.1 SU of the true value of the alternate source standard (for example if the true value is 7.0 SU then the result must be within the range of 6.9 -7.1 SU).
- Indicate at the bottom of the form if all 4 sample results are within +/-0.1 SU of the true value for the standard.
 - If all 4 sample results are within +/-0.1 SU of the true value of the standard, the IDC is acceptable.
 - If any of the four samples are not within acceptable range, the IDC is not acceptable. Look for a problem (bad buffers, meter issue, etc.) correct the issue, and repeat the entire process with a new form.

| pH Initia | I Demonstra | ation of Capa | bility (IDC) | | |
|--------------|---------------------------------|---|---|----------|-------------------------|
| Method | | |] | | |
| Reference: | | | - | | |
| Analyst: | | | | | |
| Date: | | |] | | |
| *The analysi | t indicated must pe | erform the calibration | n as well as all analyses. | | |
| Buffers u | sed for Calibra | ation | | | |
| | | Buffer ID | | | |
| | Buffer Value (4, 7, 10, etc) | (manufacturer/lo t number, etc) | | _ | |
| Buffer 1 | | | | | |
| Buffer 2 | | | | | |
| Buffer 3 | | | | 34-317 | |
| | Source Stand | | | | |
| | Buffer Value (4, 7, 10, etc) | Buffer ID (manufacturer/lo t number, etc) | calibrate the meter (a pH 7 buffe manufacturer or lot number for e | | |
| | | | | | |
| Calibratio | n . | | | _ | |
| Cambratic | Calibration | | | | |
| | Time | 7 | | | |
| | | | | | |
| | pH 7 Check S | ample | | | |
| | pri / Clieck S | ample | | | |
| | pH result | Temperature | Analysis time | | |
| | | | | | |
| | | | | | |
| | 200 0 0 | | | | |
| Analysis | of Alternate S | ource Standard | / 4 Replicate Samples | | |
| | | | 7 | | |
| Analyst: | | - Turnella | _ | Within | +/-0.1 SU of true value |
| | pH result | Temperature | Analysis time | Yes | No |
| Sample 1 | | | | | |
| Sample 2 | | | | | |
| Sample 3 | | 1 | | | |
| Sample 4 | | | | | |
| | | | | | |
| Are all 4 sa | mple results with | nin +/-0.1 SU of the | true value fo the standard? | | |
| Yes: | IDC acceptable | е | | | |
| No: | IDC not accep | | asons for unacceptable results an | d repeat | |
| No: | entire IDC | | | | |

Records must be maintained for each operator/analyst while they are conducting the test and for three years after they have stopped doing the testing.

Effluent pH Log

Meter ID

VPDES General Permit No. Standard Methods, 18th Ed., 4500-H* B

| | | | | | 1 | | | | Buffer 7 | |
|------|------|-------------|-------------------------------|-------------|-------------------------------|--------------|--------------------------------|------------------------|----------|---------------------|
| Date | Time | pH Buffer 4 | Buffer 4 Corrected Temp | pH Buffer 7 | Suffer 7 Corrected Temp | pH Buffer 10 | Buffer 10 Corrected Temp | pH Buffer 7 Recheck | Recheck | Analyst Initials |
| | | | | | | | | | | |
| | | | | | | | | | | , |

Initial Demonstration of Capability / Certificate of Operator Competence

| | med comparation of capability / confined of operator competence | icate of Operator Compete | 100 |
|-------------------------|---|---------------------------|---------------------|
| Alternate pH Standard | | Value | Lot No. |
| 1st pH Measurement (SU) | Temperature | Time | Analyst's Initials |
| 2nd pH Measurement (SU) | Temperature | Time | Analyst's Initials |
| 3rd pH Measurement (SU) | Temperature | Time | Analyst's Initial's |
| 4th pH Measurement (SU) | Temperature | Time | Analyst's Initials |

Are all IDC measurements within ± 0.1 SU?

Note: A meter calibration and IDC series must be conducted for each analyst and documented on individual forms.

pH Initial Demonstration of Capability (IDC)

| 40 CFR 136 Approved Method Reference: | 4500 - H+ B-2000 |
|--|------------------|
| Analyst: | Michael Chapski |
| Date: | 02/08/2019 |

^{*}The analyst indicated must perform the calibration as well as all analyses.

Buffers used for Calibration

Buffer Value

(4, 7, 10, etc) Buffer ID (manufacturer/lot number, etc)

| | (, , , , , , , , , , , , , , | Daniel in (manadataternot maniber, etc) |
|----------|-------------------------------|---|
| Buffer 1 | 4 | Blue Book Lot # 766631 |
| Buffer 2 | 7 | Blue Book Lot # 766488 |
| Buffer 3 | 10 | Blue Book Lot # 766543 |

Calibration

Calibration

Time

16:25

pH 7 Check Sample

| pH result | Temperature | Analysis time | |
|-----------|-------------|---------------|--|
| 7.01 | Z0.2°C | 16: 30 | |

Alternate Source Standard Buffer

Buffer ID

*Must be from a different source than the buffers used to calibrate the meter (for example, a pH 7 buffer from a

Buffer Value (manufacturer/lo

(manufacturer/lot different manufacturer or with a different lot number than

(4, 7, 10, etc) number, etc) the buffer used to calibrate the meter).

7 Blue Book

Lot # 868386

Analysis of Alternate Source Standard/ 4 Replicate Samples

*Analyze 4 samples of the alternate source standard listed above.

| Michael Chapski | |
|-----------------|-----------------|
| | Michael Chapsin |

Within +/-0.1 SU of true value?

| | pH result | Temperature | Analysis time | Yes No |
|----------|-----------|-------------|---------------|--------|
| Sample 1 | 7.07 | 20,3°C | 16:33 | V |
| Sample 2 | 7.07 | 70,40 | 16:40 | / |
| Sample 3 | 7.07 | 20.3°C | 16:45 | |
| Sample 4 | 7.06 | 20.2°C | 16: 50 | |

| Are all 4 s | ample results within +/-0.1 SU of the true value of the standard? | Yes |
|-------------|---|------------------|
| Yes: | IDC acceptable | |
| No: | IDC not acceptable, Investigate reasons for unacceptable results an IDC | id repeat entire |

Records must be maintained for each operator/analyst while they are conducting the test and for three years after they have stopped doing the testing.

VPDES General Permit No. VAG 804067

Standard Methods, 18th Ed., 4500-H* B S/N 27 /6 39 / Correction Factor =

Effluent pH Log

Meter ID Cakter pHTest 30

| | - | | | | | | | | The state of the s | |
|--------|-------|-------------|-------------------------------|-------------|-------------------------------|--------------|--------------------------------|------------------------|--|---------------------------------|
| Date | Time | pH Buffer 4 | Buffer 4 Corrected Temp | pH Buffer 7 | Buffer 7 Corrected Temp | pH Buffer 10 | Buffer 10 Corrected Temp | pH Buffer 7 Recheck | Buffer 7 Recheck Corrected Temp | Sampler/ Analyst Initials |
| 5/8/13 | 16:25 | 4.62 | 7,2'02 | 7,00 | 7.1.02 | 10.05 | 20.2.05 | 7.01 | 20,2,02 | MC |
| | 2 8 | | | | | | | | | |

Initial Demonstration of Capability / Certificate of Operator Competence

| The state of the s | Proposition of the Contract of | | |
|--|--|-----------|--------------------|
| Alternate pH Standard USA Blue Book | 15A Blue Book | Value 7.0 | Lot No. # 86 B386 |
| 1st pH Measurement (SU) | Temperature | Time | Analyst's initials |
| 7.07 | 20,3°C | 16:33 | MC |
| 2nd pH Measurement (SU) | Temperature | Time | Analyst's Initials |
| 20.7 | 7.402 | 16:40 | MC |
| 3rd pH Measurement (SU) | Temperature | Time | Analyst's Initials |
| 7.07 | 20.3.6 | 16:45 | JW. |
| 4th pH Measurement (SU) | Temperature | Time | Analyst's Initials |
| 7.06 | 7,202 | 16:50 | MC |
| | | | |

Note: A meter calibration and IDC series must be conducted for each analyst and documented on individual forms.

Are all IDC measurements within ± 0.1 SU?

pH Initial Demonstration of Capability (IDC)

| 40 CFR 136 Approved Method Reference | 4500 - H + 13 |
|---|---------------|
| Analyst | Keith Holt |
| Date | 2/22/16 |

^{*}The analyst indicated must perform the calibration as well as all analyses.

Buffers used for Calibration

Buffer Value

| | (4, 7, 10, etc) | Buffer ID (mar | nufacturer/lot number, etc) |
|----------|-----------------|----------------|-----------------------------|
| Buffer 1 | 4 | Blue Book | Lot 4 AGZ50 |
| Buffer 2 | 7 | Blue Book | Let 4 AG649 |
| Buffer 3 | 10 | Blue Book | Let 41 A F965 |

Calibration

Analyst:

Calibration

Time

1586

pH 7 Check Sample

| pH result | Temperature | Analysis time | |
|-----------|-------------|---------------|--|
| 7.02 | 1.05 | 1539 | |

Alternate Source Standard Buffer

*Must be from a different source than the buffers used to calibrate the meter (for example, a pit 7 buffer from a

Buffer Value (4, 7, 10, etc)

number, etc)

(manufacturer/lot different manufacturer or with a different lot number than

the buffer used to calibrate the meter)

Analysis of Alternate Source Standard/ 4 Replicate Samples

*Analyze 4 samples of the alternate source standard listed above

Keitl Hel

| Allalyst. | | | | Within +/- | 0.1 SU of true va |
|-----------|-----------|-------------|---------------|------------|-------------------|
| | pH result | Temperature | Analysis time | Yes | No |
| Sample 1 | 7.05 | 20.3 | 1544 | | |
| Sample 2 | 7.06 | 20.4 | 1554 | | |
| Sample 3 | 7.65 | 206 | 1558 | - | |
| Comple 4 | 70 | 20 7 | 11.11 | | |

USA Blue Book Lot 566637

| Are all 4 s | ample results within +/-0.1 SU of the true value of the standard? | Yes |
|-------------|---|------------------|
| Yes: | IDC acceptable | |
| No: | IDC not acceptable. Investigate reasons for unacceptable results an IDC | id (epeat entire |

Records must be maintained for each operator/analyst while they are conducting the test and for three years after they have stopped doing the testing

VANCOSC 363 VARCOSC 363 VPDES General Permit No. VAG 840050 Correction Factor = Standard Methods, 18th Ed., 4500-H*B Meter ID Euthech / Octon 30

|] | Date | Time | pH Buffer 4 | Buffer 4 Corrected Temp | pH Buffer 7 | Buffer 7 Corrected Temp | pH Buffer 10 | Buffer 10 Corrected Temp | pH Buffer 7 Recheck | Buffer 7 Recheck Corrected Temp | Sample: r/ Analys: t Initials |
|--------------------------|---------|------|-------------|-------------------------------|-------------|-------------------------------|--------------|--------------------------------|------------------------|--|-------------------------------------|
| 20.0 7.04 20.0 7.04 19.9 | 2/22/11 | 1530 | 407 | 20.0 | 7.64 | 19.9 | 10.05 | 19.8 | 7.62 | 20.1 | M |

| Alternate pH Standard USA Bloc Book Value 7.0 | | Lot No. 5 GG 37 |
|---|-----------------------------------|-----------------------|
| Alternate pH Standard | te of C | Value 7.0 |
| | minal Demonstration of Capability | Alternate pH Standard |

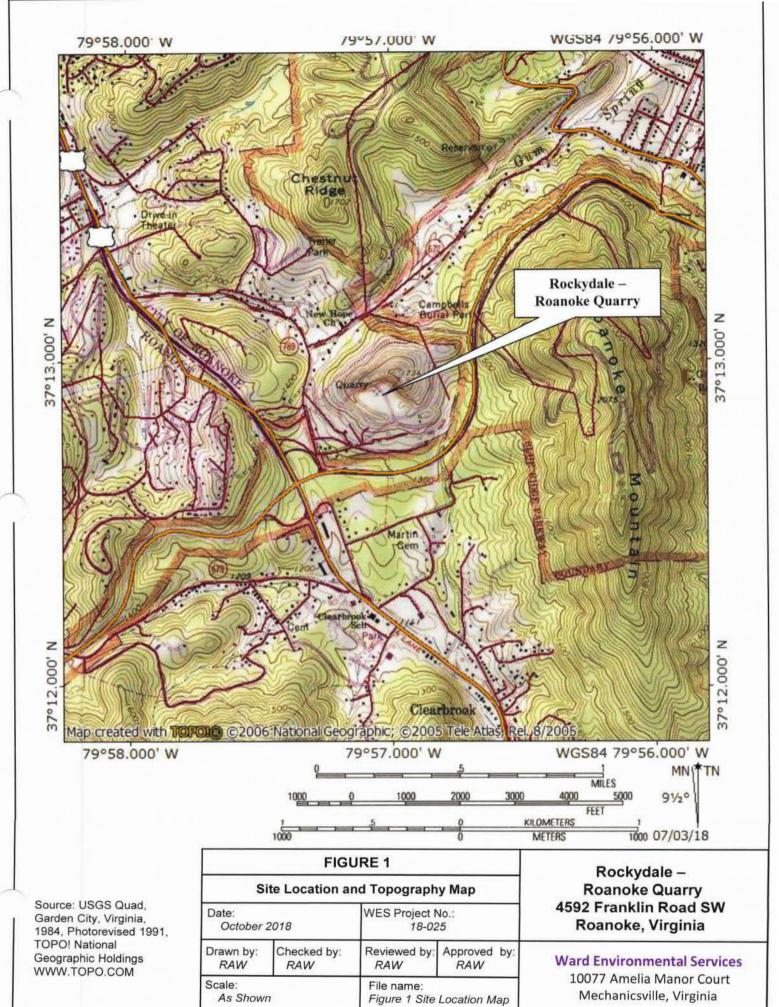
| Alternate pH Standard USA | | 1310c 13cok Value 7.0 | Value | 7.0 | | Lot No. 566637 |
|-------------------------------|------|-----------------------|-------|-----------|------------|------------------------|
| 1st pH Measurement (SU) | 7,05 | Temperature 20.3 | 20.3 | Time 1544 | 1544 | Analyst's Initials Hit |
| 2nd pH Measurement (SU) 7,66 | 7.06 | Temperature 20 4 | 70.4 | Time | Time 15'5' | Analyst's Initial & VU |
| 3rd pH Measurement (SU) 7, 05 | 7.05 | Temperature 20.6 | 20.6 | Time /558 | 1558 | Analyst's Initial's PM |
| 4th pH Measurement (SU) 7, 0 | 7,0 | Temperature 20 7 | 207 | Time 12/6 | 917 | Analyst's Initials X4 |

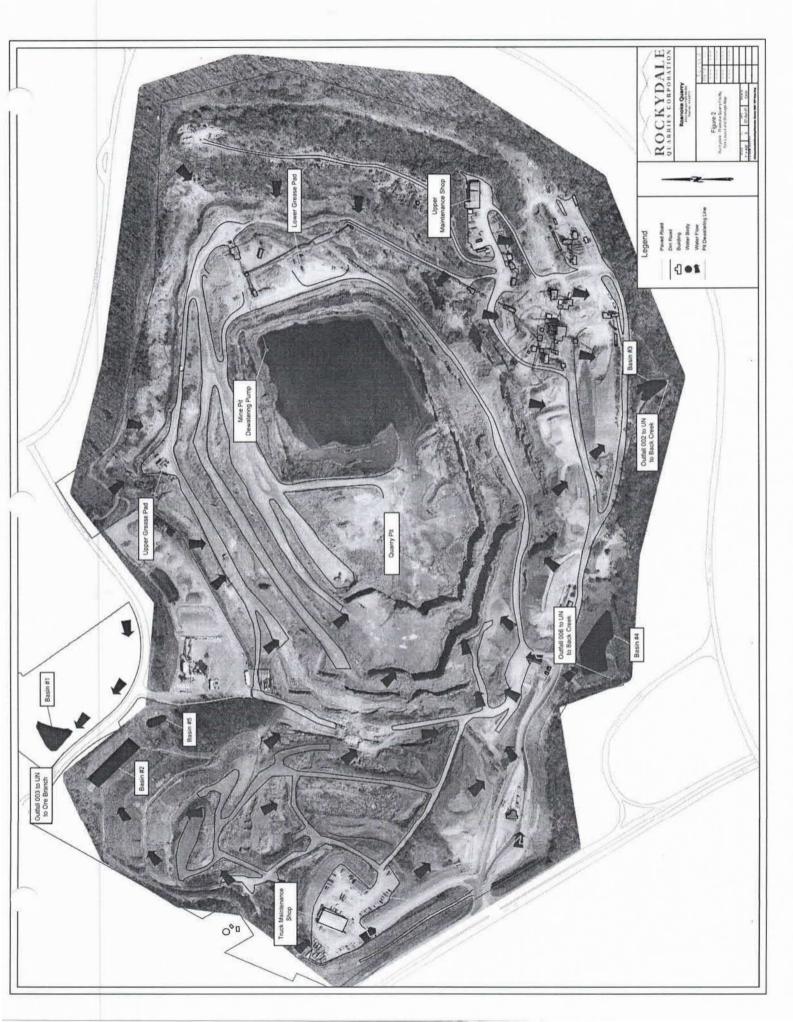
Are all IDC measurements within ± 0.1 SUR yes

Note: A meter calibration and IDC series must be conducted for each analyst and documented on individual forms.

FIGURES

FIGURE 1 – GENERAL LOCATION MAP FIGURE 2 – FACILITY SITE PLAN





APPENDIX G

SPILL RESPONSE CONTRACTOR INFORMATION



RETAINER AGREEMENT FOR EMERGENCY RESPONSE SERVICES

| THIS AGRE | EMENT | made this 29 | day of | November 29, 2018 | by and between |
|--------------|----------|---------------|--|-------------------|---------------------------|
| W.E.L., Inc. | (WEL), a | and Rockydale | The second secon | | _(CLIENT), whose principa |
| address is | 2343 Hig | hland Farm Ro | d. Roano | ke. VA 24017 | |

WEL agrees to provide on an emergency response basis; labor, equipment and supplies necessary to mitigate, and abate petroleum spills, hazardous material spills, biohazard incidents, natural disaster incidents, and/or other events, as requested by CLIENT, in accordance with the attached "Emergency Services Fee Schedule", dated January 1, 2017.

WEL agrees that no increase in the prices set forth on the attached Fee Schedule shall be made for labor, materials, and equipment listed thereon during the term of this agreement. CLIENT agrees that WEL may amend such Fee Schedule, to add <u>new</u> types of equipment or materials, and CLIENT will be provided an updated Fee Schedule, at that time.

- 1. EMERGENCY RESPONSE: WEL has established Emergency Response Teams based in Concord (Lynchburg), VA, Roanoke, VA, Winchester, VA, and Bluefield, WV, available on a twenty-four hour basis, and can normally be on the scene of an incident within one to two hours of the initial call for assistance, pending no unforeseen circumstances. A longer response time will be encountered if the scene is outside of the primary coverage area. If WEL cannot respond within this time frame, it will notify the CLIENT with an approximate ETA, and will not be responsible for any damage or loss due to its inability to so respond, due to events of force majeure, or multiple emergency response incidents, at the same time.
- 2. GENERATED WASTE MATERIALS: CLIENT acknowledges all waste materials generated during response activities will be handled, packaged, transported, and disposed at permitted facilities in accordance with applicable federal, state, and local regulations. All designated waste materials will be documented by Manifest, Bill of Lading, and/or weight tickets, as appropriate to the waste type, and receiving facility.
- 3. NOTICE TO AUTHORITIES: CLIENT acknowledges that WEL does not undertake to give or file any notices required by law to be given by CLIENT to any Regulatory Agency or Authority, unless authorized, and instructed by CLIENT to perform such activities.
- 4. INDEMNIFICATION AND HOLD HARMLESS PROVISIONS: Each party agrees to indemnify, defend and hold harmless the other party hereto and the other party's shareholders, directors, officers, employees and agents, from and against any and all claims, demands, causes of action and liabilities of any nature, whether for damages to property, business interests or persons arising out of or related to the performance of this Agreement and/or the conditions to which this Agreement pertains to the extent that any such claims, demands, causes of action and/or liability is attributable to the breach of contract, negligence or other fault of the indemnifying party. The indemnification by each party shall survive the termination of this Agreement

Rockydale Quarries Corporation 2343 Highland Farm Rd Roanoke, VA 24017 Emergency Response Retainer Agreement Page 2.

- 5. INSURANCE: WEL, and/or its subcontractors, shall obtain, and maintain in good standing, proof of insurance, with the minimum amounts, and types of coverage, as shown on the attached "Certificate of Insurance" (COI).
- 6. PERMITS AND LICENSES: WEL shall obtain, and maintain in good standing, all applicable permits, and licenses, as required by Federal, State, and Municipal agencies having jurisdiction, in order to provide the services covered by this agreement.
- 7. **TERMINATION OF AGREEMENT:** This agreement shall be terminated upon the happening of any of the following events:
 - Any default or breach of the terms, and conditions of this agreement by the CLIENT or WEL.
 - · Bankruptcy or insolvency of either of the parties hereto.
 - Failure by CLIENT to pay any invoice rendered in accordance with payment terms set out below.
 - . Thirty (30) days written notice of termination by either party to the other.
- 8. PAYMENT TERMS: Payment to WEL will be due within thirty (30) days of invoice date to CLIENT, and CLIENT agrees to make payment of all undisputed amounts of such invoices in full, whether or not CLIENT has been paid by any insurance carrier or other parties against whom it may have a claim. If payment is not made within thirty (30) days from date of invoice, a service charge of two percent (2%) per month, may accrue on any unpaid balance. CLIENT agrees to pay such service charge, and all expenses of collection.
- 9. TERM OF AGREEMENT: The term of this agreement shall remain in effect until November 29, 2020, at which time a renewal agreement shall be submitted to CLIENT.
- 10. ACCEPTANCE: The undersigned parties hereby accept this agreement, acknowledge receipt of same, and agree to be legally bound by its terms and provisions, however, CLIENT shall not be obligated to list or use WEL exclusively as its emergency response contractor, and WEL shall not be obligated to provide emergency response services, if unavailable or unable to respond as requested.

| Rockydale Quarries | W.E.L., Inc. |
|--------------------|-----------------|
| | Joe Rakes |
| NAME | NAME |
| | Joseph R. Rakes |
| SIGNATURE | SIGNATURE |
| | Branch Manager |
| TITLE | TITLE |



24 Hour Emergency Response 800-847-2455

EFFECTIVE 1/1/2017

EMERGENCY SERVICES FEE SCHEDULE

| PERSONNEL: | REGULAR RATE PER HOUR |
|--------------------------------------|-----------------------|
| Emergency Response Manager | \$125.00 |
| Project Manager | \$100.00 |
| Health & Safety Officer | \$95.00 |
| Geologist | \$85.00 |
| Pilot | \$85.00 |
| Asbestos Inspector | \$80.00 |
| Logistics/Disposal Coordinator | \$80.00 |
| Supervisor | \$75.00 |
| Foreman | \$70.00 |
| Asbestos/Biohazard/Hazmat Technician | \$65.00 |
| Equipment Operator | \$60.00 |
| Technician | \$55.00 |

Rates are for time used on projects in the field, office, in consultation or in data review and report preparation, in meetings, or in travel to and from the job site or meetings.

OVERTIME: Charges will occur between 5:00 p.m. through 7:00 a.m. weekdays and on Saturdays. Overtime charge will be one and one-half the regular rate.

DOUBLE-TIME: Charges will occur Sundays and on Holidays. Double-time charge will be double the regular rate.

PER DIEM: Overnight Lodging + Meals - \$ 150.00 per person/per day.

Meals Only - \$ 35.00 per person/per day.

| VEHICLES | RATE | |
|--|----------------------|--|
| Environmental Van | \$ 185.00 per day | |
| ER Box Truck | \$ 275.00 per day | |
| HAZMAT Response Truck | \$ 300.00 per day | |
| HiRail Pickup | \$ 225.00 per day | |
| One Ton Truck | \$ 200.00 per day | |
| Pickup Truck | \$ 150.00 per day | |
| Box Truck w/Liftgate | \$ 75.00 per hour | |
| Dump Truck - Tandem | \$ 75.00 per hour | |
| Dump Truck - Tri Axle or Quad | \$ 85.00 per hour | |
| HiRail Gang Truck | \$ 75.00 per hour | |
| Knuckle Boom Loader Truck | \$ 75.00 per hour | |
| Road Tractor | \$ 80.00 per hour | |
| Roll-Back Truck | \$ 75.00 per hour | |
| Roll-Off Truck | \$ 80.00 per hour | |
| Service Truck | \$ 65.00 per hour | |
| Stake Bed Truck w/liftgate | \$ 75.00 per hour | |
| Water Truck - 2200 Gal. Stainless | \$ 70.00 per hour | |
| Water Truck - 3500 Gal. Stainless | \$ 80.00 per hour | |
| Assessed Comments and State St | | |
| VACUUM EQUIPMENT | RATE MISC. CHARGES | |
| VAC-CON Truck | \$ 225.00 per hour | |
| VAC Truck - Dry Air Mover | \$ 200.00 per hour | |
| VAC Truck - High Density/HEPA | \$ 250.00 per hour | |
| VAC Truck - HiRail/Dry Air Mover | \$ 225.00 per hour | |
| VAC Truck - HiRail Liquid | \$ 175.00 per hour | |
| VAC Truck - Liquid 3000-3500 Gal. | \$ 125.00 per hour | |
| VAC Tanker - Liquid 5000-6000 Gal | \$ 175.00 per hour | |
| VAC Tanker - Liquid 1000 Gal. | \$ 100.00 per hour | |
| Vacuum Box | \$ 150.00 per day | |
| Clean-Out Charge | \$ 350.00 per unit | |
| HEPA Replacement Filters | Cost + 20% | |
| Bag Filter Replacement | Cost + 20% | |
| TRAILERS | RATE MISC. CHARGES | |
| Boom Trailer | \$ 175.00 per day | |
| Box Trailer (45-53') | \$ 125.00 per day | |
| Cargo/Equipment Trailer | \$ 175.00 per day | |
| Office Trailer | \$ 200.00 per day | |
| Dump Trailer | \$ 200.00 per day | |
| Emergency Response Trailer | \$ 300.00 per day | |
| Lowboy Trailer | \$ 275.00 per day | |
| Tag-A-Long Trailer | \$ 225.00 per day | |
| Tanker (5000-6500 Gal.) Stainless | \$ 125.00 per day | |
| Tanker (6000-8000 Gal.) Aluminum | \$ 125.00 per day | |
| Clean-Out Charge | \$ 350.00 per tanker | |

| 22' Center Console w/200 HP | \$ 450.00 per day |
|---|--------------------|
| 12-16' John Boat w/Motor | \$ 250.00 per day |
| HEAVY EQUIPMENT | RATE |
| Agri-Veyor Transfer Auger | \$ 85.00 per hour |
| Backhoe w/Extendahoe | \$ 85.00 per hour |
| Backhoe w/Hydraulic Hammer | \$ 175.00 per hour |
| Backhoe w/Stanley Compactor | \$ 105.00 per hour |
| Brush Hog 10' | \$ 65.00 per hour |
| Crane 30 Ton/90' Boom | \$ 175.00 per hour |
| Dredge (IMS 4010) | \$ 250.00 per hour |
| Dozer - Cat D6 / Komatsu 58L-S | \$ 125.00 per hour |
| Forklift | \$ 60.00 per hour |
| Hydraulic Power Pack | \$ 80.00 per hour |
| Hydraulic Wacker Packer | \$ 60.00 per hour |
| Manlift - 60' | \$ 85.00 per hour |
| Motorgrader | \$ 135.00 per hour |
| Pipe Jetter | \$ 165.00 per hour |
| Roller | \$ 65.00 per hour |
| Rubber Tire Loader - L70 / W75 / Trojan Teros | \$ 100.00 per hour |
| Sheep Foot Compactor | \$ 60.00 per hour |
| Skid Steer Loader | \$ 70.00 per hour |
| Skid Steer Loader w/Sweeper Attachment | \$ 90.00 per hour |
| Trackhoe - PC230 | \$ 125.00 per hour |
| Trackhoe - PC200 | \$ 120.00 per hour |
| Trackhoe - PC78 | \$ 90.00 per hour |
| Trackhoe - PC60 | \$ 85.00 per hour |
| Trackhoe w/Hydraulic Hammer | \$ 250.00 per hour |
| Trackhoe w/Hydraulic Thumb | \$ 140.00 per hour |
| Trackhoe w/Grapple | \$ 125.00 per hour |
| Track Loader - Cat 955 / Cat 963 | \$ 120.00 per hour |
| Track Loader w/Root Rake | \$ 115.00 per hour |
| Tractor - John Deere 4x4 90HP | \$ 75.00 per hour |
| Tub Grinder | \$ 175.00 per hour |
| Walinga Chem-Veyor | \$ 200.00 per hour |

| PUMPS & HOSES | RATE |
|---|--------------------|
| Diaphragm Pump - 3" | \$ 200.00 per day |
| Diaphragm Pump - 2" Polypropylene / Stainless Steel | \$ 175.00 per day |
| Diaphragm Pump - 2" | \$ 125.00 per day |
| Drum Pump | \$ 50.00 per day |
| H&H 100 HP - 6" Water Pump | \$ 100.00 per hour |
| H&H 100 HP - 4" Water Pump | \$ 85.00 per hour |
| Siphon/Transfer Pump - 1 1/2" | \$ 65.00 per day |
| Sump Pump | \$ 50.00 per day |
| | |

| PUMPS & HOSES (Cont.) | RATE | |
|---|---------------------------|--|
| Trash Pump - 3" | \$ 200.00 per day | |
| Trash Pump - 2" | \$ 150.00 per day | |
| Hose, 2-3" Chemical | \$ 3.00 per ft./day | |
| Hose, Straight ADS Vacuum Hose (20' x 6" Section) | \$ 80.00 per section/day | |
| Hose, Flex Vacuum Hose (Up to 6" diameter) | \$ 2.25 per ft./day | |
| Hose, Fire | \$ 1.50 per ft./day | |
| Pipe, Aluminum Vacuum - 6" | \$ 3.00 per ft./day | |
| Fittings, Aluminum - 6" (90's, 45's, etc.) | \$ 75.00 per day | |
| Fittings, Standard for Transfer | \$ 75.00 per day | |
| SAMPLING & MONITORING EQUIP. | RATE | |
| Gas Meter | \$ 100.00 per day | |
| Colorimetric Tube Pump | \$ 25.00 per day | |
| Hand Auger | \$ 25.00 per day | |
| Dil/Water Level Indicator | \$ 50.00 per day | |
| Personnel Air Sampling Pump | \$ 50.00 per day | |
| Photolonization Detector (PID) | \$ 100.00 per day | |
| Sludge Judge | \$ 25.00 per day | |
| Bailers (Disposable) | \$ 20.00 each | |
| Coliwasa | \$ 10.00 each | |
| Clor-D-Tect Field Screening Kit | \$ 40.00 each | |
| PCB Field Screening Kit | \$ 40.00 each | |
| oH Paper | \$ 15.00 per roll | |
| Sample Materials (Jars, Labels, etc.) | \$ 5.00 each | |
| Sample Shipping | \$ 50.00 per shipment | |
| PERSONAL PROTECTIVE EQUIP. | RATE | |
| Fire Bunker Gear | \$ 125.00 per person/day | |
| evel A PPE | \$ 350.00 per person/day | |
| evel B PPE | \$ 250.00 per person/day | |
| evel C PPE | \$ 150.00 per pertson/day | |
| evel D Modified PPE | \$ 50.00 per person/day | |
| RUMS, CONTAINERS & PACKAGING | RATE | |
| Asbestos Bags | \$ 5.00 each | |
| Biohazard Boxes | \$ 25.00 each | |
| Cubic Yard Box w/Liner | \$ 175.00 each | |
| 0rum - 95 Gal. Poly Overpack | \$ 300.00 each | |
| 0rum - 85 Gal. Steel Overpack | \$ 275.00 each | |
| Drums - 55 Gal., Poly | \$ 100.00 each | |
| Drums - 55 Gal., Steel | \$ 60.00 each | |
| Orum Labels (DOT / EPA) | \$ 1.25 each | |
| Drum Liner | \$ 7.50 each | |
| BC Tote (275 Gal. Capacity) | \$ 350.00 each | |
| Pail - 5 Gallon, Poly | \$ 20.00 each | |

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| MICCELL ANEQUIC FOLIDATENT | |
|---|---------------------------------------|
| MISCELLANEOUS EQUIPMENT | RATE |
| 4-Wheeler ATV | \$ 225.00 per day |
| AFD/Negative Air Machine | \$ 125.00 per day |
| Air Compressor (175-235 cfm) | \$ 300.00 per day |
| Betts Valve | \$ 225.00 per day |
| Chain Saw | \$ 60.00 per day |
| Concrete Saw | \$ 150.00 per day |
| Confined Space Equipment | \$ 375.00 per day |
| Copus Air Horn | \$ 100.00 per day |
| Cut Off Saw | \$ 125.00 per day |
| Dome Clamps | \$ 75.00 per day |
| Drill - Air Driven | \$ 50.00 per day |
| Drum Dumper Attachment | \$ 75.00 per day |
| Drum Vac Head | \$ 75.00 per day |
| Electric Generator | \$ 100.00 per day |
| Fluorescent Bulb Crusher | \$ 75.00 per day |
| Frac Tank | \$ 85.00 per day |
| Grounding & Bonding Kit | \$ 75.00 per day |
| Hand Packer | \$ 125.00 per day |
| Haz Hammock | \$ 250.00 per day |
| HEPA Vacuum | \$ 200.00 per day |
| Jackhammer | \$ 75.00 per day |
| Leaf Blower | \$ 25.00 per day |
| Light Plant | \$ 275.00 per day |
| Light Stand | \$ 25.00 per day |
| Mercury Vacuum | \$ 400.00 per day |
| Metal Detector | \$ 50.00 per day |
| Pallet Jack | \$ 45.00 per day |
| Poly Tank 250 GAL | \$ 50.00 per day |
| Poly Tank 500 GAL | \$ 75.00 per day |
| Power Auger | \$ 75.00 per day |
| Power Saw Pressure Washer/Steam Cleaner | \$ 50.00 per day \$ 275.00 per day |
| | |
| Roll Off Container (20-30 CY) | \$ 25.00 per day \$ 50.00 per day |
| Rototiller Sawzall | \$ 40.00 per day |
| | \$ 25.00 per day |
| Shop Vac | \$ 25.00 per day |
| Shower (Decon) | |
| Skimmer, Drum - 36" | \$ 500.00 per day |
| Space Heater Tank Drilling Kit (Air Drill, Air Hose, Air Bottles) | \$ 40.00 per day \$ 175.00 per day |
| Two-Way Radios | \$ 50.00 per day |
| Weedeater | \$ 50.00 per day |
| | 7 |

DISPOSAL CHARGES: Based upon characterization and approval by disposal facility.

Petroleum Impacted Soils/Debris Disposal \$ 40.00 per ton

Liquids: Non-Hazardous (Gasoline, Fuel Oil, Water, etc.) \$ 0.85 per gallon.

Non-Hazardous Sludge \$ 1.70 per gallon

Hazardous Waste Liquids Cost + 20%

Drums: Petroleum Contaminated Soil \$ 150.00 per drum

Petroleum Contaminated Sorbent Materials \$ 150.00 per drum

Hazardous Waste Cost + 20%

"Empty" Drums \$ 25.00 per drum

NOTES

- A. All vehicles, vacuum equipment, heavy equipment and trailers will be billed portal to portal.

 A four (4) hour minimum charge will also apply.
- B. All rates for vehicles, boats and heavy equipment, DO NOT include Operators.
- C. Cleaning and/or repair charges will be assessed for equipment contaminated or damaged by site conditions.
- D. Fuel surcharges may be applied based on current national averages.
- E. Subcontractor personnel/services, rental equipment and non-listed items purchased for project completion will be billed at Cost + 20%.
- F. Report preparation and submittal will be billed at a cost of \$350.00 per incident.
- G. All federal, state, and municipal taxes, except income taxes, now and herinafter imposed with respect to services rendered, to rental equipment; to the processing, manufacture, repair, delivery, transportation of equipment and supplies shall be added to and become part of the total costs payable by the client, unless the proper exemption certificates are furnished.
- H. W.E.L., Inc. (WEL), reserves the right to bill the client for all items and adjustments made by third party negotiators (spill management companies, qualified individuals, insurance adjusters, etc.).

APPENDIX A

SUMMARY OF RECENT SPCC AMENDMENTS
COPY OF OIL POLLUTION PREVENTION REGULATIONS (40 CFR PART 112)

Summary of Recent SPCC Amendments

On July 17, 2002, the EPA issued a final rule amending the Oil Pollution Prevention regulation, which addresses requirements for SPCC Plans. The new SPCC rule became effective August 16, 2002. According to the new rule, this regulation no longer applies to the following:

- Completely buried tanks that are subject to all Underground Storage Tank technical requirements in 40 CFR parts 280 and 281; and
- Containers with a storage capacity of less than 55 gallons.

On December 26, 2006, the EPA issued another final rule amending the Oil Pollution Prevention Regulation, which addresses requirements for SPCC Plans. The new SPCC rule is effective as of April 26, 2007. According to the new amendment, the following regulation changes may be applicable to Elizabeth River Tunnels facilities:

- Specifically-sized secondary containment is no longer required for mobile refuelers.
 Mobile refuelers still must comply with general secondary containment and other rule requirements.
- A facility may prepare a self-certified SPCC Plan if the aggregate aboveground oil storage capacity in containers equal to or greater than 55-gallons is 12,000-gallons or less. This amendment only applies if the facility has had no single discharge exceeding 1,000-gallons or no two discharges each exceeding 42-gallons in any 12month period of the past three years.
- An oil spill contingency plan with a written commitment of manpower, equipment and materials, and an inspection and monitoring program may be utilized in lieu of secondary containment for oil-filled operational equipment. Oil filled operational equipment is defined as equipment which includes an oil storage container or containers in which the oil is present solely to support the function of the apparatus or device, for example, pump or compressor lubricating systems, gear boxes, transformers, and electrical switches. This amendment only applies if the facility has had no single discharge exceeding 1,000-gallons or no two discharges each exceeding 42-gallons in any 12-month period of the past three years from oil-filled operational equipment.

Summary of Recent SPCC Amendments, Continued

On October 15, 2007, the EPA issued a proposed amendment to the Oil Pollution Prevention Regulation, which addresses requirements for SPCC Plans. The new SPCC rule was finalized on December 5, 2008. The effective date for a facility to come into compliance with the applicable requirements of the December 2008 SPCC Amendment is November 10, 2010. According to the 2008 SPCC rule, the following regulation changes may apply to the Roanoke Quarry facility:

- The rule allows an owner or operator to separate or segregate containers to determine the
 facility boundaries, based on such factors as ownership or operation of the buildings,
 structures, containers, and equipment at the site, the activities being conducted, property
 boundaries, and other relevant considerations.
- The rule extends the exemption from the size-secondary secondary containment requirement for mobile refuelers provided in the December 2006 SPCC Amendment to non-transportation-related tank trucks at a facility subject to the SPCC Rule.
- The rule amends the general secondary containment requirement at §112.7(c) to make clear that the scope of secondary containment takes into consideration the typical failure mode, and most likely quantity of oil that would be discharged, consistent with current EPA guidance.
- The rule amends the facility security requirements at §112.7(g) to allow an owner or operator to tailor his security measures to the facility's specific characteristics and location.
- The rule amends the requirements of §112.8(c)(6) and 112.12(c)(6) to provide flexibility in complying with bulk storage container integrity testing requirements. Specifically, EPA will allow an owner or operator to consult and rely on industry standards to determine the appropriate qualifications for tank inspectors/testing personnel and the type/frequency of integrity testing required for a particular container size and configuration.
- The rule requires specifically-sized secondary containment for petroleum product loading/unloading racks. The rule applies to racks that service SPCC regulated oil storage containers and oil storage containers that are subject to State and/or other applicable requirements. The EPA defines a loading rack as having stationary-mounted, articulating arms. As of the date of this Plan, there was no loading/unloading rack at this facility.

Summary of Recent SPCC Amendments, Continued

On December 5, 2008, the EPA issued an amendment to the SPCC rule in order to provide increased clarity, to tailor requirements to particular industry sectors, and to streamline certain requirements for those facility owners or operators subject to the rule. On April 9, 2009, EPA delayed the effective date of the SPCC rule in response to public comments regarding regulatory review.

In November 2009, the EPA promulgated revisions to the December 2008 amendments, which became effective on January 14, 2010. According to the new rule, the following regulation changes included:

- Amending the general secondary containment requirement at §112.7(c) to make clear that
 the scope of secondary containment takes into consideration the typical failure mode, and
 most likely quantity of oil that would be discharged, consistent with current EPA
 guidance.
- Amending the facility security requirements at §112.7(g) to allow an owner or operator to tailor his security measures to the facility's specific characteristics and location.
- Amending the requirements of §112.8(c)(6) and 112.12(c)(6) to provide flexibility in complying with bulk storage container integrity testing requirements. Specifically, EPA will allow an owner or operator to consult and rely on industry standards to determine the appropriate qualifications for tank inspectors/testing personnel and the type/frequency of integrity testing required for a particular container size and configuration.

112 of the Code of Federal Regulations, is amended as follows:

PART 112-OIL POLLUTION PREVENTION

1. The authority for part 112 continues to read as follows:

Authority: 33 U.S.C. 1251 et seq.; 33 U.S.C. 2720; E.O. 12777 (October 18, 1991), 3 CFR, 1991 Comp., p. 351.

2. Part 112 is amended by designating §§ 112.1 through 112.7 as subpart A, adding a subpart heading and revising newly designated subpart A to read as

Subpart A-Applicability, Definitions, and General Requirements For All Facilities and All Types of Oils

Sec.

- General applicability. 112.1
- 112.2 Definitions.
- 112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.
- 112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.
- 112.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators.
- 112.6 [Reserved].
- General requirements for Spill Prevention, Control, and Countermeasure Plans.

Subpart A-Applicability, Definitions, and General Requirements for All Facilities and All Types of Oils

§ 112.1 General applicability.

(a)(1) This part establishes procedures, methods, equipment, and other requirements to prevent the discharge of oil from nontransportation-related onshore and offshore facilities into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act).

(2) As used in this part, words in the singular also include the plural and words in the masculine gender also include the feminine and vice versa, as the case may require.

(b) Except as provided in paragraph (d) of this section, this part applies to any owner or operator of a nontransportation-related onshore or offshore facility engaged in drilling, producing, gathering, storing,

processing, refining, transferring, distributing, using, or consuming oil and oil products, which due to its location, could reasonably be expected to discharge oil in quantities that may be harmful, as described in part 110 of this chapter, into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act) that has oil in:

(1) Any aboveground container; (2) Any completely buried tank as

defined in § 112.2;

(3) Any container that is used for standby storage, for seasonal storage, or for temporary storage, or not otherwise "permanently closed" as defined in § 112.2;

(4) Any "bunkered tank" or "partially buried tank" as defined in § 112.2, or any container in a vault, each of which is considered an aboveground storage container for purposes of this part.

(c) As provided in section 313 of the Clean Water Act (CWA), departments, agencies, and instrumentalities of the Federal government are subject to this part to the same extent as any person.

(d) Except as provided in paragraph (f) of this section, this part does not

apply to: (1) The owner or operator of any facility, equipment, or operation that is not subject to the jurisdiction of the Environmental Protection Agency (EPA) under section 311(j)(1)(C) of the CWA, as follows:

(i) Any onshore or offshore facility, that due to its location, could not reasonably be expected to have a discharge as described in paragraph (b) of this section. This determination must be based solely upon consideration of the geographical and location aspects of the facility (such as proximity to navigable waters or adjoining shorelines, land contour, drainage, etc.) and must exclude consideration of manmade features such as dikes, equipment or other structures, which may serve to restrain, hinder, contain, or otherwise prevent a discharge as described in paragraph (b) of this section.

(ii) Any equipment, or operation of a vessel or transportation-related onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation, as defined in the Memorandum of

Understanding between the Secretary of Transportation and the Administrator of EPA, dated November 24, 1971 (Appendix A of this part).

(iii) Any equipment, or operation of a vessel or onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation or the U.S. Department of the Interior, as defined in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA, dated November 8, 1993 (Appendix B of this part).

(2) Any facility which, although otherwise subject to the jurisdiction of EPA, meets both of the following

requirements:

(i) The completely buried storage capacity of the facility is 42,000 gallons or less of oil. For purposes of this exemption, the completely buried storage capacity of a facility excludes the capacity of a completely buried tank, as defined in § 112.2, and connected underground piping, underground ancillary equipment, and containment systems, that is currently subject to all of the technical requirements of part 280 of this chapter or all of the technical requirements of a State program approved under part 281 of this chapter. The completely buried storage capacity of a facility also excludes the capacity of a container that is "permanently closed," as defined in § 112.2.

(ii) The aggregate aboveground storage capacity of the facility is 1,320 gallons or less of oil. For purposes of this exemption, only containers of oil with a capacity of 55 gallons or greater are counted. The aggregate aboveground storage capacity of a facility excludes the capacity of a container that is "permanently closed," as defined in

§ 112.2.

(3) Any offshore oil drilling production, or workover facility that is subject to the notices and regulations of the Minerals Management Service, as specified in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA, dated November 8, 1993 (Appendix B of

(4) Any completely buried storage tank, as defined in § 112.2, and connected underground piping, underground ancillary equipment, and containment systems, at any facility, that is subject to all of the technical requirements of part 280 of this chapter or a State program approved under part 281 of this chapter, except that such a tank must be marked on the facility diagram as provided in § 112.7(a)(3), if

the facility is otherwise subject to this

(5) Any container with a storage capacity of less than 55 gallons of oil.

(6) Any facility or part thereof used exclusively for wastewater treatment and not used to satisfy any requirement of this part. The production, recovery, or recycling of oil is not wastewater treatment for purposes of this

paragraph.

(e) This part establishes requirements for the preparation and implementation of Spill Prevention, Control, and Countermeasure (SPCC) Plans. SPCC Plans are designed to complement existing laws, regulations, rules, standards, policies, and procedures pertaining to safety standards, fire prevention, and pollution prevention rules. The purpose of an SPCC Plan is to form a comprehensive Federal/State spill prevention program that minimizes the potential for discharges. The SPCC Plan must address all relevant spill prevention, control, and countermeasures necessary at the specific facility. Compliance with this part does not in any way relieve the owner or operator of an onshore or an offshore facility from compliance with other Federal, State, or local laws. (f) Notwithstanding paragraph (d) of

s section, the Regional Administrator .. ay require that the owner or operator of any facility subject to the jurisdiction of EPA under section 311(j) of the CWA prepare and implement an SPCC Plan, or any applicable part, to carry out the

purposes of the CWA.

 Following a preliminary determination, the Regional Administrator must provide a written notice to the owner or operator stating the reasons why he must prepare an SPCC Plan, or applicable part. The Regional Administrator must send such notice to the owner or operator by certified mail or by personal delivery. If the owner or operator is a corporation, the Regional Administrator must also mail a copy of such notice to the registered agent, if any and if known, of the corporation in the State where the facility is located.

(2) Within 30 days of receipt of such written notice, the owner or operator may provide information and data and may consult with the Agency about the need to prepare an SPCC Plan, or

applicable part.

(3) Within 30 days following the time under paragraph (b)(2) of this section within which the owner or operator may provide information and data and

sult with the Agency about the need prepare an SPCC Plan, or applicable part, the Regional Administrator must make a final determination regarding

whether the owner or operator is required to prepare and implement an SPCC Plan, or applicable part. The Regional Administrator must send the final determination to the owner or operator by certified mail or by personal delivery. If the owner or operator is a corporation, the Regional Administrator must also mail a copy of the final determination to the registered agent, if any and if known, of the corporation in the State where the facility is located.

(4) If the Regional Administrator makes a final determination that an SPCC Plan, or applicable part, is necessary, the owner or operator must prepare the Plan, or applicable part, within six months of that final determination and implement the Plan, or applicable part, as soon as possible, but not later than one year after the Regional Administrator has made a final

determination. (5) The owner or operator may appeal a final determination made by the Regional Administrator requiring preparation and implementation of an SPCC Plan, or applicable part, under this paragraph. The owner or operator must make the appeal to the Administrator of EPA within 30 days of receipt of the final determination under paragraph (b)(3) of this section from the Regional Administrator requiring preparation and/or implementation of an SPCC Plan, or applicable part. The owner or operator must send a complete copy of the appeal to the Regional Administrator at the time he makes the appeal to the Administrator. The appeal must contain a clear and concise statement of the issues and points of fact in the case. In the appeal, the owner or operator may also provide additional information. The additional information may be from any person. The Administrator may request additional information from the owner or operator. The Administrator must render a decision within 60 days of receiving the appeal or additional information submitted by the owner or operator and must serve the owner or operator with the decision made in the appeal in the manner described in paragraph (f)(1) of this section.

§ 112.2 Definitions.

For the purposes of this part: Adverse weather means weather conditions that make it difficult for response equipment and personnel to clean up or remove spilled oil, and that must be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height as specified in Appendix E to this part

(as appropriate), ice conditions, temperatures, weather-related visibility, and currents within the area in which the systems or equipment is intended to function.

Alteration means any work on a container involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of the container.

Animal fat means a non-petroleum oil, fat, or grease of animal, fish, or

marine mammal origin.

Breakout tank means a container used to relieve surges in an oil pipeline system or to receive and store oil transported by a pipeline for reinjection and continued transportation by

pipeline.

Bulk storage container means any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Oil-filled electrical, operating, or manufacturing equipment is not a bulk storage container.

Bunkered tank means a container constructed or placed in the ground by cutting the earth and re-covering the container in a manner that breaks the surrounding natural grade, or that lies above grade, and is covered with earth, sand, gravel, asphalt, or other material. A bunkered tank is considered an aboveground storage container for purposes of this part.

Completely buried tank means any container completely below grade and covered with earth, sand, gravel, asphalt, or other material. Containers in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage containers for

purposes of this part.

Complex means a facility possessing a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of the CWA.

Contiguous zone means the zone established by the United States under Article 24 of the Convention of the Territorial Sea and Contiguous Zone, that is contiguous to the territorial sea and that extends nine miles seaward from the outer limit of the territorial

Contract or other approved means

(1) A written contractual agreement with an oil spill removal organization that identifies and ensures the availability of the necessary personnel and equipment within appropriate response times; and/or

(2) A written certification by the owner or operator that the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times; and/or

(3) Active membership in a local or regional oil spill removal organization that has identified and ensures adequate access through such membership to necessary personnel and equipment to respond to a discharge within appropriate response times in the specified geographic area; and/or

(4) Any other specific arrangement approved by the Regional Administrator upon request of the owner or operator.

Discharge includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes discharges in compliance with a permit under section 402 of the CWA; discharges resulting from circumstances identified, reviewed, and made a part of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a condition in such permit; or continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of the CWA, that are caused by events occurring within the scope of relevant operating or treatment systems. For purposes of this part, the term discharge shall not include any discharge of oil that is authorized by a permit issued under section 13 of the River and Harbor Act of 1899 (33 U.S.C. 407).

Facility means any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline (other than a vessel or a public vessel) used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and waste treatment, or in which oil is used, as described in Appendix A to this part. The boundaries of a facility depend on several site-specific factors, including, but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and the types of activity at the site.

Fish and wildlife and sensitive environments means areas that may be identified by their legal designation or by evaluations of Area Committees (for planning) or members of the Federal On-Scene Coordinator's spill response structure (during responses). These areas may include wetlands, National and State parks, critical habitats for endangered or threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine

reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and State lands that are research national areas, heritage program areas, land trust areas, and historical and archaeological sites and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats.

Injury means a measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge, or exposure to a product of reactions resulting from a discharge.

Maximum extent practicable means within the limitations used to determine oil spill planning resources and response times for on-water recovery, shoreline protection, and cleanup for worst case discharges from onshore non-transportation-related facilities in adverse weather. It includes the planned capability to respond to a worst case discharge in adverse weather, as contained in a response plan that meets the requirements in § 112.20 or in a specific plan approved by the Regional Administrator.

Navigable waters means the waters of the United States, including the territorial seas.

(1) The term includes:

 (i) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide;

(ii) All interstate waters, including interstate wetlands;

(iii) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:

 (A) That are or could be used by interstate or foreign travelers for recreational or other purposes; or

(B) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or,

(C) That are or could be used for industrial purposes by industries in interstate commerce;

 (iv) All impoundments of waters otherwise defined as waters of the United States under this section; (v) Tributaries of waters identified in paragraphs (1)(i) through (iv) of this definition:

(vi) The territorial sea; and

(vii) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (1) of this definition.

(2) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds which also meet the criteria of this definition) are not waters of the United States. Navigable waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

Non-petroleum oil means oil of any kind that is not petroleum-based, including but not limited to: Fats, oils, and greases of animal, fish, or marine mammal origin; and vegetable oils, including oils from seeds, nuts, fruits,

and kernels.

Offshore facility means any facility of any kind (other than a vessel or public vessel) located in, on, or under any of the navigable waters of the United States, and any facility of any kind that is subject to the jurisdiction of the United States and is located in, on, or under any other waters.

Oil means oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

dredged spoil.

Oil Spill Removal Organization means an entity that provides oil spill response resources, and includes any for-profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provide required response resources.

Onshore facility means any facility of any kind located in, on, or under any land within the United States, other

than submerged lands.

Owner or operator means any person owning or operating an onshore facility or an offshore facility, and in the case of any abandoned offshore facility, the person who owned or operated or maintained the facility immediately prior to such abandonment.

Partially buried tank means a storage container that is partially inserted or constructed in the ground, but not entirely below grade, and not completely covered with earth, sand, avel, asphalt, or other material. A partially buried tank is considered an aboveground storage container for purposes of this part.

Permanently closed means any container or facility for which:

 All liquid and sludge has been removed from each container and

connecting line; and

(2) All connecting lines and piping have been disconnected from the container and blanked off, all valves (except for ventilation valves) have been closed and locked, and conspicuous signs have been posted on each container stating that it is a permanently closed container and noting the date of closure.

Person includes an individual, firm, corporation, association, or partnership.

Petroleum oil means petroleum in any form, including but not limited to crude oil, fuel oil, mineral oil, sludge, oil refuse, and refined products.

Production facility means all structures (including but not limited to wells, platforms, or storage facilities), piping (including but not limited to flowlines or gathering lines), or equipment (including but not limited to workover equipment, separation

nipment, or auxiliary nonnsportation-related equipment) used in the production, extraction, recovery, lifting, stabilization, separation or treating of oil, or associated storage or measurement, and located in a single geographical oil or gas field operated by a single operator.

Regional Administrator means the Regional Administrator of the Environmental Protection Agency, in and for the Region in which the facility

is located.

Repair means any work necessary to maintain or restore a container to a condition suitable for safe operation, other than that necessary for ordinary, day-to-day maintenance to maintain the functional integrity of the container and that does not weaken the container.

Spill Prevention, Control, and Countermeasure Plan; SPCC Plan, or Plan means the document required by § 112.3 that details the equipment, workforce, procedures, and steps to prevent, control, and provide adequate countermeasures to a discharge.

Storage capacity of a container means the shell capacity of the container.

Transportation-related and nontransportation-related, as applied to an onshore or offshore facility, are defined e Memorandum of Understanding

veen the Secretary of Transportation and the Administrator of the Environmental Protection Agency, dated November 24, 1971, (Appendix A of this part)

United States means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, the U.S. Virgin Islands, and the Pacific Island Governments.

Vegetable oil means a non-petroleum oil or fat of vegetable origin, including but not limited to oils and fats derived from plant seeds, nuts, fruits, and

kernels.

Vessel means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other

than a public vessel.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds.

Worst case discharge for an onshore non-transportation-related facility means the largest foreseeable discharge in adverse weather conditions as determined using the worksheets in

Appendix D to this part.

§ 112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.

The owner or operator of an onshore or offshore facility subject to this section must prepare a Spill Prevention, Control, and Countermeasure Plan (hereafter "SPCC Plan" or "Plan)," in writing, and in accordance with § 112.7, and any other applicable section of this

part.

(a) If your onshore or offshore facility was in operation on or before August 16, 2002, you must maintain your Plan, but must amend it, if necessary to ensure compliance with this part, on or before February 17, 2003, and must implement the amended Plan as soon as possible, but not later than August 18, 2003. If your onshore or offshore facility becomes operational after August 16, 2002, through August 18, 2003, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare a Plan on or before August 18, 2003, and fully implement it as soon as possible, but not later than August 18, 2003.

(b) If you are the owner or operator of an onshore or offshore facility that becomes operational after August 18, 2003, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare and implement a Plan before you begin

operations. (c) If you are the owner or operator of an onshore or offshore mobile facility, such as an onshore drilling or workover rig, barge mounted offshore drilling or workover rig, or portable fueling facility, you must prepare, implement, and maintain a facility Plan as required by this section. This provision does not require that you prepare a new Plan each time you move the facility to a new site. The Plan may be a general plan. When you move the mobile or portable facility, you must locate and install it using the discharge prevention practices outlined in the Plan for the facility. You may not operate a mobile or portable facility subject to this part unless you have implemented the Plan. The Plan is applicable only while the facility is in a fixed (non-transportation) operating

(d) A licensed Professional Engineer must review and certify a Plan for it to be effective to satisfy the requirements

of this part.

 By means of this certification the Professional Engineer attests:

(i) That he is familiar with the requirements of this part;

(ii) That he or his agent has visited

and examined the facility;

(iii) That the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part;

(iv) That procedures for required inspections and testing have been

established; and

(v) That the Plan is adequate for the facility.

(2) Such certification shall in no way relieve the owner or operator of a facility of his duty to prepare and fully implement such Plan in accordance with the requirements of this part.

(e) If you are the owner or operator of a facility for which a Plan is required

under this section, you must:

(1) Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended, and

(2) Have the Plan available to the Regional Administrator for on-site

review during normal working hours.

(f) Extension of time. (1) The Regional Administrator may authorize an extension of time for the preparation and full implementation of a Plan, or any amendment thereto, beyond the time permitted for the preparation, implementation, or amendment of a

Plan under this part, when he finds that the owner or operator of a facility subject to this section, cannot fully comply with the requirements as a result of either nonavailability of qualified personnel, or delays in construction or equipment delivery beyond the control and without the fault of such owner or operator or his agents or employees.

(2) If you are an owner or operator seeking an extension of time under paragraph (f)(1) of this section, you may submit a written extension request to the Regional Administrator. Your

request must include:

(i) A full explanation of the cause for any such delay and the specific aspects of the Plan affected by the delay;

(ii) A full discussion of actions being taken or contemplated to minimize or

mitigate such delay; and

(iii) A proposed time schedule for the implementation of any corrective actions being taken or contemplated, including interim dates for completion of tests or studies, installation and operation of any necessary equipment, or other preventive measures. In addition you may present additional oral or written statements in support of

your extension request.

(3) The submission of a written extension request under paragraph (f)(2) of this section does not relieve you of your obligation to comply with the requirements of this part. The Regional Administrator may request a copy of your Plan to evaluate the extension request. When the Regional Administrator authorizes an extension of time for particular equipment or other specific aspects of the Plan, such extension does not affect your obligation to comply with the requirements related to other equipment or other specific aspects of the Plan for which the Regional Administrator has not expressly authorized an extension.

§ 112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.

If you are the owner or operator of a facility subject to this part, you must:

(a) Notwithstanding compliance with § 112.3, whenever your facility has discharged more than 1,000 U.S. gallons of oil in a single discharge as described in § 112.1(b), or discharged more than 42 U.S. gallons of oil in each of two discharges as described in § 112.1(b), occurring within any twelve month period, submit the following information to the Regional Administrator within 60 days from the time the facility becomes subject to this section:

(1) Name of the facility;

(2) Your name:

(3) Location of the facility;

(4) Maximum storage or handling capacity of the facility and normal daily throughput;

(5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;

(6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;

(7) The cause of such discharge as described in § 112.1(b), including a failure analysis of the system or subsystem in which the failure

(8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence;

(9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or

discharge.

(b) Take no action under this section until it applies to your facility. This section does not apply until the expiration of the time permitted for the initial preparation and implementation of the Plan under § 112.3, but not including any amendments to the Plan.

(c) Send to the appropriate agency or agencies in charge of oil pollution control activities in the State in which the facility is located a complete copy of all information you provided to the Regional Administrator under paragraph (a) of this section. Upon receipt of the information such State agency or agencies may conduct a review and make recommendations to the Regional Administrator as to further procedures, methods, equipment, and other requirements necessary to prevent and to contain discharges from your facility.

(d) Amend your Plan, if after review by the Regional Administrator of the information you submit under paragraph (a) of this section, or submission of information to EPA by the State agency under paragraph (c) of this section, or after on-site review of your Plan, the Regional Administrator requires that you do so. The Regional Administrator may require you to amend your Plan if he finds that it does not meet the requirements of this part or that amendment is necessary to prevent and contain discharges from your

facility. (e) Act in accordance with this

paragraph when the Regional Administrator proposes by certified mail or by personal delivery that you amend your SPCC Plan. If the owner or operator is a corporation, he must also notify by mail the registered agent of such corporation, if any and if known,

in the State in which the facility is located. The Regional Administrator must specify the terms of such proposed amendment. Within 30 days from receipt of such notice, you may submit written information, views, and arguments on the proposed amendment. After considering all relevant material presented, the Regional Administrator must either notify you of any amendment required or rescind the notice. You must amend your Plan as required within 30 days after such notice, unless the Regional Administrator, for good cause, specifies another effective date. You must implement the amended Plan as soon as possible, but not later than six months after you amend your Plan, unless the Regional Administrator specifies another date.

(f) If you appeal a decision made by the Regional Administrator requiring an amendment to an SPCC Plan, send the appeal to the EPA Administrator in writing within 30 days of receipt of the notice from the Regional Administrator requiring the amendment under paragraph (e) of this section. You must send a complete copy of the appeal to the Regional Administrator at the time you make the appeal. The appeal must contain a clear and concise statement of the issues and points of fact in the case. It may also contain additional information from you, or from any other person. The EPA Administrator may request additional information from you, or from any other person. The EPA Administrator must render a decision within 60 days of receiving the appeal and must notify you of his decision.

§ 112.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators.

If you are the owner or operator of a

facility subject to this part, you must:
(a) Amend the SPCC Plan for your facility in accordance with the general requirements in § 112.7, and with any specific section of this part applicable to your facility, when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge as described in § 112.1(b). Examples of changes that may require amendment of the Plan include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at

a facility. An amendment made under nis section must be prepared within six months, and implemented as soon as possible, but not later than six months following preparation of the amendment.

(b) Notwithstanding compliance with paragraph (a) of this section, complete a review and evaluation of the SPCC Plan at least once every five years from the date your facility becomes subject to this part; or, if your facility was in operation on or before August 16, 2002, five years from the date your last review was required under this part. As a result of this review and evaluation, you must amend your SPCC Plan within six months of the review to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge as described in § 112.1(b) from the facility. You must implement any amendment as soon as possible, but not later than six months following preparation of any amendment. You must document your completion of the review and evaluation, and must sign a statement as to whether you will amend the Plan, either at the beginning or end of the

an or in a log or an appendix to the .n. The following words will suffice, I have completed review and evaluation of the SPCC Plan for (name of facility) on (date), and will (will not) amend the Plan as a result."

(c) Have a Professional Engineer certify any technical amendment to your Plan in accordance with § 112.3(d).

§112.6 [Reserved]

§112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. You must prepare the Plan in writing. If you do not follow the sequence specified in this section for the Plan, you must prepare an equivalent Plan acceptable to the Regional Administrator that meets all of the applicable requirements listed in this part, and you must supplement it with a section cross-referencing the location of requirements listed in this part and the equivalent requirements in

ther prevention plan. If the Plan for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up. As detailed elsewhere in this section, you must also:

(a)(1) Include a discussion of your facility's conformance with the requirements listed in this part.

(2) Comply with all applicable requirements listed in this part. Your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2),112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11),112.13(c)(2), and 112.14(c), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c) 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in § 112.4(d) and (e).

(3) Describe in your Plan the physicallayout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under § 112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes. You must also address in your Plan:

(i) The type of oil in each container and its storage capacity;

(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);

(iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge; (iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);

 (v) Methods of disposal of recovered materials in accordance with applicable

legal requirements; and

(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in § 112.1(b).

(4) Unless you have submitted a response plan under § 112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in § 112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged as described in § 112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.

(5) Unless you have submitted a response plan under § 112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices.

(b) Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in § 112.1(b). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:

(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;

(ii) Curbing;(iii) Culverting, gutters, or other

drainage systems;

(iv) Weirs, booms, or other barriers;(v) Spill diversion ponds;

(v) Spill diversion ponds;(vi) Retention ponds; or(vii) Sorbent materials.(2) For offshore facilities:(i) Curbing or drip pans; or

(ii) Sumps and collection systems.

(d) If you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c) to prevent a discharge as described in § 112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under § 112.20, provide in your Plan the following:

(1) An oil spill contingency plan following the provisions of part 109 of

this chapter.

(2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged

that may be harmful.

(e) Inspections, tests, and records. Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(f) Personnel, training, and discharge prevention procedures. (1) At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of

the facility SPCC Plan.

(2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.

(3) Schedule and conduct discharge prevention briefings for your oilhandling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in § 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

(g) Security (excluding oil production facilities). (1) Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is

unattended.

(2) Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.

(3) Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when the pump is in a nonoperating or non-standby status.

(4) Securely cap or blank-flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.

(5) Provide facility lighting commensurate with the type and location of the facility that will assist in

the:

 (i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and

(ii) Prevention of discharges occurring

through acts of vandalism.

(h) Facility tank car and tank truck loading/unloading rack (excluding offshore facilities). (1) Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

(i) If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

(j) In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.

3. Part 112 is amended adding subpart B consisting of §§ 112.8 through 112.11 to read as follows:

Subpart B—Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

Sec.

112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

112.10 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.

112.11 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

Subpart B—Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

§ 112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

(a) Meet the general requirements for the Plan listed under § 112.7, and the specific discharge prevention and containment procedures listed in this section.

(b) Facility drainage. (1) Restrain rainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

(2) Use valves of manual, open-andclosed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this

section. (3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment asins in areas subject to periodic

(4) If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.

(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in § 112.1(b) in case there is an equipment failure or human error at the facility.

(c) Bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure

and temperature.

(2) Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain

cipitation. You must ensure that d areas are sufficiently impervious contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose.

You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

(i) Normally keep the bypass valve

sealed closed.

(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).

(iii) Open the bypass valve and reseal it following drainage under responsible

supervision; and

(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with §§ 122.41(j)(2) and 122.41(m)(3) of this chapter.

(4) Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.

(5) Not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skidmounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of nondestructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(7) Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open

watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.

(ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.

(iii) Direct audible or code signal communication between the container gauger and the pumping station.

(iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.

(v) You must regularly test liquid level sensing devices to ensure proper

operation.

(9) Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in § 112.1(b).

(10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.

(11) Position or locate mobile or portable oil storage containers to prevent a discharge as described in § 112.1(b). You must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

(d) Facility transfer operations, pumping, and facility process. (1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as

indicated by the magnitude of the

damage.

(2) Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.

(3) Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.

(4) Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.

(5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other

oil transfer operations.

§ 112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

If you are the owner or operator of an onshore production facility, you must:

(a) Meet the general requirements for the Plan listed under § 112.7, and the specific discharge prevention and containment procedures listed under

this section.

(b) Oil production facility drainage. (1) At tank batteries and separation and treating areas where there is a reasonable possibility of a discharge as described in § 112.1(b), close and seal at all times drains of dikes or drains of equivalent measures required under § 112.7(c)(1), except when draining uncontaminated rainwater. Prior to drainage, you must inspect the diked area and take action as provided in § 112.8(c)(3)(ii), (iii), and (iv). You must remove accumulated oil on the rainwater and return it to storage or dispose of it in accordance with legally approved methods.

(2) Inspect at regularly scheduled intervals field drainage systems (such as drainage ditches or road ditches), and oil traps, sumps, or skimmers, for an accumulation of oil that may have resulted from any small discharge. You

must promptly remove any accumulations of oil.

(c) Oil production facility bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and the conditions of

(2) Provide all tank battery separation, and treating facility installations with a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must safely confine drainage from undiked areas in a catchment basin or holding pond.

(3) Periodically and upon a regular schedule visually inspect each container of oil for deterioration and maintenance needs, including the foundation and support of each container that is on or above the surface of the ground.

(4) Engineer or update new and old tank battery installations in accordance with good engineering practice to prevent discharges. You must provide at

least one of the following:

(i) Container capacity adequate to assure that a container will not overfill if a pumper/gauger is delayed in making regularly scheduled rounds.

(ii) Overflow equalizing lines between containers so that a full container can overflow to an adjacent container.

(iii) Vacuum protection adequate to prevent container collapse during a pipeline run or other transfer of oil from the container.

(iv) High level sensors to generate and transmit an alarm signal to the computer where the facility is subject to a computer production control system.

(d) Facility transfer operations, oil production facility. (1) Periodically and upon a regular schedule inspect all aboveground valves and piping associated with transfer operations for the general condition of flange joints. valve glands and bodies, drip pans, pipe supports, pumping well polish rod stuffing boxes, bleeder and gauge valves, and other such items.

(2) Inspect saltwater (oil field brine) disposal facilities often, particularly following a sudden change in atmospheric temperature, to detect possible system upsets capable of causing a discharge.

(3) Have a program of flowline maintenance to prevent discharges from each flowline.

§ 112.10 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.

If you are the owner or operator of an onshore oil drilling and workover

facility, you must:

(a) Meet the general requirements listed under § 112.7, and also meet the specific discharge prevention and containment procedures listed under this section.

(b) Position or locate mobile drilling or workover equipment so as to prevent a discharge as described in § 112.1(b).

(c) Provide catchment basins or diversion structures to intercept and contain discharges of fuel, crude oil, or

oily drilling fluids.

(d) Install a blowout prevention (BOP) assembly and well control system before drilling below any casing string or during workover operations. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while that BOP assembly and well control system are on the well.

§ 112.11 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

If you are the owner or operator of an offshore oil drilling, production, or workover facility, you must:

(a) Meet the general requirements listed under § 112.7, and also meet the specific discharge prevention and containment procedures listed under

this section. (b) Use oil drainage collection equipment to prevent and control small oil discharges around pumps, glands, valves, flanges, expansion joints, hoses, drain lines, separators, treaters, tanks, and associated equipment. You must control and direct facility drains toward a central collection sump to prevent the facility from having a discharge as described in § 112.1(b). Where drains and sumps are not practicable, you must remove oil contained in collection equipment as often as necessary to prevent overflow.

(c) For facilities employing a sump system, provide adequately sized sump and drains and make available a spare pump to remove liquid from the sump and assure that oil does not escape. You must employ a regularly scheduled preventive maintenance inspection and testing program to assure reliable operation of the liquid removal system and pump start-up device. Redundant automatic sump pumps and control devices may be required on some

installations

(d) At facilities with areas where separators and treaters are equipped with dump valves which predominantly fail in the closed position and where pollution risk is high, specially equip the facility to prevent the discharge of oil. You must prevent the discharge of oil by

(1) Extending the flare line to a diked area if the separator is near shore;

(2) Equipping the separator with a high liquid level sensor that will automatically shut in wells producing to the separator; or

(3) Installing parallel redundant dump

valves.

(e) Equip atmospheric storage or surge containers with high liquid level

sensing devices that activate an alarm or ontrol the flow, or otherwise prevent

rischarges.

(f) Equip pressure containers with high and low pressure sensing devices that activate an alarm or control the flow.

(g) Equip containers with suitable corrosion protection.

(h) Prepare and maintain at the facility a written procedure within the Plan for inspecting and testing pollution prevention equipment and systems.

(i) Conduct testing and inspection of the pollution prevention equipment and systems at the facility on a scheduled periodic basis, commensurate with the complexity, conditions, and circumstances of the facility and any other appropriate regulations. You must use simulated discharges for testing and inspecting human and equipment pollution control and countermeasure systems.

(j) Describe in detailed records surface and subsurface well shut-in valves and devices in use at the facility for each well sufficiently to determine their method of activation or control, such as pressure differential, change in fluid or flow conditions, combination of pressure and flow, manual or remote

ntrol mechanisms.

k) Install a BOF assembly and well control system during workover operations and before drilling below any casing string. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while the BOP assembly and well control system are on the well.

 Equip all manifolds (headers) with check valves on individual flowlines.

(m) Equip the flowline with a high pressure sensing device and shut-in valve at the wellhead if the shut-in well pressure is greater than the working pressure of the flowline and manifold valves up to and including the header valves. Alternatively you may provide a pressure relief system for flowlines.

 (n) Protect all piping appurtenant to the facility from corrosion, such as with protective coatings or cathodic

protection.

(o) Adequately protect sub-marine piping appurtenant to the facility against environmental stresses and other activities such as fishing operations.

(p) Maintain sub-marine piping appurtenant to the facility in good operating condition at all times. You must periodically and according to a

dule inspect or test such piping for res. You must document and keep a record of such inspections or tests at the facility. 4. Part 112 is amended by adding subpart C consisting of §§ 112.12 through 112.15 to read as follows:

Subpart C—Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, Including Oils from Seeds, Nuts, Fruits and Kernels

Sec.

112.12 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

112.13 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

- 112.14 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.
- 112.15 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

Subpart C—Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, including Oils from Seeds, Nuts, Fruits, and Kernels.

§ 112.12 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities)

If you are the owner or operator of an onshore facility (excluding a production

facility), you must:

(a) Meet the general requirements for the Plan listed under § 112.7, and the specific discharge prevention and containment procedures listed in this section.

(b) Facility drainage. (1) Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

(2) Use valves of manual, open-andclosed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, subject to the requirements of paragraphs (c)(3)(ii), (iii), and (iv) of this section.

(3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur

outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

(4) If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge,

retain oil in the facility.

(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in § 112.1(b) in case there is an equipment failure or human error at the facility.

(c) Bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure

and temperature.

(2) Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

(i) Normally keep the bypass valve

sealed closed.

(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).

(iii) Open the bypass valve and reseal it following drainage under responsible

supervision; and

(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with §§ 122.41(j)(2) and 122.41(m)(3) of this chapter.

(4) Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage

tanks

(5) Not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skidmounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of nondestructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(7) Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or

retention system.

(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible

air vent may suffice. (ii) High liquid level pump cutoff

devices set to stop flow at a predetermined container content level. (iii) Direct audible or code signal

communication between the container gauger and the pumping station.

(iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.

- (v) You must regularly test liquid level sensing devices to ensure proper operation.
- (9) Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in § 112.1(b).
- (10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.
- (11) Position or locate mobile or portable oil storage containers to prevent a discharge as described in § 112.1(b). You must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.
- (d) Facility transfer operations, pumping, and facility process. (1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.
- (2) Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an
- (3) Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.
- (4) Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation. modification, construction, relocation, or replacement.
- (5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

§ 112.13 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

If you are the owner or operator of an onshore production facility, you must:

(a) Meet the general requirements for the Plan listed under § 112.7, and the specific discharge prevention and containment procedures listed under

this section.

(b) Oil production facility drainage. (1) At tank batteries and separation and treating areas where there is a reasonable possibility of a discharge as described in § 112.1(b), close and seal at all times drains of dikes or drains of equivalent measures required under § 112.7(c)(1), except when draining uncontaminated rainwater. Prior to drainage, you must inspect the diked area and take action as provided in § 112.12(c)(3)(ii), (iii), and (iv). You must remove accumulated oil on the rainwater and return it to storage or dispose of it in accordance with legally approved methods.

(2) Inspect at regularly scheduled intervals field drainage systems (such as drainage ditches or road ditches), and oil traps, sumps, or skimmers, for an accumulation of oil that may have resulted from any small discharge. You

must promptly remove any accumulations of oil.

(c) Oil production facility bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and the conditions of

storage.

(2) Provide all tank battery separation, and treating facility installations with a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must safely confine drainage from undiked areas in a catchment basin or holding pond.

(3) Periodically and upon a regular schedule visually inspect each container of oil for deterioration and maintenance needs, including the foundation and support of each container that is on or above the surface of the ground.

(4) Engineer or update new and old tank battery installations in accordance with good engineering practice to prevent discharges. You must provide at least one of the following:

(i) Container capacity adequate to assure that a container will not overfill if a pumper/gauger is delayed in making regularly scheduled rounds.

(ii) Overflow equalizing lines between containers so that a full container can overflow to an adjacent container.

(iii) Vacuum protection adequate to prevent container collapse during a

pipeline run or other transfer of oil from he container.

(iv) High level sensors to generate and transmit an alarm signal to the computer where the facility is subject to a computer production control system.

(d) Facility transfer operations, oil production facility. (1) Periodically and upon a regular schedule inspect all aboveground valves and piping associated with transfer operations for the general condition of flange joints, valve glands and bodies, drip pans, pipe supports, pumping well polish rod stuffing boxes, bleeder and gauge valves, and other such items.

(2) Inspect saltwater (oil field brine) disposal facilities often, particularly following a sudden change in atmospheric temperature, to detect possible system upsets capable of

causing a discharge.

(3) Have a program of flowline maintenance to prevent discharges from each flowline.

§ 112.14 Spill Prevention, Control, and Countermeasure Plan regulrements for onshore oil drilling and workover facilities.

If you are the owner or operator of an onshore oil drilling and workover

facility, you must:

(a) Meet the general requirements sted under § 112.7, and also meet the ecific discharge prevention and containment procedures listed under this section.

(b) Position or locate mobile drilling or workover equipment so as to prevent a discharge as described in § 112.1(b).

(c) Provide catchment basins or diversion structures to intercept and contain discharges of fuel, crude oil, or

oily drilling fluids.

(d) Install a blowout prevention (BOP) assembly and well control system before drilling below any casing string or during workover operations. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while that BOP assembly and well control system are on the well.

§ 112.15 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

If you are the owner or operator of an offshore oil drilling, production, or

workover facility, you must:

(a) Meet the general requirements listed under § 112.7, and also meet the specific discharge prevention and containment procedures listed under his section.

) Use oil drainage collection aipment to prevent and control small oil discharges around pumps, glands, valves, flanges, expansion joints, hoses, drain lines, separators, treaters, tanks, and associated equipment. You must control and direct facility drains toward a central collection sump to prevent the facility from having a discharge as described in § 112.1(b). Where drains and sumps are not practicable, you must remove oil contained in collection equipment as often as necessary to prevent overflow.

(c) For facilities employing a sump system, provide adequately sized sump and drains and make available a spare pump to remove liquid from the sump and assure that oil does not escape. You must employ a regularly scheduled preventive maintenance inspection and testing program to assure reliable operation of the liquid removal system and pump start-up device. Redundant automatic sump pumps and control devices may be required on some installations

(d) At facilities with areas where separators and treaters are equipped with dump valves which predominantly fail in the closed position and where pollution risk is high, specially equip the facility to prevent the discharge of oil. You must prevent the discharge of

oil by:

(1) Extending the flare line to a diked area if the separator is near shore;

(2) Equipping the separator with a high liquid level sensor that will automatically shut in wells producing to the separator; or

(3) Installing parallel redundant dump

valves.

(e) Equip atmospheric storage or surge containers with high liquid level sensing devices that activate an alarm or control the flow, or otherwise prevent discharges.

(f) Equip pressure containers with high and low pressure sensing devices that activate an alarm or control the

flow

(g) Equip containers with suitable

corrosion protection.

(h) Prepare and maintain at the facility a written procedure within the Plan for inspecting and testing pollution prevention equipment and systems.

(i) Conduct testing and inspection of the pollution prevention equipment and systems at the facility on a scheduled periodic basis, commensurate with the complexity, conditions, and circumstances of the facility and any other appropriate regulations. You must use simulated discharges for testing and inspecting human and equipment pollution control and countermeasure systems.

(j) Describe in detailed records surface and subsurface well shut-in valves and devices in use at the facility for each well sufficiently to determine their

method of activation or control, such as pressure differential, change in fluid or flow conditions, combination of pressure and flow, manual or remote control mechanisms.

- (k) Install a BOP assembly and well control system during workover operations and before drilling below any casing string. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while that BOP assembly and well control system are on
- (l) Equip all manifolds (headers) with check valves on individual flowlines.
- (m) Equip the flowline with a high pressure sensing device and shut-in valve at the wellhead if the shut-in well pressure is greater than the working pressure of the flowline and manifold valves up to and including the header valves. Alternatively you may provide a pressure relief system for flowlines.
- (n) Protect all piping appurtenant to the facility from corrosion, such as with protective coatings or cathodic protection.
- (o) Adequately protect sub-marine piping appurtenant to the facility against environmental stresses and other activities such as fishing operations.
- (p) Maintain sub-marine piping appurtenant to the facility in good operating condition at all times. You must periodically and according to a schedule inspect or test such piping for failures. You must document and keep a record of such inspections or tests at the facility.
- 5. Part 112 is amended by designating §§ 112.20 and 112.21 as subpart D, and adding a subpart heading as follows:

Subpart D-Response Requirements

112.20 Facility response plans.

112.21 Facility response training and drills/

Subpart D-Response Requirements

6. Section 112.20 is amended by revising the first sentence of paragraph (h) to read as follows:

§ 112.20 Facility response plans.

*

(h) A response plan shall follow the format of the model facility-specific response plan included in Appendix F to this part, unless you have prepared an equivalent response plan acceptable to the Regional Administrator to meet State or other Federal requirements. * *

Appendix C—[Amended]

- 7. Appendix C of part 112 is amended
- a. Revising the first sentence of section 2.1; and
- b. Revising the title and first sentence of section 2.4.

Appendix C to Part 112—Substantial Harm Criteria

2.1 Non-Transportation-Related Facilities With a Total Oil Storage Capacity Greater Than or Equal to 42,000 Gallons Where Operations Include Over-Water Transfers of Oil

A non-transportation-related facility with a total oil storage capacity greater than or equal to 42,000 gallons that transfers oil over water to or from vessels must submit a response plan to EPA. * * * * *

2.4 Proximity to Public Drinking Water Intakes at Facilities with a Total Oil Storage Capacity Greater than or Equal to 1 Million Gallons

A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility would shut down a public drinking water intake, which is analogous to a public water system as described at 40 CFR 143.2(c).

Appendix D-[Amended]

8. Appendix D of part 112 is amended by revising footnote 2 to section A.2 of Part A to read as follows:

Appendix D to Part 112—Determination of a Worst Case Discharge Planning Volume

Part A * * * *

* *

A.2 Secondary Containment-Multiple-Tank Facilities

Secondary containment is described in 40 CFR part 112, subparts A through C. Acceptable methods and structures for containment are also given in 40 CFR 112.7(c)(1).

Appendix F-[Amended]

- 9. Appendix F of part 112 is amended by:
- a. Revising section 1.2.7;
- b. Revising the second and last sentences of section 1.4.3;

- c. Revising paragraph (7) and the undesignated paragraph and NOTE following paragraph (7) in section 1.7.3;
 - d. Revising section 1.8.1;
- e. Revising the first two sentences of section 1.8.1.1. introductory text;
- f. Revising the next to the last sentence of section 1.8.1.3;
- g. Revising the next to last sentence of section 1.10.;
- h. Revising paragraph (6) of section 2.1;
- i. Remove the acronym "SIC" in section 3.0, and add in alphabetical order the acronym "NAICS"; and.
- j. Remove the reference to "Standard Industrial Classification (SIC) Code" in Attachment F-1, General Information, and add in in alphabetical order a reference to "North American Industrial Classification System (NAICS) Code."

The revisions read as follows:

Appendix F to Part 112-Facility-Specific Response Plan

1.2.7 Current Operation

Briefly describe the facility's operations and include the North American Industrial Classification System (NAICS) code.

1.4.3 Analysis of the Potential for an Oil Discharge

* * * This analysis shall incorporate factors such as oil discharge history, horizontal range of a potential discharge, and vulnerability to natural disaster, and shall, as appropriate, incorporate other factors such as tank age. * * * The owner or operator may need to research the age of the tanks the oil discharge history at the facility.

1.7.3 Containment and Drainage Planning * *

(7) Other cleanup materials.

In addition, a facility owner or operator must meet the inspection and monitoring requirements for drainage contained in 40 CFR part 112, subparts A through C. A copy of the containment and drainage plans that are required in 40 CFR part 112, subparts A through C may be inserted in this section, including any diagrams in those plans.

Note: The general permit for stormwater drainage may contain additional requirements.

1.8.1 Facility Self-Inspection

Under 40 CFR 112.7(e), you must include the written procedures and records of inspections for each facility in the SPCC

Plan. You must include the inspection records for each container, secondary containment, and item of response equipment at the facility. You must crossreference the records of inspections of each container and secondary containment required by 40 CFR 112.7(e) in the facility response plan. The inspection record of response equipment is a new requirement in this plan. Facility self-inspection requires two-steps: (1) a checklist of things to inspect; and (2) a method of recording the actual inspection and its findings. You must note the date of each inspection. You must keep facility response plan records for five years. You must keep SPCC records for three years.

1.8.1.1. Tank Inspection

The tank inspection checklist presented below has been included as guidance during inspections and monitoring. Similar requirements exist in 40 CFR part 112. subparts A through C. * * *

1.8.1.3 Secondary Containment Inspection

* * * * * * Similar requirements exist in 40 CFR part 112, subparts A through C. * * *

1.10 Security

According to 40 CFR 112.7(g) facilities are required to maintain a certain level of security, as appropriate. * * * * *

2.1 General Information * * *

(6) North American Industrial Classification System (NAICS) Code: Enter the facility's NAICS code as determined by the Office of Management and Budget (this information may be obtained from public library resources.)

3.0 Acronyms *

*

NAICS: North American Industrial Classification System

* Attachments to Appendix F

Attachment F-1-Response Plan Cover Sheet

General Information

*

North American Industrial Classification System (NAICS) Code:

[FR Doc. 02-16852 Filed 7-16-02; 8:45 am] BILLING CODE 6560-50-P

APPENDIX H

STATE GENERAL AST REQUIREMENTS COMPLIANCE MATRIX
COMPLETED AST REGISTRATION FORMS



Cloverdale, Virginia 24077 Phone: 540-312-8467

Fax: 540-400-8865

Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: September 18 & October 9, 2020

Gauge Accuracy Report / 2020 Rockydale Quarry Roanoke

| Tank # | Product | Reading | Actual | +/- | Results |
|---------------------|---------------|---------|--------|--------|---------|
| R-01 | Diesel | 61 | 61 | +/- 0 | Pass |
| G-01 | Gas | 10 | 10.50 | +.5 | Pass |
| D-02 | Off Rd Diesel | 27 | 26 | -1 | Pass |
| Pit D-01 | Off Rd Diesel | 23 | 22.75 | - 1/4 | Pass |
| Maintenance D-01 | Off Rd Diesel | 37 | 37 | +/- 0 | Pass |
| PMI 10 WT | 10 WT Oil | 57 | 55.75 | - 1.25 | Pass |
| PMI 15W40 | 15W40 Oil | 40 | 39.25 | 75 | Pass |
| PMI EP68 | EP 68 Oil | 24 | 24 | +/- 0 | Pass |
| Used Oil 01 | Used Oil | 40 | 38.50 | - 1.50 | Pass |
| Used Oil 02 | Used Oil | 22 | 21.50 | 50 | Pass |
| Used Oil 03 | Used Oil | 37 | 35 | +/- | Pass |

Comments:

Rick Trogdon 540 819-3246/ricktrogdon85@yahoo.com



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: February 19/ February 26, 2019

Gauge Accuracy Report

P.O. Box 531

Cloverdale, Virginia 24077

Phone: 540-312-8467

Fax: 540-400-8865

| Tank # | Product | Reading | Actual | +/- | Results |
|---------------------|---------------|---------|--------|-------|---------|
| R-01 | Diesel | 12" | 11.5" | 5" | Pass |
| G-01 | Gas | 43.5" | 43" | -1/2" | Pass |
| D-02 | Off Rd Diesel | 30" | 31" | +1" | Pass |
| Pit D-01 | Off Rd Diesel | 31" | 30.5 | 5" | Pass |
| Maintenance D-01 | Off Rd Diesel | 28.5" | 28" | -1/2" | Pass |
| PMI 10 WT | 10 WT | 29 | 29 | 0" | Pass |
| PMI 15w40 | 15w40 | 40" | 40" | 0" | Pass |
| PMI EP68 | EP68 | 54" | 54.25" | +.25" | Pass |
| Used Oil 01 | Used Oil | 29" | 28.25" | 75" | Pass |
| Used Oil 02 | Used Oil | 23" | 22.5" | 5" | Pass |
| Used Oil 03 | Used Oil | 50" | 49" | -1" | Pass |
| Used Oil 04 | Used Oil | 8" | 8" | 0" | Pass |

Comments:

Pulc Trogdon



P.O. Box 531

Cloverdale, Virginia 24077

Phone: 540-312-8467

Fax: 540-400-8865

Site: Rockydale Quarries

4754 Old Rocky Mount Rd

Roanoke, VA 24014

Test Dates: February 19/ February 26, 2019

AST Piping Test Results

| Piping ID | Pipe Composite | Isolation Method | Test Duration | Leak Rate ICL-FCL | Result |
|------------------|-------------------|---------------------|------------------|----------------------|-------------|
| R-01 | Steel | Valves | 30 min | .0010 GPH | Pass |
| G-01 | Steel | Valves | 30 min | .0005 GPH | Pass |
| D-02 | Steel | Valves | 30 min | .0010 GPH | Pass |
| Pit D-01 | Steel | Valves | 30 min | .0010 GPH | Pass |
| Maintenance D-01 | Steel | Valves | 30 min | .0015 GPH | Pass |
| PMI 10WT | Steel | Valves | 30 min | .0010 GPH | Pass |
| PMI 15W40 | Steel | Valves | 30 min | .0005 GPH | Pass |
| PMI EP68 | Steel | Valves | 30 min | .0005 GPH | Pass |
| Used Oil 01 | Steel | Valves | 30 min | N/A | See comment |
| Used Oil 02 | Steel | Valves | 30 min | .0005 GPH | Pass |
| Used Oil 03 | Steel | Valves | 30 min | .0005 GPH | Pass |
| Used Oil 04 | Steel | Valves | 30 min | N/A | See comment |

Testing Comments: Used Oil 01 has a non pressurized line (no test required). Used Oil 04 is for storage only.

Rick Trogdon

(Certification LT 437 S.S. 1082-190)



P.O. Box 531

Cloverdale, Virginia 24077

Phone: 540-312-8467

Fax: 540-400-8865

Site: Rockydale Quarries

4754 Old Rocky Mount Rd

Roanoke, VA 24014

Test Dates: February 19/ February 26, 2019

AST Piping Test Results

| Piping ID | Pipe Composite | Isolation Method | Test Duration | Leak Rate ICL-FCL | Result |
|------------------|-------------------|---------------------|------------------|----------------------|-------------|
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| G-01 | Steel | Valves | 30 min | .0005 GPH | Pass |
| D -02 | Steel | Valves | 30 min | .0010 GPH | Pass |
| Pit D-01 | Steel | Valves | 30 min | .0010 GPH | Pass |
| Maintenance D-01 | Steel | Valves | 30 min | .0015 GPH | Pass |
| PMI 10WT | Steel | Valves | 30 min | .0010 GPH | Pass |
| PMI 15W40 | Steel | Valves | 30 min | .0005 GPH | Pass |
| PMI EP68 | Steel | Valves | 30 min | .0005 GPH | Pass |
| Used Oil 01 | Steel | Valves | 30 min | N/A | See comment |
| Used Oil 02 | Steel | Valves | 30 min | .0005 GPH | Pass |
| Used Oil 03 | Steel | Valves | 30 min | .0005 GPH | Pass |
| Used Oil 04 | Steel | Valves | 30 min | N/A | See comment |

Testing Comments: Used Oil 01 has a non pressurized line (no test required). Used Oil 04 is for storage only.

Rick Trogdon

(Certification LT 437 S.S. 1082-190)



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: February 19/ February 26, 2019

Gauge Accuracy Report

P.O. Box 531

Cloverdale, Virginia 24077

Phone: 540-312-8467

Fax: 540-400-8865

| Tank # | Product | Reading | Actual | +/- | Results |
|---------------------|-------------------|---------|--------|-------|---------|
| R-01 | Diesel | 12" | 11.5" | 5" | Pass |
| G-01 | Gas | 43.5" | 43" | -1/2" | Pass |
| D -02 | Gas Off Rd Diesel | 30" | 31" | +1" | Pass |
| Pit D-01 | Off Rd Diesel | 31" | 30.5 | 5" | Pass |
| Maintenance D-01 | Off Rd Diesel | 28.5" | 28" | -1/2" | Pass |
| PMI 10 WT | 10 WT | 29 | 29 | . 0" | Pass |
| PMI 15w40 | 15w40 | 40" | 40" | 0" | Pass |
| PMI EP68 | EP68 | 54" | 54.25" | +.25" | Pass |
| Used Oil 01 | Used Oil | 29" | 28.25" | 75" | Pass |
| Used Oil 02 | Used Oil | 23" | 22.5" | 5" | Pass |
| Used Oil 03 | Used Oil | 50" | 49" | -1" | Pass |
| Used Oil 04 | Used Oil | 8., | 8" | 0., | Pass |

Comments:

Pick Trogdon

| 3.000-Gallon Double-Walled Single Wall Single Wall Single Wall Single Wall Single Wall Single Wall Steel AST 5.000-Gallon Single Wall | | Truc | Truck Shop | | Pit | | | A | Maintenance Shop | | | |
|--|--------------------------|---|--|---|---|--|--|--------|--|---|---|---|
| 9/2017 5/2018 11/2017 11/2017 8/2017 | | 3,000-Gallon Double-Valled Steel AST Gasoline (G-0.2) | 10,000-Gallon Double-Walled Steel AST On Road Diesel Fuel (R-01) | 10,000-Gallon Double-Walled Steel AST Off Road Diesel Fuel (Pit D-02) | 6,000-Gallon Single Wall Steel AST Off Road Diesel Fuel (Pit D-0.1) | 6,000-Gallon Single Wall Steel AST Off Road Diesel Fuel (Maintenance D-01) | 1,000-Gallon Single Wall Steel AST Heating Oil/Used Oil (Usd 02) | | 1,000-Gallon Single Wall Steel AST 68 Hydraulic Oil (PMI-68) | 1,000-Gallon Single Wall Steel AST 10Wt. Oil (PMI 10 Wt.) | 1,000-Gallon Single Wall Steel AST 15w-40 Oil (PMI 15-40) | 1,000-Gallon Single Wall Steel AST Heating Oil/Used Oil (Used Oil 04) |
| 8/2017 8/2017 8/2017 11/2017 8/2017 8/2017 8/2017 8/2017 8/2017 8/2017 8/2017 8/2017 8/2017 8/2017 8/2017 8/2017 11/20 | Annual Gauge Calibration | | 88 | | | | | | | | | |
| 8/2017 8/ | | 9/2017 | | 5/2018 | 11/2017 | 11/2017 | | | | | | |
| Now 8,2017 19/2017 11/2017 11/2017 | | 8/2017 | 8/2017 | _ | 8/2017 | 8/2017 | 8/2017 | 8/2017 | 8/2017 | 8/2017 | 8/2017 | 8/2017 |
| | | Nov. 8,2017 | 11/2017 | | 11/2017 | 11/2017 | - 11/2017 - | | | | | |
| | | | | | | | | | | | | |

Daily - Preshitts of outills + AST, Runtill

Weekly- AST Inspections, Bike Diving Ling

auntuly - Visual outbell Monitoring, Routine Inspection Form, then keeping checklist, AST Inspection Annually - Site Compliance Evoluation, Non Storm Water discharge, * 1 DMR for each outfall

State General AST Requirements Compliance Matrix

| AGGREGATE FACILITY CAPACITY - Gallons | | 0 To ≤ 660 | >660 To < 25K | ≥ 25K To < 1MM | ≥ IMM |
|--|--|---------------|------------------|--|----------|
| AST REQUIREMENT | Regulatory Reference 9VAC25- 91 | N/A | N/A | APPICABLE TO ROCKYDALE ROANOKE QUARRY | N/A |
| Excluded from Regulation | 30.A.3 | X | | | |
| Registration of Tank(s) w/DEQ | 100.A | | X | See Appendix H | X |
| Re-registration every 5 years | 100.F | | X | As Needed | X |
| Registration of Tank(s) w/Local Officials | 100.G | | X | Not Required | Х |
| Closure Assessment | 120 | | X | As Needed | X |
| Recordkeeping | 150 | | | See Section 2.7 | X |
| Inventory Control Testing | 130.B.1 | | | See Section 4.1 | X |
| Secondary Containment | 130.B.2 | | | See Table 1 See Section 3.4 | X |
| Safe Fill & Shutdown | 130.B.3 | | | See Section 3.9 | X |
| Pressure Testing of Pipes | 130.B.4 | | | See Section 3.16 | X |
| Visual Daily & Weekly Inspection of Tanks | 130.B.5 | | | See Section 2.7 | х |
| Training of Individuals | 130.B.6 | | | See Section 4.5 | X |
| Leak Detection | 130.B.7 | | | See Section 2.3 See Section 4.4 | X |
| Formal Inspection (new tanks) | 130.C.1 | | | | X |
| Formal Re-inspection | 130.C.2 | | | | X |
| Safe Fill & Shutdown & High Level Alarm | 130.C.3 | | | | Х |
| Cathodic Protection of Piping | 130.C.4 | | | | X |
| Oil Discharge Contingency Plan (22 items) | 170 | | | See Prepared Document | X |
| Groundwater Characterization & Monitoring | 180 & 190 | | | | Х |

Facility and Aboveground Storage Tank Regulation (9VAC25-91)

Part I Program Administration

9VAC25-91-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings, unless the context clearly indicates otherwise:

"Aboveground storage tank" or "AST" means any one or combination of tanks, including pipes, used to contain an accumulation of oil at atmospheric pressure, and the volume of which, including the volume of the pipes, is more than 90% above the surface of the ground. This term does not include line pipe and breakout tanks of an interstate pipeline regulated under the federal Accountable Pipeline Safety and Partnership Act of 1996 (49 USC § 60101 et seq.).

"Board" means the State Water Control Board.

"Containment and cleanup" means abatement, containment, removal and disposal of oil and, to the extent possible, the restoration of the environment to its existing state prior to an oil discharge.

"Corrosion professional" means a person who by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

"Department" means the Department of Environmental Quality (DEQ).

"Discharge" means any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

"Elevated tank" means an AST that is not in contact with the ground and that is raised above the surface of the ground.

"Facility" means any development or installation within the Commonwealth that deals in, stores or handles oil and includes a pipeline.

"Flow-through process tank" means (as defined in 40 CFR Part 280) a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or byproducts from the production process.

"Local building official" means the person authorized by the Commonwealth to enforce the provisions of the Uniform Statewide Building Code (USBC).

"Local director or coordinator of emergency services" means any person appointed pursuant to § 44-146.19 of the Code of Virginia.

"Major repair" means alterations that refer to operations that require cutting, additions, removal or replacement of the annular plate ring, the shell-to-bottom weld or a sizable portion of the AST shell.

"Oil" means oil of any kind and in any form, including, but not limited to, petroleum and petroleum byproducts, fuel oil, lubricating oils, sludge, oil refuse, oil mixed with other wastes, crude oils, and all other liquid hydrocarbons regardless of specific gravity.

"Operator" means any person who owns, operates, charters by demise, rents, or otherwise exercises control over or responsibility for a facility or a vehicle or a vessel.

"Person" means an individual; trust; firm; joint stock company; corporation, including a government corporation; partnership; association; any state or agency thereof; municipality; county; town; commission; political subdivision of a state; any interstate body; consortium; joint venture; commercial entity; the government of the United States or any unit or agency thereof.

"Pipes" or "piping" means a pressure-tight cylinder used to convey a fluid or to transmit a fluid pressure and is ordinarily designated "pipe" in applicable material specifications. Materials designated "tube" or "tubing" in the specifications are treated as pipe when intended for pressure service. This term includes piping and associated piping which is utilized in the operation of an AST, or emanating from or feeding ASTs or transfers oil from or to an AST (e.g., dispensing systems, including airport hydrant fueling systems, supply systems, gauging systems, auxiliary systems, etc.). This term does not include line pipe and breakout tanks of an interstate pipeline regulated under the federal Accountable Pipeline Safety and Partnership Act of 1996 (49 USC § 60101 et seq.).

"Pipeline" means all new and existing pipe, rights of way, and any equipment, facility, or building used in the transportation of oil, including, but not limited to, line pipe, valves, and other appurtenances connected to line pipe; pumping units; fabricated assemblies associated with pumping units; metering and delivery stations and fabricated assemblies therein; and breakout tanks.

"Release prevention barrier (RPB)" means a nonearthen barrier that is impermeable; is composed of material compatible with oil stored in the AST; meets proper engineering strength and elasticity standards; and functions to prevent the discharge of stored oil to state lands, waters and storm drains. It must contain and channel any leaked oil in a manner that provides for early release detection through the required daily and weekly inspections.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction.

"Storage capacity" means the total capacity of an AST or a container, whether filled in whole or in part with oil, a mixture of oil, or mixtures of oil with nonhazardous substances, or empty. An AST that has been permanently closed in accordance with this chapter has no storage capacity.

"Tank" means a device designed to contain an accumulation of oil and constructed of nonearthen materials, such as concrete, steel, or plastic, that provides structural support. This term does not include flow-through process tanks as defined in 40 CFR Part 280.

"Tank vessel" means any vessel used in the transportation of oil as bulk cargo.

"Upgrade" means an alteration of the performance, design, equipment or appurtenances of an AST or facility to meet a higher, new, or current standard.

"Vaulted tank" means any tank situated upon or above the surface of the floor in an underground area (such as an underground room, basement, cellar, mine-working, drift, shaft, tunnel or vault) providing enough space for physical inspection of the exterior of the tank.

"Vehicle" means any motor vehicle, rolling stock, or other artificial contrivance for transport whether self-propelled or otherwise, except vessels.

"Vessel" includes every description of watercraft or other contrivance used as a means of transporting on water, whether self-propelled or otherwise, and shall include barges and tugs.

9VAC25-91-20. Applicability.

A. The operator shall comply with all applicable requirements pursuant to this chapter. The operator as defined in this chapter can be more than one person and each operator shares joint responsibility for compliance.

- B. The requirements of this chapter apply as follows:
 - 1. The provisions of Part II (9VAC25-91-100 et seq., Registration, Notification and Closure Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity greater than 660 gallons of oil, unless otherwise specified within this chapter; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity greater than 1,320 gallons of oil, unless otherwise specified within this chapter. Storage of oil that is excluded from regulation in 9VAC25-91-30 A is not included when calculating the aggregate aboveground storage capacity.
 - 2. The provisions of Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter. Storage of oil that is excluded from regulation in 9VAC25-91-30 A is not included when calculating the aggregate aboveground storage capacity.
 - 3. The provisions of Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter. Storage of oil that is excluded from regulation in 9VAC25-91-30 A is not included when calculating the aggregate aboveground storage capacity.
 - 4. The provisions of Part V (9VAC25-91-180 et seq., Groundwater Characterization Study (GCS) and GCS Well Monitoring Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity of one million gallons or greater of oil, unless otherwise specified within this regulation; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity of one million gallons or greater of oil, unless otherwise specified within this chapter. Storage of oil that is excluded from regulation in 9VAC25-91-30 A is not included when calculating the aggregate aboveground storage capacity.

9VAC25-91-30. Exclusions.

A. The requirements of this chapter do not apply to:

- 1. Vessels:
- 2. Licensed motor vehicles, unless used solely for the storage of oil (e.g., airport refueling trucks and mobile refueling vehicles);
- 3. An AST with a storage capacity of 660 gallons or less of oil:
- 4. An AST containing petroleum, including crude oil or any fraction thereof, which is liquid at standard temperature and pressure (60°F at 14.7 pounds per square inch absolute) subject to and specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of § 101(14) of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC § 9601 et seq.);
- 5. A wastewater treatment tank system that is part of a wastewater treatment facility regulated under § 402 or § 307(b) of the federal Clean Water Act (33 USC § 1251 et seq.);

- 6. An AST that is regulated by the Department of Mines, Minerals and Energy under Chapter 22.1 (§ 45.1-361.1 et seq.) of Title 45.1 of the Code of Virginia;
- 7. An AST used for the storage of products that are regulated pursuant to the federal Food, Drug, and Cosmetic Act (21 USC § 301 et seq.);
- 8. An AST that is used to store hazardous wastes listed or identified under Subtitle C of the Resource Conservation and Recovery Act (RCRA) (Solid Waste Disposal Act) (42 USC § 6901 et seq.), or a mixture of such hazardous wastes and other regulated substances;
- 9. An AST that is used to store propane gas, butane gas or other liquid petroleum gases;
- 10. An AST used to store nonpetroleum hydrocarbon-based animal and vegetable oils;
- 11. A liquid trap or associated gathering lines directly related to oil or gas production, or gathering operations;
- 12. A surface impoundment, pit, pond, or lagoon;
- 13. A stormwater or wastewater collection system;
- 14. Equipment or machinery that contains oil for operational purposes, including but not limited to lubricating systems, hydraulic systems, and heat transfer systems;
- 15. An AST that forms an integral part (cannot be readily detached or removed) of the equipment or machinery and the contents of the AST are solely used by the attached equipment or machinery (e.g., fuel tank affixed into the frame of an emergency generator);
- 16. An AST used to contain oil for less than 120 days when: (i) used in connection with activities related to the containment and cleanup of oil; (ii) used by a federal, state or local entity in responding to an emergency, including response related drills; or (iii) used temporarily on-site to replace permanent capacity storage;
- 17. Oil-filled electrical equipment, including, but not limited to, transformers, circuit breakers or capacitors;
- 18. A flow-through process tank;
- 19. Oily water separators;
- An AST containing dredge spoils;
- 21. An AST located on a farm or residence used for storing motor fuel for noncommercial purposes with a storage capacity of 1,100 gallons or less; or
- 22. Pipes or piping beyond the first valve from the AST that connects an AST with production process tanks or production process equipment.
- B. In addition to the exclusions listed in subsection A of this section, the following are excluded from the requirements contained in Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter:
 - 1. An AST with a capacity of 5,000 gallons or less used for storing heating oil for consumptive use on the premises where stored;
 - 2. An AST storing asphalt and asphalt compounds which are not liquid at standard conditions of temperature and pressure (60°F at 14.7 pounds per square inch absolute); and
 - 3. Line pipe and breakout tanks of an interstate pipeline regulated under the federal Accountable Pipeline Safety and Partnership Act of 1996 (49 USC § 60101 et seq.).
- C. Asphalt and asphalt compounds that are not liquid at standard conditions of temperature and pressure (60°F at 14.7 pounds per square inch absolute) are excluded from any requirement to install groundwater monitoring wells or groundwater protection devices or to

conduct groundwater characterization studies under Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) and Part V (9VAC25-91-180 et seq., Groundwater Characterization Study (GCS) and GCS Well Monitoring Requirements) of this chapter.

9VAC25-91-40. Compliance dates.

- A. Every operator shall comply with this chapter on its effective date unless a later date is otherwise specified.
- B. Operators of facilities existing on June 24, 1998, and exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., facilities not engaged in the resale of oil) having an aboveground storage capacity of 25,000 gallons or greater of oil must have complied with Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter on or before October 22, 1998, unless otherwise specified in this chapter. If compliance with Part III of this chapter necessitates extensive upgrades to the existing facility design, these exempted operators shall have submitted a proposed extended compliance schedule and supporting explanation to the board no later than September 22, 1998, or such date approved by the board.
- C. Operators of ASTs and facilities existing prior to June 24, 1998, and previously registered in accordance with the requirements of § 62.1-44.34:19.1 of the Code of Virginia shall not have to resubmit the registration form until five years from the date of the initial registration unless title to that AST or facility is transferred (i.e., change of ownership) or the AST is converted or brought back into use after permanent closure, whichever occurs first.
- D. Operators of facilities subject to Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter that were brought into use on or after June 24, 1998, shall submit a complete application meeting all applicable requirements of this chapter no later than 90 days prior to commencement of operations.
 - The operator must receive approval of the ODCP by the board prior to commencement of facility operations.
 - 2. The operators of facilities that have previously met the provisions of § 62.1-44.34:15 of the Code of Virginia for ODCP submittal shall not be required to resubmit the ODCP until 90 days prior to the date that plan's approval expires. Ninety days prior to the expiration of approval of the ODCP, the facility operator shall submit an updated plan or certification of renewal of an existing plan according to 9VAC25-91-170 F.
- E. An operator having obtained approval of the ODCP shall operate, maintain, monitor, and keep records pertaining to 9VAC25-91-170 A 18 of Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter and under the provisions of Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter.

9VAC25-91-50. Statement of purpose.

The purpose of this chapter is to: (i) establish requirements for registration of facilities and individual ASTs located within the Commonwealth; (ii) provide the board with the information necessary to identify and inventory facilities with an aggregate storage capacity of greater than 1,320 gallons of oil or an individual AST with a storage capacity of greater than 660 gallons of oil; (iii) develop standards and procedures for operators of facilities with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil relating to the prevention of pollution from new and existing aboveground storage tanks; (iv) provide requirements for the development of facility oil discharge contingency plans for facilities with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil that will ensure that the applicant can take such steps as are necessary to protect environmentally sensitive areas, to respond to the threat of an oil discharge, and to contain, clean up and mitigate an oil discharge within the shortest feasible time, where plans must address concerns for the effect of oil discharges on the environment as well as considerations of public health and safety; and (v)

provide requirements for facilities and individual ASTs with an aggregate aboveground storage capacity of one million gallons or greater of oil to conduct a groundwater characterization study (GCS) within the geographic boundaries of a facility; to submit the GCS as part of the oil discharge contingency plan; to conduct a monthly gauging and inspection of GCS monitoring wells, monitoring of well headspace and sampling and laboratory analysis of GCS monitoring wells; and to gather all observations and data maintained at the facility and compile and submit them as an annual report to the department.

9VAC25-91-60. Administrative fees.

A. Fees are assessed for review of oil discharge contingency plans (ODCP). An application for review of a contingency plan will not be accepted unless the required fee has been received by the department.

- 1. Fees shall be paid in United States currency by check, draft, or postal money order made payable to the Treasurer of Virginia. When the department is able to accept electronic payments, payments may be submitted electronically.
- 2. The fee, together with the application and oil discharge contingency plan, shall be sent to the department at the following mailing address:

Department of Environmental Quality

Office of Financial Management

P.O. Box 1104

Richmond, VA 23218

- 3. Notifications and correspondence for which a fee is not applicable should be mailed to the department as specified in 9VAC25-91-70.
- B. ODCP application.
 - ODCP application fees are as follows:
 - a. For a facility with an aggregate aboveground maximum storage or handling capacity from 25,000 gallons up to and including 100,000 gallons of oil the fee is \$718;
 - b. For a facility with an aggregate aboveground maximum storage or handling capacity greater than 100,000 gallons up to one million gallons of oil the fee is \$2,155;
 - c. For a facility with an aggregate aboveground maximum storage or handling capacity of one million gallons or greater of oil the fee is \$3,353; or
 - d. For a pipeline, the ODCP application fee shall be based on the average daily throughput of oil. Once that volume is determined, the ODCP application fee will be calculated per subdivisions a, b and c of this subdivision.
 - 2. The fee for approval of a contingency plan encompassing more than one facility as described in 9VAC25-91-170 D shall be based on the aggregate aboveground storage capacity of the facilities.
 - 3. Fees shall only be paid upon initial submittal of an oil discharge contingency plan by an operator. Renewals, additions, deletions or changes to the plan are not subject to the administrative fee.
 - 4. Application fees are refundable upon receipt of a written request to withdraw the ODCP application provided the request is received no later than 30 days after submittal and prior to the department's review of the contingency plan.
 - 5. Overpayments of application fees are refundable upon written request.

9VAC25-91-70. Correspondence to the Department of Environmental Quality (DEQ).

A. Correspondence that contains fees must be submitted to the department as specified in 9VAC25-91-60 A.

B. All other written correspondence and notifications to the department related to the requirements of this chapter shall be addressed to the DEQ regional office servicing the facility that is the subject of the correspondence. A list of regional offices and their addresses are available from the central office at the following address:

Mailing Address:

Department of Environmental Quality
Office of Spill Response and Remediation
P.O. Box 1105
Richmond, VA 23218

Street Address:

Department of Environmental Quality
Office of Spill Response and Remediation
629 E. Main Street
Richmond, VA 23219

9VAC25-91-80. Delegation of Authority.

The executive director, or his designee, may perform any act of the board under this chapter, except as limited by § 62.1-44.14 of the Code of Virginia.

9VAC25-91-90. (Repealed.)

Part II

Registration, Notification and Closure Requirements

9VAC25-91-100. Registration requirements.

A. Section 62.1-44.34:19.1 of the Code of Virginia requires an operator of a facility located within the Commonwealth with an aggregate aboveground storage capacity of more than 1,320 gallons of oil or an operator of an individual AST located within the Commonwealth with a storage capacity of more than 660 gallons of oil to register such facility or AST with the board and with the local director or coordinator of emergency services unless otherwise specified within this chapter.

- B. Although the term "operator" includes a variety of persons who may share joint responsibility for compliance with this chapter, in fixing responsibility for compliance with the registration requirements, the board shall look first to the owner or a duly authorized representative of the facility or AST.
 - C. A duly authorized representative may submit the registration on the owner's behalf.
 - 1. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by the owner and indicates that the representative has signatory authority for the registration;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity (e.g., the plant manager, the operator of a facility or an AST, the superintendent, or a position of equivalent responsibility), or specifies an individual or a position having overall responsibility for environmental matters for the facility or company. A duly authorized representative

thus may be either a named individual or any individual occupying a named position; and

- c. The written authorization is submitted to the department along with the registration form.
- 2. Changes to authorization. If an authorization previously submitted is no longer accurate because a different individual or position has assumed responsibility for the overall operation of the facility or for environmental matters, a new authorization satisfying the requirements shall be submitted to the department prior to or together with any reports or information signed by that duly authorized representative.
- 3. Certification. Any person signing a registration document shall 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 ensure 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."

- D. The owner or a duly authorized representative of a new facility or AST, a converted facility or AST, a facility or AST brought back into use after permanent closure, or a facility or AST whose title is transferred (change of ownership) shall register such facility or AST with the board and local director or coordinator of emergency services within 30 days after being brought into use or when title is transferred.
- E. Registration shall include the following information and other information that may be required if approved by the board:
 - 1. Facility and AST owner and operator information (e.g., name, address, and phone numbers);
 - 2. Facility information (e.g., name, type, address, contact person and phone numbers, and aggregate storage capacity);
 - 3. Tank and piping information (e.g., storage capacity, product stored, type of design and construction standards);
 - 4. Other information that may be reasonably requested by the board; and
 - Owner certification of information.
- F. The owner or a duly authorized representative of the facility or AST shall renew the registration required by this section every five years or whenever title to the facility or AST is transferred (change of ownership), whichever occurs first.
- G. A facility or AST installed after June 24, 1998, including an AST or facility operated by the federal government, shall not be registered without either (i) a review performed by the department of the permits, inspections, and certification of use required in accordance with the provisions of the Uniform Statewide Building Code and obtained by the owner or a duly authorized representative from the local code officials or their designee or (ii) an inspection by the department. In the case of a regulated AST operated by the Commonwealth, the Department of General Services shall function as the local code official in accordance with § 36-98.1 of the Code of Virginia.

9VAC25-91-110. Notifications.

A. An owner or a duly authorized representative of the facility or AST shall notify the board within 30 days after any AST:

- 1. Upgrade;
- 2. Major repair;
- 3. Replacement (i.e., relocating or repositioning of an existing AST); or
- 4. Change in service (i.e., change in operation, conditions of the stored product, specific gravity, corrosivity, temperature or pressure that has occurred from the original that may affect the tank's suitability for service).
- B. Notifications do not require a fee.

9VAC25-91-120. Aboveground storage tank closure.

A. After June 24, 1998, a facility or AST, including a facility or AST operated by the federal government, shall not be permanently closed without being registered and either (i) having a review performed by the department of the permits and inspections required in accordance with the provisions of the Uniform Statewide Building Code and obtained by the owner or a duly authorized representative from the local code official or his designee or (ii) being inspected by the department.

- 1. For inspections by the department (e.g., where a permit is not issued by the local code official or his designee), at least 14 days notice to the department is required prior to the commencement of closure operations. Notice shall be made by the owner or a duly authorized representative.
- 2. In the case of a regulated AST operated by the Commonwealth, the Department of General Services shall function as the local code official in accordance with § 36-98.1 of the Code of Virginia.
- 3. If the closure is in response to containment and cleanup actions that necessitate AST removal, the owner or a duly authorized representative of the facility or AST shall immediately notify the local code official and the department.
- B. Closure operations shall be reported to the department by the owner or a duly authorized representative within 30 days after the permanent closure operation is completed.
 - C. Closure operations shall include the following:
 - 1. Removal of all liquids, sludges, and vapors from the AST and associated piping. All wastes removed shall be disposed of in accordance with all applicable state and federal requirements.
 - 2. For tanks being closed in place, the tank shall be rendered vapor free. Provisions must be made for adequate ventilation to ensure that the tank remains vapor free. Vent lines shall remain open and maintained in accordance with the applicable codes. All access openings shall be secured (normally with spacers to assist ventilation). The AST shall be secured against tampering and flooding. The name of the product last stored, the date of permanent closure and PERMANENTLY CLOSED shall be stenciled in a readily visible location on the AST. Piping shall be disconnected. All pipes being closed in place shall be vapor free and capped or blind flanged.
 - 3. An assessment of the AST site shall be conducted prior to completion of permanent closure operations.

- a. In conducting the assessment, the owner or a duly authorized representative shall sample and test for the presence of petroleum hydrocarbons at the AST site in any area where contamination is likely to have occurred. These locations shall be subject to the review of the board. Sampling and testing shall be conducted in accordance with established EPA-approved analytical methods or other methods approved by the board.
- (1) The owner or a duly authorized representative shall submit copies of the laboratory results, a description of the area sampled, a photograph of the site indicating sampled areas, and a site map indicating the location of the closed AST and associated piping as attachments to the closure form.
- (2) If contaminated soils, contaminated groundwater, free product as a liquid or vapor, or other evidence of a release is discovered, the owner or a duly authorized representative shall immediately notify the board and conduct the cleanup in accordance with board requirements.
- b. The board may consider an alternative to the soil sampling requirements of this subsection if the owner or a duly authorized representative of the AST demonstrates to the board's satisfaction that:
- (1) There is no evidence of present or past contamination by providing records of monthly leak detection monitoring for the previous 12 months; and
- (2) The facility or AST has operated an approved or approvable leak detection system.
- 4. A closure inspection conducted by either the department or the local building official, as discussed in subsection A of this section.
- D. When deemed necessary by the board, the owner or a duly authorized representative of a facility or an AST that was permanently closed prior to June 24, 1998, shall assess the site and close the AST in accordance with the requirements of this section.
- E. The owner or a duly authorized representative shall maintain all records relating to compliance with this section for a period of not less than five years from the date the board receives notice of the completed closure. These records shall be made available to the board upon request.

Part III Pollution Prevention Requirements

9VAC25-91-130. Pollution prevention standards and procedures.

- A. Pollution prevention standards and procedures for facilities are listed in this section. Aboveground storage tanks with an aggregate capacity of one million gallons or more shall comply with the requirements of subsections B and C of this section.
- B. Requirements for aboveground storage tanks at facilities for 25,000 gallons or more. Section 62.1-44.34:15.1 of the Code of Virginia provides the following requirements for existing aboveground storage tanks at a facility with an aggregate aboveground storage capacity equal to or greater than 25,000 gallons of oil or for an existing individual aboveground storage tank with a storage capacity equal to or greater than 25,000 gallons of oil, unless otherwise exempted.

1. Inventory control and testing for significant variations.

- a. The following aboveground storage tanks shall not be subject to inventory control and testing for significant variations:
- (1) Aboveground storage tanks totally off ground with all associated piping off ground;

- (2) Aboveground storage tanks with a capacity of 5,000 gallons or less located within a building or structure designed to fully contain a discharge of oil; and
- (3) Aboveground storage tanks containing No. 5 or No. 6 oil for consumption on the premises where stored.
- b. Each operator shall institute inventory control procedures capable of detecting a significant variation of inventory. A significant variation shall be considered a variation in excess of 1.0% of the storage capacity of each individual AST. Reconciliations of inventory measurements shall be conducted monthly. If a significant variation persists for two consecutive reconciliation periods, the operator shall conduct an investigation to determine the cause of the variation and reconcile physical measurements to 60°F at 14.7 pounds per square inch absolute. This investigation shall be completed within five working days of the end of the second reconciliation period. If this investigation does not reveal the cause of the inventory variation, the operator shall notify the board and the local director or coordinator of emergency services and shall conduct additional testing to determine the cause of the inventory variation. The testing method, schedule, and results of this additional testing shall be submitted to the board for review. For a refinery, a significant variation of inventory shall be considered a loss in excess of 1.0% by weight of the difference between the refinery's input and output of oil.
- c. Inventory records shall be kept of incoming and outgoing volumes of oil from each tank. All tanks shall be gauged no less frequently than once every 14 days and on each day of normal operation. For a refinery, the operator shall calculate the input and output of oil at the refinery on a daily basis. The operator shall reconcile daily inventory records with the inventory measurements conducted monthly.

2. Secondary containment.

- a. The operator shall have and maintain secondary containment or another method approved by the board for each AST. The containment structure must be capable of containing oil and shall be constructed in accordance with 40 CFR Part 112 so that any discharge from the AST will not escape the containment before cleanup occurs. The operator shall have each secondary containment or approved method evaluated and certified to be in compliance with the applicable requirements of 40 CFR Part 112, the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR 1910.106. The operator of a facility existing on June 24, 1998, shall have had this evaluation or certification performed by a professional engineer or person approved by the board on or before June 30, 1998, and every 10 years thereafter, unless otherwise exempted.
- b. If the secondary containment cannot be certified to be in compliance with the applicable requirements of 40 CFR Part 112, the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR 1910.106, the operator must upgrade, repair, or replace the secondary containment to meet the applicable requirements listed in subdivision 2 a of this subsection unless the board accepts the certification with qualifications.
- c. The operator of a facility shall have the evaluation and certification performed every 10 years by a professional engineer (PE) licensed in the Commonwealth of Virginia or other state having reciprocity with Virginia or by a person approved by the board unless otherwise exempted.
- d. The professional engineer shall not certify the secondary containment until all of the applicable requirements of 40 CFR Part 112, the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR 1910.106 have

been met. In the event the professional engineer certifies the secondary containment with qualifications, such qualifications will be subject to review and approval by the board. If the certification contains qualifications that may impact the ability of the secondary containment to contain a discharge of oil as required by subdivision 2 a of this subsection, the deficiencies must be corrected and the secondary containment must be reevaluated and recertified by a professional engineer.

- e. At a minimum, the certification statement for the secondary containment must contain the following statement: "Based on my evaluation, I hereby certify that each secondary containment structure for (insert the facility name and tank identification information) is in compliance with the applicable requirements of 40 CFR Part 112, the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR 1910.106."
- f. The certification must be signed and sealed by a professional engineer licensed in the Commonwealth of Virginia or other state having reciprocity or by a person approved by the board.
- g. Operators of facilities existing on June 24, 1998, and exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have had this evaluation completed on or before June 24, 2003, and every 10 years thereafter.
- h. Operators of a newly installed AST shall have this evaluation completed prior to being placed into service and every 10 years thereafter.
- i. Operators of an existing AST with a current engineering certification statement on November 1, 2015, may maintain their existing engineering certification statement until their next required certification, or 10 years, whichever is sooner. At such time, the certification statements must contain the statement required in 9VAC25-91-130 B 2 e.

3. Safe fill and shutdown procedures.

a. Each operator shall institute safe fill, shutdown, and transfer procedures, or equivalent measures approved by the board, that will ensure that spills resulting from tank overfills or other product transfer operations do not occur. Written safe fill, shutdown, and transfer procedures shall be maintained by the operator for use by facility personnel.

All receipts of oil shall be authorized by the operator or facility personnel trained by the operator who shall ensure the volume available in the tank is greater than the volume of oil to be transferred to the tank before the transfer operation commences. The operator shall ensure the transfer operation is monitored continually, either by manual or automatic means, until complete. The operator shall ensure that all tank fill valves not in use are secured and that only the tank designated is receiving oil.

- b. All oil transfer areas where filling connections are made with vehicles shall be equipped with a spill containment system capable of containing and collecting those spills and overfills. The containment system shall be designed to hold at least the capacity as required by 40 CFR Part 112.
- c. If installed, an automatic shutdown system utilized during transfer of oil shall include the capability to direct the flow of oil to another tank capable of receiving the transferred oil or the capability to shut down the pumping or transfer system. This automatic shutdown system shall be tested prior to each receipt of oil and records of testing shall be maintained at the facility.

- d. All ASTs shall be equipped with a gauge that is readily visible and indicates the level of oil or quantity of oil in the tank. In addition, the storage capacity, product stored and tank identification number shall be clearly marked on the tank at the location of the gauge. These gauges shall be calibrated annually.
- 4. Pressure testing of piping. All piping shall be pressure tested as specified in this subsection or using an equivalent method or measure approved by the board at intervals not to exceed five years. The operator of a facility or AST existing on June 24, 1998, shall have completed the initial test on or before June 30, 1998, except operators of existing facilities or ASTs for which compliance was exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil). These excepted operators shall have completed the initial test on or before June 24, 2003. All newly installed or repaired piping shall be tested before being placed into service.
 - a. A pressure test may be a hydrostatic test at 150% maximum allowable working pressure (MAWP) or an inert gas test at 110% MAWP.
 - b. A test conducted and certified by an American Petroleum Institute (API) authorized piping inspector to be in conformity with the API 570 Piping Inspection Code is deemed an equivalent method of testing approved by the board.
 - c. The board may consider on a case-by-case basis requests for approval of other equivalent methods or measures which conform to industry recommended practices, standards and codes. The operator shall submit a request for approval of a proposed equivalent method or measure to the board as specified in 9VAC25-91-160.
- 5. Visual daily inspection and weekly inspections.
 - a. The operator or a duly authorized representative shall conduct a daily visual inspection for each day in which normal operation occurs, but no less frequently than once every 14 days in the areas of the facility where this chapter applies. The facility person conducting the inspection shall document completion of this inspection by making and signing an appropriate notation in the facility records. This visual inspection shall include the following:
 - (1) A complete walk-through of the facility property in the areas where this chapter applies to ensure that no hazardous conditions exist;
 - (2) An inspection of ground surface for signs of leakage, spillage, or stained or discolored soils;
 - (3) A check of the berm or dike area for excessive accumulation of water and to ensure the dike or berm manual drain valves are secured;
 - (4) A visual inspection of the exterior tank shell to look for signs of leakage or damage; and
 - (5) An evaluation of the condition of the aboveground storage tank and appurtenances.
 - b. The operator or a duly authorized representative shall conduct a weekly inspection each week in which normal operation occurs, but no less frequently than once every 14 days, of the facility in the areas where this chapter applies, using a checklist that contains at least the items found in subdivision 5 c of this subsection. The checklist is not inclusive of all safety or maintenance procedures but is intended to provide guidance to the requirements within this chapter. The weekly checklist shall be maintained at the facility and provided to the board upon request. This checklist shall be signed and dated by the facility person or persons conducting the inspection and shall become part of the facility record.

- (1) The operator of a new AST/facility shall develop the checklist within 90 days after the date of installation.
- (2) The operator of each facility existing on June 24, 1998, and exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have developed the checklist by September 28, 1998.
- (3) Operators of facilities existing on June 24, 1998, and not exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have developed a checklist by September 28, 1993, shall be deemed to be in compliance with this checklist requirement as of June 24, 1998.
- c. Sample—weekly inspection checklist for aboveground storage tank systems: (1) Containment dike or berm in satisfactory condition. (2) Containment area free of excess standing water or oil. (3) Gate valves used for emptying containment areas secured. (4) Containment area/base of tank free of high grass, weeds, and debris. (5) Tank shell surface, including any peeling areas, welds, rivets/bolts, seams, and foundation, visually inspected for areas of rust and other deterioration. (6) Ground surface around tanks and containment structures and transfer areas checked for signs of leakage. (7) Leak detection equipment in satisfactory condition. (8) Separator or drainage tank in satisfactory condition. (9) Tank water bottom drawoffs not in use are secured. (10) Tank fill valves not in use are secured. (11) Valves inspected for signs of leakage or deterioration. (12) Inlet and outlet piping and flanges inspected for leakage. (13) All tank gauges have been inspected and are operational.

Signature of Inspector

Date

Time

- d. The operator shall promptly remedy unsatisfactory facility and equipment conditions observed in the daily and weekly inspections. The operator shall make repairs, alterations, and retrofits in accordance with American Petroleum Institute (API) Standard 653, Fourth Edition (April 2009), with Addendum 1 (August 2010) and Addendum 2 (January 2012), Steel Tank Institute (STI) standard STI-SP001, Fifth Edition (September 2011), industry standards, or methods approved by the board.
- 6. Training of individuals. To ensure proper training of individuals conducting inspections required by subdivision 5 of this subsection, the operator of a facility shall train personnel based on the following requirements:
 - a. Each facility operator shall establish a training program for those facility personnel conducting the daily visual and weekly inspections of the facility. Facility records shall contain the basic information and procedures required by subdivision 6 c of this subsection. The required training may be conducted by the operator or by a third party. The training program established shall be maintained to reflect current conditions of the facility.
 - (1) The operator of a new facility shall establish the training program within six months after being brought into use.

- (2) The operator of each facility exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have established the training program by December 24, 1998.
- (3) Operators of facilities not exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who developed a training program by December 31, 1993, shall be deemed to be in compliance with this training program requirement as of June 24, 1998, so long as that program reflects current conditions of the facility.
- b. The required training shall be conducted for facility personnel as applicable. Personnel not receiving this initial training and who will be conducting these inspections shall receive the training prior to conducting any inspection.
- (1) The operator of a new facility shall conduct the personnel training within 12 months after being brought into use and prior to personnel conducting any inspection.
- (2) The operator of each facility exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have conducted the personnel training by June 24, 1999.
- (3) Operators of facilities not exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have conducted the personnel training by June 30, 1994, shall be deemed to be in compliance with this personnel training requirement as of June 24, 1998, so long as the training provided reflects current conditions of the facility and all inspections are current.
- c. Training for personnel performing daily and weekly inspections shall address at a minimum:
- (1) Basic information regarding occupational safety, hazard recognition, personnel protection, and facility operations;
- (2) The procedures to be followed in conducting the daily visual and weekly facility inspections;
- (3) The procedures to be followed upon recognition of a hazard or the potential for a hazard; and
- (4) The procedure for evaluating the condition of the aboveground storage tank and appurtenances.
- d. The operator of a facility shall train facility personnel upon any changes to the contents of the initial training program or every three years and shall document this training in the facility records.
- 7. Leak detection. The operator shall operate, maintain, monitor and keep records of the system established for early detection of a discharge to groundwater (i.e., a method of leak detection) as required by 9VAC25-91-170 A 18 and contained in the facility's approved ODCP. These activities shall be inspected and approved by the board.
- C. Requirements for aboveground storage tanks at facilities for one million gallons or more. In addition to the requirements of subsection B of this section, the following requirements apply to existing aboveground storage tanks at facilities with an aggregate aboveground storage capacity of one million gallons or more of oil or for an existing individual aboveground storage tank with a storage capacity of one million or more gallons of oil, unless otherwise exempted.

1. Formal inspections.

- a. Each AST shall undergo formal external and internal tank inspections. The initial formal internal and external inspections for an AST existing on June 24, 1998, shall have been completed on or before June 30, 1998, unless otherwise specified within this chapter.
- (1) All newly installed ASTs shall have initial formal inspections within five years after the date of installation.
- (2) Operators of facilities existing on June 24, 1998, and exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have completed the initial formal inspections on or before June 24, 2003.
- (3) An AST with a storage capacity of less than 12,000 gallons shall not be subject to the formal internal inspection unless the integrity of the AST is in question and an inspection is deemed necessary by the board.
- b. Inspections shall be conducted in accordance with the provisions of American Petroleum Institute (API) Standard 653, Fourth Edition (April 2009), with Addendum 1 (August 2010) and Addendum 2 (January 2012); Steel Tank Institute (STI) standard STI-SP001, Fifth Edition (September 2011); or procedure approved by the board. If construction practices allow external access to the tank bottom, a formal external inspection utilizing accepted methods of nondestructive testing or procedure approved by the board may be allowed in lieu of the internal inspection.
- c. An API Standard 653 inspection conducted between January 1, 1991, and June 24, 1998, may be accepted by the board if the operator provides supporting documentation to the board for review and approval.
- d. All formal inspections and testing required by subdivisions 1 and 2 of this subsection shall be conducted by a person certified to conduct the inspection or test. This certification shall be accomplished in accordance with the provisions of API Standard 653, STI-SP001, or a procedure approved by the board. Proof of this certification shall be maintained in the facility records. The results of all tests and inspections required by subdivisions 1 and 2 of this subsection shall be maintained at the facility or at a location approved by the board for the life of the tank, but for no less than five years.

2. Formal reinspections.

- a. Each AST shall undergo an external reinspection every five years. Inspections shall be conducted in accordance with the provisions of API Standard 653, STI-SP001, or other procedure accepted by the board after the initial formal external inspection has been conducted.
- b. Each AST with a storage capacity of 12,000 gallons of oil or greater shall undergo an internal reinspection in accordance with the provisions of API Standard 653 or STI-SP001 every 10 years after the initial formal internal inspection has been conducted.
- (1) The board may require the internal reinspection sooner than 10 years if there is an indication that the corrosion rate established by the initial internal inspection or a subsequent reinspection has increased.
- (2) The internal reinspection period may be extended beyond 10 years if the operator can demonstrate to the board that an extension of the reinspection period is

warranted. The operator shall provide supporting documentation to the board for review and approval at least six months prior to the date the reinspection is due.

- c. An AST with a storage capacity of less than 12,000 gallons shall not be subject to the formal internal reinspection unless the integrity of the AST is in question and an inspection is deemed necessary by the board.
- 3. Safe fill and shutdown procedures high level alarm. If unattended during transfer operations, the AST shall be equipped with a high level alarm or other appropriate mechanism approved by the board that will immediately alert the operator to prevent an overfill event. Activation of the high level alarm or other appropriate mechanism shall initiate an immediate and controlled emergency shutdown of the transfer, either by manual or automatic means. Each operator shall include this emergency shutdown procedure in the facility records and shall ensure that all facility personnel involved in the transfer operation are trained in this procedure. The alarm shall consist of a visual and audible device capable of alerting the operator, both by sight and hearing, to prevent an overfill situation. If the operator is in a control station, this alarm shall activate a warning light and audible signal in that station. In addition, this system shall alarm on failure, malfunction, or power loss. This high level alarm shall be tested prior to each receipt of oil. Records of testing shall be maintained at the facility.
- 4. Cathodic protection of piping. The requirement for cathodic protection of piping shall apply to buried piping only. Cathodic protection shall be installed and maintained in accordance with the following applicable publications: American Petroleum Institute Standard (API) 1632, Third Edition (2002), the Uniform Statewide Building Code and its referenced model codes and standards, or National Association of Corrosion Engineers (NACE) SP0285-2011. All piping above ground shall be protected from corrosion using methods and procedures referenced in the Uniform Statewide Building Code and its referenced model codes and standards, or a procedure approved by the board. Piping that passes through the wall of the containment berm or dike or under road crossings shall be protected from corrosion and damage using practices recommended in the publications listed in this subdivision.

9VAC25-91-140. Performance standards for aboveground storage tanks newly installed, retrofitted, or brought into use.

- A. All ASTs shall be built in accordance with the applicable design standards adopted by Underwriters Laboratories, the American Petroleum Institute, the Steel Tank Institute or other standard approved by the board.
- B. All ASTs shall be strength tested before being placed in use in accordance with the applicable code or standard under which they were built.
- C. ASTs that have the tank bottom in direct contact with the soil shall have a determination made by a corrosion professional as to the type and degree of corrosion protection needed to ensure the integrity of the tank system during the use of the tank. If a survey indicates the need for corrosion protection for the new installation, corrosion protection shall be provided.
- D. ASTs installed after June 30, 1993, shall have a release prevention barrier (RPB) installed either under or in the bottom of the tank. The RPB shall be capable of: (i) preventing the release of the oil and (ii) containing or channeling the oil for leak detection.
- E. Existing ASTs that are retrofitted (reconstruction or bottom replacement) or brought back into use shall be brought into compliance with subsections A, B, C, and D of this section. The operator shall submit a schedule to the department of the work to be performed in order to bring the existing AST into compliance with new-built construction standards. This compliance schedule shall be submitted to the department no less than six months prior to the anticipated completion date.

- F. Operators of ASTs installed, retrofitted (reconstruction or bottom replacement) or brought back into use shall also comply with 9VAC25-91-130 B and 9VAC25-91-130 C, as applicable.
- G. All newly installed ASTs shall be constructed and installed in a manner consistent with the applicable standards and requirements found in the Uniform Statewide Building Code and its referenced model codes and standards or other standards approved by the board. Approval and any applicable permits shall be obtained from the local building official before construction starts.
 - H. Compliance dates for subsections A through G of this section.
 - 1. Operators of a newly installed, retrofitted or brought-back-into-use facility or AST shall comply with the requirements of this section within 30 days prior to being placed into service.
 - 2. Operators of facilities existing on June 24, 1998, and exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have complied with these requirements by October 22, 1998.
 - 3. Operators of facilities existing on June 24, 1998, and not exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have met these requirements on or before June 30, 1993, shall be deemed to be in compliance with these requirements as of the effective date of this chapter.

9VAC25-91-145. Performance standards for certain aboveground storage tanks located in the City of Fairfax.

- A. The requirements of this section apply to aboveground storage tanks at facilities with an aggregate capacity of one million gallons or greater existing prior to January 29, 1992, and located in the City of Fairfax.
- B. All ASTs altered as required by this section shall be strength tested before being returned to use in accordance with the applicable code or standard under which they were built.
- C. All ASTs shall contain a release prevention barrier (RPB) either under or in the bottom of the tank. The RPB shall be capable of (i) preventing the release of the oil and (ii) containing or channeling the oil for leak detection. Existing elevated ASTs that are installed in containment areas meeting the requirements of an RPB or that are located within earthen containment dikes and are included in the daily and weekly inspections required by 9VAC25-91-130 B 5 shall be considered to be in compliance with the requirements of this section.
- D. All ASTs altered as required by this section shall meet the applicable standards and requirements found in the Uniform Statewide Building Code or other standards approved by the board. Approval and all applicable permits shall be obtained from the local building official before altering ASTs.
- E. Operators of facilities subject to this section shall meet the performance standards of this section no later than July 1, 2021.

9VAC25-91-150. Recordkeeping and access to facilities.

- A. Each operator of a facility subject to this chapter shall maintain the following records:
 - 1. All records relating to all required measurements and inventory and reconciliation of oil at the facility;
 - 2. All records relating to required tank/pipe testing;
 - 3. All records relating to spill events and other discharges of oil from the facility;
 - 4. All supporting documentation for developed contingency plans;

- 5. All records for implementation and monitoring of leak detection and applicable provisions of 9VAC25-91-170 A 18 of Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter;
- 6. All records relating to training of individuals;
- 7. All records relating to facility and tank inspections; and
- 8. Any records required to be kept by statute or regulation of the board.
- B. These records shall be kept by the operator of a facility at the facility or at an alternate location approved by the board for a period of no less than five years unless otherwise indicated.
- C. Upon request, each operator shall make these records available to the department and to the director or coordinator of emergency services for the locality in which the facility is located or to any political subdivision within one mile of the facility.
- D. Operators shall maintain all records relating to compliance with this chapter for a period of no less than five years from the date the department receives notice of the closure unless otherwise indicated. These records shall be made available to the department at any time upon request.

9VAC25-91-160. Variances to the requirements of Part III (9VAC25-91-130 et seq.) of this chapter.

- A. General criteria for granting a variance on a case-by-case basis.
 - 1. The board is required by § 62.1-44.34:15.1 of the Code of Virginia to establish the criteria to grant variances of the AST pollution prevention requirements on a case-by-case basis and by regulation for categories of ASTs. Any person affected by this chapter may petition the board to grant a variance of any requirement of Part III (9VAC25-91-130 et seq.) of this chapter.
 - 2. The board will not grant any petition for a variance related to:
 - a. Definitions;
 - b. Registration;
 - c. Classification of aboveground storage tanks; or
 - d. Oil discharge contingency plans.
 - 3. The board may grant a variance if:
 - a. The applicant demonstrates to the satisfaction of the board that the alternate design or operation will result in a facility that is equally capable of preventing pollution of state water, land, and storm drains from the discharge of oil from new and existing ASTs. If the variance would extend a deadline, the petitioner shall demonstrate that a good faith effort to comply with the deadline was made;
 - b. Granting the variance will not result in an unreasonable risk to human health or the environment; and
 - c. Granting the variance will not result in a conflict with applicable local codes or ordinances.
 - 4. In rendering a decision, the board may:
 - a. Deny the petition;
 - b. Grant the variance as requested;
 - c. Grant a modified variance which:
 - (1) Specifies additional or modified requirements:
 - (2) Includes a schedule for:

- (a) Periodic review of the modified requirements;
- (b) Implementation by the facility of such control measures as the board finds necessary in order that the variance may be granted; or
- (c) Compliance, including increments of progress, by the facility with each requirement of the variance; or
- (3) Specifies the termination date of the variance.
- d. Grant a partial variance that:
- (1) Specifies a particular part of the requirement;
- (2) Specifies a particular part of the request;
- (3) Includes a schedule for:
- (a) Periodic review of the partial requirements;
- (b) Implementation by the facility of such control measures as the board finds necessary in order that the variance may be granted; or
- (4) Specifies the termination date of the variance.
- 5. An operator must comply with the requirements of this chapter even when a variance request is under consideration by the board. A variance request submitted but disapproved, or submitted but not yet decided, shall not constitute a defense or delay to any enforcement action undertaken by the department.
- B. Administrative procedures.
 - 1. General requirements for the submission of a petition by the owner or a duly authorized representative. All petitions submitted to the board shall include:
 - a. The owner's or duly authorized representative's name and address;
 - b. A citation of the regulatory requirement to which a variance is requested;
 - c. An explanation of the need or desire for the proposed action, including the reason the existing requirement is not achievable or is impractical compared to the alternative being proposed;
 - d. An explanation of the impact to applicable local codes and ordinances;
 - e. A description of the proposed action;
 - f. The duration of the variance, if applicable;
 - g. The potential impact of the variance on human health or the environment and a justification of the proposed action's ability to provide equivalent protection of human health and the environment as would compliance with the regulatory requirements;
 - h. Enforcement action against or pending against the petitioner;
 - i. Other information believed by the applicant to be pertinent; and
 - i. The following statements signed by the owner or a duly authorized representative:
 - "I certify that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. The petition, if granted, will not be in violation of any local codes or ordinances or pose an unreasonable risk to human health or the environment. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

- 2. In addition to the general information required of all petitioners under subdivision 1 of this subsection, the petitioner shall submit other information as may be required by the board.
- 3. All variance petitions and correspondence shall be submitted to the following address:

Mailing Address:

Department of Environmental Quality

Office of Spill Response and Remediation

P.O. Box 1105

Richmond, VA 23218

Street Address:

Department of Environmental Quality

Office of Spill Response and Remediation

629 E. Main Street

Richmond, VA 23219

C. Petition processing.

- 1. After receiving a petition that includes the information required in subdivision B 1 of this section, the board will determine whether the information received is sufficient to render the decision. If the information is deemed to be insufficient, the board will specify additional information needed and request that it be furnished.
- 2. The petitioner may submit the additional information requested, may attempt to show that no reasonable basis exists for the request for additional information, or may withdraw the petition. If the board agrees that no reasonable basis exists for the request for additional information, the board will act in accordance with subdivision 3 b of this subsection. If the board continues to believe that a reasonable basis exists to require the submission of such information, the board will deny the petition.
- 3. After the petition is deemed complete:
 - a. The board will review the petition;
 - b. After evaluating the petition, the board will notify the applicant of the following final decision:
 - (1) Petition is denied;
 - (2) Requested variance is granted; or
 - (3) Modified or partial variance is granted;
 - c. The board shall send written notification of the variance to the chief administrative officer of the locality in which the facility is located; and
 - d. If the board grants a variance request, the notice to the petitioner shall provide that the variance may be terminated upon a finding by the board that the petitioner has failed to comply with any variance requirements.
- D. Variance by regulation for categories of ASTs.
 - 1. ASTs totally off ground shall not be subject to inventory control or testing for significant variation if:
 - a. All associated piping is off ground;
 - b. All associated buried piping is double walled; or
 - c. All associated piping meets the requirements using a combination of subdivisions 1 a and 1 b of this subsection.

- ASTs with a capacity of 5,000 gallons or less located within a building or structure designed to fully contain a discharge of oil shall not be subject to inventory control or testing for significant variation.
- 3. ASTs containing No. 5 or No. 6 fuel oil for consumption on the premises where stored shall not be subject to inventory control or testing for significant variation.
- 4. ASTs with release prevention barriers (RPBs) and with an established corrosion rate and cathodic protection that protects the entire area of the tank bottom shall not be subject to inventory control or testing for significant variation if:
 - a. All associated piping is off ground;
 - b. All associated buried piping is double walled; or
 - c. All associated piping meets the requirements using a combination of subdivisions
 4 a and 4 b of this subsection.
- 5. ASTs with release prevention barriers (RPBs) and with secondary containment that is 72 hours impermeable shall not be subject to inventory control or testing for significant variation if:
 - a. All associated piping is off ground;
 - b. All associated buried piping is double walled; or
 - c. All associated piping meets the requirements using a combination of subdivisions 5 a and 5 b of this subsection.
- 6. ASTs that meet the construction and installation standards of STI-F911, F921, or F941, or equivalent standards approved by the board shall not be subject to inventory control or testing for significant variation.
- 7. For refineries with a continuous leak detection monitoring system and cathodic protection of the AST and piping, a significant variation of inventory shall be considered a loss in excess of 3.0% by weight of the difference between the refinery's input and output.
- 8. Vaulted tanks meeting UL 2245 or an equivalent standard approved by the board shall not be subject to inventory control or testing for significant variation. The inspections for these tanks required in 9VAC25-91-130 B 5 need to be conducted no more frequently than once every 31 days. The criteria for the visual daily inspection and weekly inspection checklist shall be incorporated into a monthly checklist.
- 9. An AST used in the production/manufacturing process with full containment that is 72 hours impervious shall not be subject to inventory control or testing for significant variation.
- 10. An AST of 12,000 gallons or less with full containment that is 72 hours impervious, inside a building and used for the storage of heating oil consumed on the premises shall not be subject to inventory control or testing for significant variation.
- 11. A double-walled AST shall not be subject to inventory control or testing for significant variation. The inspections required in 9VAC25-91-130 B 5 need be conducted no more frequently than once every 31 days. The criteria for the visual daily inspection and weekly inspection checklist shall be incorporated into a monthly checklist.

Part IV

Oil Discharge Contingency Plan (ODCP) Requirements

9VAC25-91-170. Contingency plan requirements and approval.

A. Section 62.1-44.34:15 of the Code of Virginia requires that all facility oil discharge contingency plans must conform to the requirements and standards determined by the board to

be necessary to ensure that the applicant can take such steps as are necessary to protect environmentally sensitive areas; to respond to the threat of an oil discharge; and to contain, cleanup, and mitigate an oil discharge within the shortest feasible time. Each such plan shall provide for the use of the best available technology (economically feasible, proven effective and reliable and compatible with the safe operation of the facility) at the time the plan is submitted for approval and, in order to be approvable, shall contain, at a minimum, the following requirements:

- 1. The name of the facility, geographic location and access routes from land and water if applicable;
- 2. The names of the operators of the facility including address and phone number;
- 3. A physical description of the facility consisting of a plan of the facility which identifies the applicable oil storage areas, transfer locations, control stations, above and below ground oil transfer piping within the facility boundary (and including adjacent easements and leased property), monitoring systems, leak detection systems and location of any safety protection devices;
- 4. A copy of the material safety data sheet (MSDS) or its equivalent for each oil or groups of oil with similar characteristics stored, transferred or handled at the facility. To be equivalent, the submission shall contain the following:
 - a. Generic or chemical name of the oil:
 - b. Hazards involved in handling the oil; and
 - c. A list of fire-fighting procedures and extinguishing agents effective with fires involving each oil or groups of oil demonstrating similar hazardous properties which require the same fire-fighting procedures;
- 5. The maximum storage or handling capacity of the facility and the individual tank capacities or, in the case of a pipeline, the average daily throughput of oil;
- 6. A complete listing, including 24-hour phone numbers, of all federal, state and local agencies required to be notified in the event of a discharge;
- 7. The position title of the individuals responsible for making the required notifications and a copy of the notification check-off list:
- 8. The position title, address and phone number of the individuals authorized to act on behalf of the operator to implement containment and cleanup actions. This individual shall be available on a 24-hour basis to ensure the appropriate containment and cleanup actions are initiated:
- 9. The position title of the individuals designated by the operator to ensure compliance during containment and cleanup of a discharge with applicable federal, state and local requirements for disposal of both solid and liquid wastes;
- 10. Identification and assurance by contract or other means acceptable to the board of the availability of private personnel and equipment necessary to remove to the maximum extent practicable the worst case discharge and to mitigate or prevent a substantial threat of such a discharge. This contract or agreement shall ensure a certain response within the shortest feasible time. The board will accept a letter of understanding between the operator and the response contractors which attests to this capability being readily available. Membership in a cleanup cooperative or other response organization is also acceptable. A listing of contractor or cooperative capabilities, including an inventory of the equipment and specification of the other information required by subdivision 12 of this subsection, shall be included unless these capabilities are already on file with the department;

- 11. Assessment of the worst case discharge, including measures to limit the outflow of oil, response strategy and operational plan. For the purpose of this chapter, the worst case discharge is the instantaneous release of the volume of the largest tank on the facility (125% of the volume of the largest tank for facilities with multiple tanks within a single containment dike) during adverse weather conditions. Facilities shall take into consideration that due to hydraulic pressure of the release, the secondary containment will not contain this volume in its entirety. The worst case discharge for a pipeline shall be based upon the volume of a discharge calculated using the maximum pressure, velocity, and elevation, and the largest pipe size and pipeline location. If facility design and operation indicates that this worst case discharge scenario does not meet the intent of this chapter, the board may require submission of other worst case scenarios on a facility-specific basis;
- 12. Inventory of facility containment equipment, including specification of quantity, type, location, time limits for gaining access to the equipment, and identification of facility personnel trained in its use;
- 13. Identification and location of natural resources at risk (including, but not limited to, surface waters as indicated on the applicable USGS quadrangle maps, groundwater, public water supplies, public and private water wells and springs, state or federal wildlife management areas, wildlife refuges, management areas, sanctuaries, property listed on the National Register of Historic Places and property listed on the National Register of Natural Landmarks), priorities for protection and means of protecting these resources;
 - a. In addition to the requirements set forth in this subdivision, the operator of a facility with an aggregate aboveground storage or handling capacity of one million gallons or greater of oil shall conduct a groundwater characterization study (GCS) within the geographic boundaries of the facility to be submitted as part of the contingency plan. The operator of such a facility shall utilize upgradient and downgradient GCS monitoring wells to satisfy this requirement. At the time of a discharge, the operator of such a facility shall conduct further characterization of the groundwater as required by the board;
 - b. For purposes of satisfying the requirement to identify and locate natural resources at risk, the operator of a pipeline shall identify surface waters as indicated on the applicable USGS quadrangle maps, public water supplies, state or federal wildlife management areas, wildlife refuges, management areas, sanctuaries, property listed on the National Register of Historic Places and property listed on the National Register of Natural Landmarks which could reasonably be expected to be impacted by the discharge. At the time of a discharge, the operator of a pipeline shall conduct a complete groundwater characterization study as required by the board and identify other natural resources at risk including public and private wells or springs which could reasonably be expected to be impacted by the discharge;
- 14. Identification and location of any municipal or other services (including, but not limited to, storm drains, storm water collection systems and sanitary sewer systems) at risk, notification procedures applicable and means of protection of these services. The identification and location of all municipal services shall include those services for which official records are available. The operator of a pipeline shall determine which sections of the system are located in areas that would require an immediate response by the operator to prevent hazards to the public if a discharge occurred;
- 15. If applicable, the facility's responsibility for responding to a discharge from a vessel moored at the facility and the identity of the sizes, types, and number of vessels that the facility can transfer oil to or from simultaneously;

- 16. A description of training, equipment testing, and periodic unannounced oil discharge drills conducted by the operator to mitigate or prevent the discharge or the substantial threat of a discharge:
- 17. The facility's oil inventory control procedures. Facilities shall ensure that this control procedure is capable of providing for the detection of a discharge of oil within the shortest feasible time in accordance with recognized engineering practices and industry measurement standards;
- 18. A detailed description of a system for early detection of a discharge to groundwater, utilizing upgradient and downgradient leak detection monitoring wells or other groundwater protection measures acceptable to the board (i.e., visual, interstitial, vapor and leak detection groundwater monitoring wells). The system will be operated, maintained and monitored in the manner approved and be subject to inspection by the department under the pollution prevention requirements of Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter. Operators subject to subdivision 13 a of this subsection may utilize such GCS wells to meet this requirement when approved by the board;
- 19. The procedures to be followed, upon detection of a discharge of oil, for testing and inspection of all tanks, piping and all oil transfer associated equipment that could reasonably be expected to be a point source for the discharge. These procedures shall be conducted within the shortest feasible time, include a progression of written procedures from visual inspection to formal testing and be conducted in accordance with recognized engineering practices;
- 20. The facility's preventive maintenance procedures applicable to the critical equipment of an oil storage and transfer system as well as the maximum pressure for each oil transfer system. The term "critical equipment" shall mean equipment that affects the safe operation of an oil storage and handling system;
- 21. A description of the security procedures used by facility personnel to avoid intentional or unintentional damage to the facility; and
- 22. A post-discharge review procedure to assess the discharge response in its entirety.
- B. All nonexempt facility operators shall file with the board the application form for approval of the contingency plan. This form shall be submitted with the required contingency plan and shall be completed insofar as it pertains to the facility. The operator shall sign and date the certification statement on the application form. If the operator is a corporation, the form shall be signed by an authorized corporate official; if the operator is a municipality, state, federal or other public agency, the form shall be signed by an authorized executive officer or ranking elected official; if the operator is a partnership or sole proprietorship, the form shall be signed by a general partner or the sole proprietor. All forms shall be acknowledged before a Notary Public.
- C. Contingency plans shall be filed with and approved by the board. The plan shall be submitted to the board at the address specified in 9VAC25-91-60 A. A copy of the original with the facility-specific information and the approval letter shall be retained at the facility and shall be readily available for inspection.
- D. An operator of multiple facilities may submit a single contingency plan encompassing more than one facility if the facilities are located within the defined boundaries of the same city or county or if the facilities are similar in design and operation. The plan shall contain site-specific information as required by subsection A of this section for each facility. The site-specific information shall be placed in appendices to the plan.

Upon renewal of an approved contingency plan submitted under this subsection, the board shall consider the individual facilities subject to all provisions of subsections E through J of this section.

E. Oil discharge contingency plans shall be reviewed, updated if necessary and resubmitted to the board for approval every 60 months from the date of approval unless significant changes occur sooner. Operators shall notify the board of significant changes and make appropriate amendments to the contingency plan within 30 days of the occurrence. For the purpose of this chapter, a significant change includes the following:

- 1. A change of operator of the facility;
- 2. An increase in the maximum storage or handling capacity of the facility that would change the measures to limit the outflow of oil, response strategy or operational plan in the event of the worst case discharge;
- 3. A decrease in the availability of private personnel or equipment necessary to remove to the maximum extent practicable the worst case discharge and to mitigate or prevent a substantial threat of such a discharge;
- 4. A change in the type of product dealt in, stored or handled by any facility covered by the plan for which a MSDS or its equivalent has not been submitted as part of the plan; or
- 5. A change in the method or operation utilized for the early detection of a discharge to groundwater (i.e., change in a method of leak detection).
- F. Updated plans or certification for renewal of an existing plan shall be submitted to the board for review and approval not less than 90 days prior to expiration of approval of the current plan. Submittal of the certification for renewal for an existing plan shall be made in accordance with the provisions of subsection B of this section. All notifications of changes, renewals, submissions and updates of plans required by this chapter shall be directed to the respective regional office.
- G. An oil discharge exercise may be required by the board to demonstrate the facility's ability to implement the contingency plan. The board will consult with the operator of the facility prior to initiating an exercise. Where appropriate, the board will ensure coordination with federal agencies prior to initiation of an exercise.
- H. The board may, after notice and opportunity for a conference pursuant to § 2.2-4019 of the Code of Virginia, deny or modify its approval of an oil discharge contingency plan if it determines that:
 - 1. The plan as submitted fails to provide sufficient information for the board to process, review and evaluate the plan or fails to ensure the applicant can take such steps as are necessary to protect environmentally sensitive areas, to respond to the threat of a discharge, and to contain and clean up an oil discharge within the shortest feasible time;
 - 2. A significant change has occurred in the operation of the facility covered by the plan;
 - 3. The facility's discharge experience or its inability to implement its plan in an oil spill discharge exercise demonstrates a necessity for modification; or
 - 4. There has been a significant change in the best available technology since the plan was approved.
- I. The board, after notice and opportunity for hearing, may revoke its approval of an oil discharge contingency plan if it determines that:
 - Approval was obtained by fraud or misrepresentation;
 - 2. The plan cannot be implemented as approved;
 - 3. A term or condition of approval of this chapter has been violated; or

- 4. The facility is no longer in operation.
- J. A Facility Response Plan (FRP) developed pursuant to § 4202 of the federal Oil Pollution Act of 1990, Pub. L. No. 101-380, 33 USCA § 2716 (1996), may be accepted as meeting the requirements of subdivisions A 1 through A 22 of this section. The operator shall submit a copy of the FRP and a copy of the currently valid FRP approval letter for the facility for review and approval by the board. The FRP shall contain a cross reference in order to index pages for the specific requirements of the ODCP. The FRP shall also contain the satisfaction of the requirements of subdivisions A 13 a and A 18 of this section. This information shall be resubmitted in accordance with the renewal period established by federal statute or regulation but in no instance shall the renewal period exceed five years. The board shall be notified of any plan amendments within 30 days of the amendment.

Part V

Groundwater Characterization Study (GCS) and GCS Well Monitoring Requirements 9VAC25-91-180. Groundwater characterization study (GCS).

- A. Section 62.1-44.34:15 of the Code of Virginia requires the operator to apply to the board for approval of an ODCP. The ODCP shall be accompanied by other relevant information required by the board (e.g., groundwater characterization study (GCS) of each facility with an aggregate aboveground storage capacity of one million gallons or greater of oil). The purpose of this GCS is to determine baseline conditions and flow of groundwater within the geographic boundaries of the facility. The operator's results of the GCS shall be subject to the review and approval of the board and shall be submitted to the department as part of the Oil Discharge Contingency Plan (ODCP) referenced in Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter. The GCS wells are required by 9VAC25-91-170 A 13 a in the ODCP requirements.
- B. Section 62.1-44.34:15.1 of the Code of Virginia requires that the operator of a facility with an aggregate capacity of one million gallons or greater of oil conduct monthly gauging and inspection, monitoring of well headspace, and quarterly sampling and laboratory analysis of all groundwater monitoring wells located at the facility to determine the presence of petroleum or petroleum byproduct contamination.
- C. Although GCS monitoring wells may be approved for use as part of a leak detection system, the GCS well monitoring requirement should not be confused with any requirement for leak detection monitoring wells required by 9VAC25-91-170 A 18.

9VAC25-91-190. Gcs Well Monitoring.

- A. All GCS wells required by 9VAC25-91-170 A 13 a in the ODCP requirements shall be monitored as follows:
 - 1. Monthly gauging of GCS groundwater monitoring wells.
 - Measure and record static water levels monthly.
 - b. Reference all water-level measurements, including total well-depth measurements, from an established and documented point on the top of the well casing.
 - c. Measurements shall be correlated with mean sea level datum and measured to the nearest $0.01\ \text{foot}.$
 - 2. Quarterly groundwater and vapor monitoring.
 - a. Quarterly vapor monitoring of all GCS wells identified in the ODCP-GCS shall be conducted prior to collecting quarterly groundwater samples.

- b. Quarterly vapor monitoring consists of collecting one monitoring well headspace measurement.
- c. Quarterly groundwater sampling (visual inspection) of all wells identified in the ODCP-GCS shall be conducted.
- (1) Measure for free product on top of the groundwater.
- (2) Collect groundwater samples for visual inspection.
- d. Tabulate vapor measurements and quarterly visual groundwater monitoring results for each well sampled.
- 3. Annual groundwater monitoring for laboratory analysis.
 - a. Annual groundwater sampling of all wells identified in the ODCP groundwater characterization study (GCS) shall be conducted.
 - b. Annual groundwater monitoring consists of collecting groundwater samples for laboratory analysis.
 - c. Groundwater samples shall be collected and analyzed for BTEX and TPH for each well.
- B. The GCS groundwater well monitoring should not be confused with the monitoring of groundwater wells utilized to satisfy 9VAC25-91-170 A 18 (i.e., leak detection wells).

9VAC25-91-200. Reporting; GCS well monitoring report.

- A. All observations and data gathered as a result of the requirements in 9VAC25-91-190 and any other data obtained from those same wells shall be maintained at the facility, compiled, and submitted to the department annually in the following format:
 - I. Monthly gauging of GCS groundwater monitoring wells.
 - 1.0 Summary of measurement procedures.
 - 2.0 Table of static water levels recorded from monitoring wells.
 - II. Quarterly GCS groundwater vapor monitoring.
 - 1.0 Summary of groundwater and vapor collection procedures.
 - 2.0 Table of vapor measurements from monitoring well headspace.
 - 3.0 Table of groundwater monitoring well visual inspection results.
 - III. Annual GCS groundwater quality evaluation.
 - 1.0 Summary of groundwater collection methods.
 - 2.0 Summary of groundwater analytical results and interpretation.
 - 3.0 Table of analytical methods used.
 - 4.0 Table of analytical results.
 - 5.0 Table of field and trip blank results.
 - 6.0 Groundwater laboratory data including chain-of-custody forms.
 - 7.0 Laboratory quality assurance review.
- B. The annual GCS monitoring report shall include the facility name and address, operator, and consultant, if any, who prepared the report, contact person and the date the report was submitted.

9VAC25-91-210. Response.

Should any observations or data indicate the presence of petroleum hydrocarbons in groundwater, the results shall be immediately reported to the board and to the local director or coordinator of emergency services appointed pursuant to § 44-146.19 of the Code of Virginia.

Part VI Resources Available

9VAC25-91-220. Resources available.

A. This chapter (Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91)) does not contain all requirements for aboveground storage tanks in Virginia. The resources listed in this section have been included to assist with complying with requirements of this regulation. Section 36-99.6 of the Code of Virginia requires the Board of Housing and Community Development to incorporate, as part of the building code, regulations adopted and promulgated by the State Water Control Board governing the installation, repair, upgrade, and closure of aboveground storage tanks. Portions of this chapter are incorporated into the Virginia Uniform Statewide Building Code (USBC). The USBC referenced model codes and standards apply as promulgated by the Virginia Department of Housing and Community Development.

- B. The following documents or portions thereof are resources referenced or provide guidance in this chapter:
 - 1. Underwriters Laboratories Standards:
 - a. Specification 142, "Steel Aboveground Tanks for Flammable and Combustible Liquids," Ninth Edition;
 - b. Standard 2245, "Standard for Below-Grade Vaults for Flammable Liquid Storage Tanks," Second Edition, December 28, 2006;
 - 2. American Petroleum Institute (API) Standards:
 - a. API 12B: Specification 12B October 2008, "Specification for Bolted Tanks for Storage of Production Liquids," Fifteenth Edition;
 - b. API 12D: Specification 12D, October 2008, "Specification for Field Welded Tanks for Storage of Production Liquids," Eleventh Edition;
 - c. API 12F: Specification 12F, October 2008, "Specification for Shop Welded Tanks for Storage of Production Liquids," Twelfth Edition;
 - d. API 575; May 2005, "Inspection of Existing Atmospheric and Low-pressure Storage Tanks," Second Edition, May 2005;
 - e. API 620: Standard 620, February 2008, "Design and Construction of Large, Welded, Low-Pressure Storage Tanks," includes Addendum 1 (2009), Addendum 2 (2010), and Addendum 3 (2012), Eleventh Edition;
 - f. API 650: Standard 650, June 2001, "Welded Tanks for Oil Storage," Eleventh Edition;
 - g. API 651: Recommended Practice 651, January 2007, "Cathodic Protection for Above Ground Petroleum Storage Tanks," Third Edition;
 - h. API 652: Recommended Practice 652, October 2005, "Lining of Aboveground Petroleum Storage Tank Bottoms," Third Edition;
 - i. API 2350: Recommended Practice 2350, January 2005, "Overfill Protection for Petroleum Storage Tanks," Third Edition;
 - 3. Virginia Statewide Fire Prevention Code (SWFPC), (March 1, 2011); and
 - 4. Steel Tank Institute (STI), Standards and Recommended Practices:

- a. STI Standard for Diked Aboveground Storage Tanks F911;
- b. STI Standard for Aboveground Tanks with Integral Secondary Containment F921, revised July 2011;
- c. STI Fireguard[™] Specifications for Fireguard protected Aboveground Storage Tanks F941.
- C. Standards and codes listed in subsection B of this section are specifically authorized for use by the board. Other standards and codes may be used if specifically authorized by the board.
- D. This chapter refers to resources that may be used to comply with provisions of the regulations. These resources are available through the Internet; therefore, in order to assist the regulated community, the resource reference document owner's contact information, including uniform resource locator or Internet address is provided for each of the resource references listed in this section.
 - 1. Underwriter's Laboratories, http://ulstandards.ul.com/access-standards/, Underwriter's Laboratories, 2600 NW Lake Road, Camas, WA 98607-8542.
 - 2. American Petroleum Institute, http://api.org, American Petroleum Institute, 1220 L Street, NW, Washington, DC 20005-4070.
 - 3. National Association of Corrosion Engineers, http://nace.org, National Association of Corrosion Engineers, 1440 South Creek Drive, Houston, TX USA 77084-4906.
 - 4. Code of Federal Regulations, http://www.gpo.gov/fdsys/.
 - 5. Virginia Uniform Statewide Building Code, http://www.dhcd.virginia.gov/index.php/va-building-codes/building-and-fire-codes/regulations/uniform-statewide-building-code-usbc.html, Virginia Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219.
 - 6. Virginia Statewide Fire Prevention Code, http://www.dhcd.virginia.gov/StateBuilding CodesandRegulations/PDFs/2009/Code%20-%20SFPC.pdf, Virginia Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219.
 - 7. Steel Tank Institute, <u>www.steeltank.com</u>, Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047.

FORMS (9VAC25-91)

Registration for Facility and Aboveground Storage Tank (AST), DEQ Form 7540-AST (rev. 11/2015)

Approval Application for Facility Oil Discharge Contingency Plan (rev. 8/2007)

Renewal Application for Facility Oil Discharge Contingency Plan (rev. 8/2007)

DOCUMENTS INCORPORATED BY REFERENCE (9VAC25-91)

American Petroleum Institute (API) Standard API 570: Piping Inspection Code, November 2009," In-service Inspection, Rating Repair, and Alteration, of Piping Systems, Third Edition

American Petroleum Institute (API) Standard API 653, April 2009, "Tank Inspection, Repair, Alteration, and Reconstruction," includes Addendum 1 (2010) and Addendum 2 (2012), Fourth Edition

American Petroleum Institute (API) Standard API 1632: Recommended Practice 1632, reaffirmed 2010 "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," Third Edition

National Association of Corrosion Engineers (NACE) SP0285-2011," External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection", revised March 13, 2011

Steel Tank Institute (STI), Standard STI - SP001 "Standard for the Inspection of Aboveground Storage Tanks," Fifth Edition, September 2011

APPENDIX B

OIL SPILL RESPONSE PROCEDURES
QUICK NOTIFICATION CHECKLIST
NATIONAL RESPONSE CENTER OIL SPILL REPORT

Rockydale - Roanoke Quarry Oil Spill Response Procedures

In the event of oil spill, be S.M.A.R.T.

I. Survey the area carefully before proceeding, to prevent endangering yourself or your fellow employees. Evacuate the area and adjacent area if needed.

For all spills:

In the event of a spill, contact the following Federal, State, Local, and agencies:

| Agency | Department/Contact |
|--------------------------|--|
| Federal | National Response Center (800) 424-8802 |
| | Virginia Department of Environmental Quality – Blue Ridge Regional Office – Roanoke (540) 562-6700 |
| Commonwealth of Virginia | Virginia Department of Emergency Management (800) 468-8892 or (804) 674-2400 (24-hour) |
| | State Police, Division 6 Office (Salem, VA) (540) 375-9500 |
| City of Roanoke | Roanoke Fire-EMS 911 or (540) 853-2327 |
| | Roanoke Police Department 911 or (540) 853-2212 |
| Rockydale - Roanoke | Mine Manager: (See Next Page) EHS Coordinator: (See Next Page) |
| Quarry | Regional Manager: (See Next Page) |

ROANOKE QUARRY S.M.A.R.T. CONTACTS

Mike Chopski Mine Manager 540-705-7150

Dallas Satterfield E, H & S Coordinator 540-597-5017

Chris Willis Area Manager 540-315-0375

- II. Managing Safety Data Sheets (SDS) should be reviewed for safety precaution, proper handling, and the necessary personal protective equipment.
- III. Action must be taken to prevent further release of material. (Use spill pillows or booms to block all nearby sewers and drains). Also, a berm may be constructed using absorbents or dirt down gradient of the spill.
- IV. Responsibility: If there is a petroleum release to the environment (i.e. spilled to the drainage channels or sewer), Rockydale Roanoke Quarry has the responsibility to clean-up the release and report the release to the appropriate regulatory agency. Responsibilities for addressing the petroleum release are identified in the table below:

| Individual | Responsibility |
|--------------|---|
| Mine Manager | Contact the spill response contractor for emergency services. |
| | The facility is also responsible for contracting with the emergency spill response contractor. |
| | 1. Notify the Virginia Department of Emergency Management when: |
| | Petroleum is released into and/or observed in the environment. |
| | UNLESS: |
| | The release is less than 25 gallons, does not reach stat waters or cause petroleum sheen on surface water, and the release is cleaned up immediately. |
| | 2. Notify the National Response Center when: |
| | A discharge of oil causes a film, sheen, or discoloration upo the surface of the water or adjoining shorelines or |
| | A discharge causes a sludge or emulsion to be deposite beneath the surface of the water or upon adjoining shorelines. |
| | The National Response Center will notify the Coast Guard and the EPA if required. |

| Individual | Responsibility |
|-----------------|--|
| EHS Coordinator | 3. Notify the Virginia Department of Environmental Quality (DEQ) when: |
| | If either of the above agencies is contacted, the DEQ should also be contacted to relay release and response information, as well as discuss additional reporting or documentation they may require. |
| | 4. Checklist and Report Forms |
| | Attached are the following forms to assist the Operations Manager in reporting the oil spill to the necessary regulatory agencies. Notification Check-Off List Oil Spill Report for regulatory agencies |

V. Time is critical. Quick actions taken as soon as a spill is discovered can prevent a major release and clean-up. Time is also critical for reporting oil spills and getting the necessary help. Do not waste time getting every detail before you call.

Quick Notification Checklist

| AGENCY | DATE TIME | CONTACT NAME |
|--|--------------|--------------|
| Virginia Department of Emergency Management 911 (800) 674-2400 (24-hour) (804) 897-6500 (Admin) | | - |
| National Response Center (800) 424-8802 (24-hour) | | |
| Virginia Department of Environmental Quality Blue Ridge Regional Office Richmond Office (540) 562-6700 | | |
| Roanoke Police Department 911 (540) 853-2212 | | |
| Roanoke City Fire-EMS 911 (540) 853-2327 | | |
| Virginia State Police Division 6 Office (Salem, VA) (540) 375-9500 | | |

National Response Center Oil Spill Report

Call Washington, D.C. - Toll Free (800) 424-8802

Write out report before calling and READ it to the person receiving your call.

I am reporting an oil spill on behalf of Rockydale - Roanoke Quarry located at 4592 Franklin Road, SW in Roanoke, Virginia 24014. My name is _____ The spill occurred at (location, date, time): I estimate the quantity of the spill to be (gallons or barrels and product): Source of the discharge: Description of the affected media: Cause of the discharge:_____ Damages or injuries caused by the discharge: Actions being used to stop, remove, and mitigate the effects of the discharge: Is an evacuation of the area required? Call made _____ Date Time Name of person you report to Name Title/Rank

List below any further discussion other than the message you read to them (use reverse side if more space is needed).

Aboveground Storage Facility and Tank Summary

Facility Name & Address:

Facility ID: 2040854 Rockydale Quarries Corp

4754 Old Rocky Mount Road Roanoke, VA 24014

County: Roanoke City Phone: (540)774-1696

Tank Id: D-01

Owner Information: Rockydale Quarries Corporation (40210), PO Box 8425, Roanoke, VA 24014,

Phone: (540) 774-1696

Content: DIESEL

Capacity: 10000 gal

Status: DISMANTLED

Release Detection: None

Release Prevention: None

Reported Installed Date: 9/17/2007

Reported

Date Closed: 12/1/2016

Material

Type

Tank None Reported None Reported Piping

None Reported None Reported

Roofing None Reported

Foundation None Reported N/A

N/A

Tank Id: G-01

Owner Information: Rockydale Quarries Corporation (40210), PO Box 8425, Roanoke, VA 24014,

Phone: (540) 774-1696

Content: GASOLINE

Capacity: 10000 gal Release Prevention: None Status: DISMANTLED

Release Detection: None

Reported

Reported

Installed Date: 10/13/2004

Date Closed: 12/1/2016

Material None Reported

Type

None Reported

Piping

None Reported None Reported Roofing

None Reported

Foundation

None Reported

Tank Id: ROC-1

Owner Information: Rockydale Quarries Corporation (40210), PO Box 8425, Roanoke, VA 24014,

Phone: (540) 774-1696

Content: HEATING OIL

Capacity: 1000 gal

Status: CURRENTLY IN USE

Release Detection: None

Release Prevention: None

Reported

Reported

Installed Date: 6/1/1994

Date Closed: N/A

Tank

Piping

Roofing

Foundation

N/A

Material Type

None Reported None Reported None Reported None Reported None Reported

None Reported

N/A

Tank Id: RQC-2

Owner Information: Rockydale Quarries Corporation (40210), PO Box 8425, Roanoke, VA 24014,

Phone: (540) 774-1696

Content: LUBE OIL

Capacity: 1010 gal

Status: CURRENTLY IN USE

Release Detection: None

Release Prevention: None Reported

Reported

Installed Date: 1/1/1999

Date Closed: N/A

Tank

Piping

Roofing

Foundation

Material Type

None Reported None Reported None Reported None Reported None Reported

None Reported

N/A

N/A

Tank Id: RQC-3

Owner Information: Rockydale Quarries Corporation (40210), PO Box 8425, Roanoke, VA 24014,

Release Prevention: None

Phone: (540) 774-1696

Content: HEATING OIL

Capacity: 2000 gal

Status: CURRENTLY IN USE

Release Detection: None

Reported

Reported

Installed Date: 6/1/1994

Date Closed: N/A

Tank

None Reported

Piping

Roofing

None Reported

None Reported

Foundation None Reported

Material Type

None Reported

None Reported

N/A

Tank Id: RQC-4

Owner Information: Rockydale Quarries Corporation (40210), PO Box 8425, Roanoke, VA 24014,

Phone: (540) 774-1696

Content: HEATING OIL

Capacity: 1000 gal Release Prevention: None Status: CURRENTLY IN USE

Release Detection: None

Reported

Reported

Installed Date: 6/1/1994

Date Closed: N/A

Tank

None Reported

Piping

Roofing

Foundation

Material Type

None Reported

None Reported None Reported None Reported

None Reported

N/A

N/A

Tank Id: RQC-5

Owner Information: Rockydale Quarries Corporation (40210), PO Box 8425, Roanoke, VA 24014,

Phone: (540) 774-1696

Content: DIESEL

Capacity: 6500 gal

Status: CURRENTLY IN USE

Release Detection: None

Release Prevention: None

Reported

Reported

Date Closed: N/A

Installed Date: 6/1/1994 Tank

None Reported

Piping

None Reported

Roofing None Reported Foundation None Reported

Material Type

None Reported

None Reported

N/A

N/A

Tank Id: RQC-6

Owner Information: Rockydale Quarries Corporation (40210), PO Box 8425, Roanoke, VA 24014,

Phone: (540) 774-1696

Content: DIESEL

Capacity: 6500 gal

Status: CURRENTLY IN USE

Release Detection: None

Release Prevention: None

Reported

Installed Date: 6/1/1994

Reported

Date Closed: N/A

Tank

None Reported

Piping

None Reported

Roofing None Reported Foundation None Reported

Material Type

None Reported

None Reported

N/A

Tank ld: RQC-7

Owner Information: Rockydale Quarries Corporation (40210), PO Box 8425, Roanoke, VA 24014,

Phone: (540) 774-1696

Content: HEATING OIL

Release Detection: None

Reported

Material

Type

Installed Date: 6/1/1994

Capacity: 1000 gal

Release Prevention: None

Reported

Date Closed: N/A

Tank

None Reported

Piping

None Reported

None Reported

Roofing

None Reported

N/A

Foundation

Status: CURRENTLY IN USE

None Reported



AUG 2 2 2017

DEQ - BRRO

August 21 2017

Mr. David Miles Virginia Department of Environmental Quality Blue Ridge Regional Office 3019 Peters Creek Road Roanoke, Virginia 24019

Reference: Above Ground Storage Tank Registration Renewal

Mr. Miles,

Enclosed is completed AST Registration Renewals for:

Rockydale - Appomattox Quarry Rockydale - Jack's Mountain Quarry Permit VAG840063 Permit VAG840050

Rockydale - Roanoke Quarry

Permit VAG840067

If you have any questions, feel free to contact me.

Thank you

Keith H. Holt

Environmental, Health and Safety Coordinator

Rockydale Quarries Corporation

540-597-5017

Page 2 of 4

| IX-A. DESCRIPTION FOR NEW II | NSTAL | LATIONS | , RENE | WALS, | AMEND | MENTS & | & CLOS | | | | | |
|---|------------------------|---------|---------------------------|----------|---------------------------------------|----------|---------------------------------------|------------|---------------------------------------|-----------|--|--|
| wner Tank Identification Number | Used | Oil -01 | Used | Oil - 02 | Used | Oil - 03 | Used | Oil - 04 | Rock | Drill Oil | | |
| EQ Tank Identification Number | | | | | | | | | | | | |
| Tank Status | ☐Amendment ☐Closure | | ☐ Amendment ☐ Amendment ☐ | | ☐ New ■ Renewal ☐ Amendment ☐ Closure | | ☐ New ■ Renewal ☐ Amendment ☐ Closure | | ☐ New ■ Renewal ☐ Amendment ☐ Closure | | | |
| Date of Installation (MM/DD/YYYY) | 1 | 994 | 19 | 994 | 1 | 994 1994 | | | | 999 | | |
| Tank Capacity (Gallons) >660 (Compartments of a compartment tank are considered to be separate tanks and should be registered and treated as such) | 1 | 000 | 10 | 000 | 1 | 1500 35° | | 1,500 1000 | | 1000 | | |
| Substance Stored Gasoline Diesel Kerosene Heating Oil Lubricating Oil Used Oil Asphalt (petroleum based) Jet Fuel | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | |
| Aviation Gasoline Ethanol E85 Biodiesel Other (specify): | | | | | | | | | | | | |
| Materials of Construction | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | |
| Bare Steel Insulated Steel Concrete Coated/(ConVault Type Tank) Galvanized Steel Fiberglass/FRP/PVC | | | | | | | | | | | | |
| Copper/Brass | THE PARTY | | | | | | Amobi Con | | A - N= | | | |
| Other (specify): | | 1 5: : | + | | - | T 5: :- | | I Di i | | T 81.1 | | |
| Single Wall Double Wall Cathodic/Corrosion Protected Double Bottom Lined Interior Shop Fabricated/Built Portable/Skid Horizontal Vertical Vaulted-below grade Piping Totally Above Ground Piping Both Above and Below Ground Other (specify): | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | |
| Foundation Type Concrete Concrete w/Coating or Release Prevention Barrier (RPB) Steel/Saddle/Runner/Beam Earthen Ring Wall Other (specify): | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | |
| Not Applicable-Horizontal Tank Fixed Cone-Welded/Bolted Floating | | Flat | Bon | Flot | Bos | Flot | | | | | | |

| A Discharge Contingency Plan | Number | | | | | 10/E/12014 /ammanata of ACT - CCC | | | | 10/27/2014 mber Date Approved (MM/DD/YYYY) | | | 39,000 Gallons | | |
|--|---|-------------|---|-----------|---|-----------------------------------|--|-----------|---------------|---|------------|--|-------------------|--|--|
| Piping Pressure Test (hydro/API 570/inert) Last Test Date (MM/DD/YYYY) | | | | | | | | | | | | | | | |
| Secondary Containment Date Certified by a PE (MM/DD/YYYY) | 12/02/2013 | | 12/02/2013 | | 12/02/2013 | | 12/02/2013 | | 12/02/2013 | | 12/02/2013 | | | | |
| Containment Type | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | | | | |
| Dike/Berm/Wall | | | | | | | | | | | | | | | |
| Sorbent Material | | | | | | | | | | - | | | | | |
| Curbing | | | | A Barrier | | | | | | | | | | | |
| Retention Pond | | | | | | | | | | | | | | | |
| Weirs/Boom | | | | | | | | | | | | | | | |
| Culverts/Gutters | | | | | | | | | | | | | | | |
| Diversion Pool | | | | | | | | No. | | | | | | | |
| None | | | | | | | | a soci | | | | | | | |
| Other (specify): | | | | | | | | | | | | | | | |
| Release Prevention Barrier | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | | | | |
| Double Wall | | | | | | | | | | | | | | | |
| Double Bottom | | | | | | | | | | | | | | | |
| Coated Concrete | | F 1/2 (6.5) | | | | | | | | | | | | | |
| Dike/Berm Excavation Liner | -H- | | H | | | | | | | | | | | | |
| Polyethylene Jacket | - H- | | H | | H | 1/1/3 | H | | H | 156 | | | | | |
| None | | AND THE S | | | | | | | | Mary and | | | | | |
| Other (specify): Release Detection Type | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | | | | |
| Visual Monitoring | Tank | T Iping | I III | riping | Talk | riping | Talik | Fiping | Talik | riping | | | | | |
| Interstitial Monitoring | | | | | n | n | | | | T F | | | | | |
| Groundwater Monitoring | | | | | | | | | | | | | | | |
| Vapor Monitoring | | | | | | | | | | | | | | | |
| None | | | | | | | | | | | | | | | |
| Other (specify): | | | 110000000000000000000000000000000000000 | | | 1 | | | | | | | | | |
| IX-C. DESCRIPTION | | | | | | | | | S | | | | | | |
| | F FACILITY TOTAL STORAGE CAPACITY IS ONE MILLION GALLONS OR MORE) Tank Tank Tank Tank Tank | | | | CILITY TOTAL STORAGE CAPACITY IS ONE MILLION GALL | | | | | | | | | | |
| Formal Inspection (API 653) Last External Inspection Date (MM/DD/YYYY) | | Tank Tank | | ank | Tank | | - 1 | ank | Tank | | | | | | |
| Titled & State a Commercial Comme | | | | | | | | | | - | | | | | |
| Last Internal Inspection Date (MM/DD/YYYY) | INI DI A | CE DEM | OVAL | OR CHA | NCE IN | LICE | of the same of the | di Capita | | | | | | | |
| X. CLOSURE | 700 | | TO | mr. r. | TT 1 | - | | mar a | W-4-2-6-81-17 | Distance | | | | | |
| Tank and Piping Status Closed in Place | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | | | | |
| Removed/Dismantled | H | H | H | H | H | H | H | | H | H | | | | | |
| Conversion/Change in Use | - | | H | H | H | - | H | | | H | | | | | |
| (NO LONGER STORES PETROLEUM) | | | | | | | | | | | | | | | |
| Closure Site Assessment Completed | Yes | Yes | Yes | L. Yes | Yes | Yes | Yes | Yes | Yes | Yes | | | | | |
| Closure Assessment Items to be enclosed with this form include: Site Map; Soil Sample Results or Records of Monthly Leak Detection Monitoring for the Previous 12 Months; Copy of Building Permit; and Photographs of Sampled Area. | ☐ No | □ No | □ No | □ No | □ No | □ No | □ No | □ No | □ No | □ No | | | | | |
| Evidence of a Leak Detected | Yes No | Yes No | Yes No | Yes no | Yes No | Yes No | Yes No | Yes No | Yes No | ☐Yes☐ No | | | | | |
| Date Last Used (MM/DD/YYYY) | | | | | | | | | | | | | | | |
| Date Closed (MM/DD/YYYY) | | | | | | | | | | | | | | | |
| Comments: | | | | | | | | | | | | | | | |

| IX-A. DESCRIPTION FOR NEW I | NSTAL | LATIONS | , RENE | WALS, | AMEND | MENTS | & CLO | SURES | Check all | that apply |
|--|--------|-------------------------------|--------|------------------------|-------|------------------|----------------|-----------------------|------------------|-----------------------|
| wner Tank Identification Number | | O Wt. | | W-40 | | P-68 | | | 1 | |
| ≟Q Tank Identification Number | | | | | | | | | | |
| Tank Status | Amen | New Renewal Amendment Closure | | □Amendment □Closure | | Renewal dment re | ☐ New [☐ Amend | Renewal iment e | New [Amend | Renewal dment e |
| Date of Installation (MM/DD/YYYY) | 1 | 999 | 1 | 999 | 1999 | | | | | |
| Tank Capacity (Gallons) >660 (Compartments of a compartment tank are considered to be separate tanks and should be registered and treated as such) | 1 | 000 | 1 | 000 | 1 | 000 | | | | |
| Substance Stored | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Gasoline Diesel Kerosene | | | | | | | | | | |
| Heating Oil | H | | П | THE REAL PROPERTY. | H | | | | H | 100 |
| Lubricating Oil | | | | | | | n | | H | |
| Used Oil | | | | | | tank of | П | | | |
| Asphalt (petroleum based) | | | | | | | | | | |
| Jet Fuel | | BEE | | | | | | | | |
| Aviation Gasoline | | | | | | | | | | |
| Ethanol | | 1 | | | | | | | | |
| E85 | | | | | | | | | | |
| Biodiesel | | A | | | | | | | | |
| Other (specify): | | | | | | | | | 100 | |
| Materials of Construction Bare Steel | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Insulated Steel | | | | H | | 1 1 | H | | H | H |
| Concrete Coated/(ConVault Type Tank) | H | | H | | H | | H | | H | |
| Galvanized Steel | | | | | | | | | SECTION A | |
| Fiberglass/FRP/PVC | | n | | F | | | | | | H |
| Copper/Brass | | H | | H | | | | | | |
| Other (specify): | | | | | | | | | | |
| Tank & Piping Type | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Single Wall | | | | | | | | | | |
| Double Wall | | | | | | | | | | |
| Cathodic/Corrosion Protected | | | | | | | Щ | | | |
| Double Bottom | | | | | | | | | | |
| Lined Interior | H | | | | | | | | H | |
| Shop Fabricated/Built Portable/Skid | H | | H | | | | H | | H | |
| Horizontal | H | Sales . | H | | H | | H | | H | |
| Vertical | | | | | | | H | | H | |
| Vaulted-below grade | n | | | | | | H | | H | |
| Piping Totally Above Ground | and in | | 2:7:31 | | | | | | | |
| Piping Totally Below Ground | | | | | | | | | | |
| Piping Both Above and Below Ground | | | | | | | | | | |
| Other (specify): | | | 4.7. | | | | | | THE THE STATE OF | |
| Foundation Type | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Concrete | | | | | | | | | | |
| Concrete w/Coating or Release Prevention Barrier (RPB) | | | | | | | | | | |
| Steel/Saddle/Runner/Beam | | | | | | 1 | | | | |
| Earthen | | | | | | | | | | |
| Ring Wall | | | | | | PERMIT | | | | |
| Other (specify): | - | | | | | | | | | |
| f Type Not Applicable-Horizontal Tank | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Fixed Cone-Welded/Bolted | H | | H | | H | | | 100 | - | |
| Floating | | | H | | H | | H | | - | |
| Other (specify): | Pan | Flat | Pan - | Flat | Pan | - Flat | | | | |

| Oil Discharge Contingency Plan ODCP Piping Pressure Test (hydro/API 570/inert) | Number | Date App | 10/27/20 roved (MM/ |)14 (DD/YYYY) | | ity AST tota regate of AS | | | 39, Gallons | 000 |
|--|--------------------|---------------------|------------------------|--|--|------------------------------------|------------------------|--|----------------|---------------|
| Last Test Date (MM/DD/YYYY) Secondary Containment | | A Carlo Carlo Carlo | | | | | - | | - | |
| Date Certified by a PE (MM/DD/YYYY) | 12/0 | 2/2013 | 12/0 | 2/2013 | 12/0 | 2/2013 | | | | |
| Containment Type | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Dike/Berm/Wall | | | | | | 100 | | | | 1 |
| Sorbent Material | | | | - The | | | | | | |
| Curbing | | | | | | | | | | |
| Retention Pond | | | | | | | | | | 75 |
| Weirs/Boom | | | | | | | | | | |
| Culverts/Gutters | | | | | | | | | | |
| Diversion Pool | | | | | | | | | | |
| None | | ne (name) | | | | | | | | |
| Other (specify): | | | | | | | | | | |
| Release Prevention Barrier | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Double Wall | | TOKE M | | | | | | | | FILE 3 |
| Double Bottom | | | | | | | | | | |
| Coated Concrete | | | | | | | | | | |
| Dike/Berm Excavation Liner | | | | | | | | | | T |
| Polyethylene Jacket | | | | | | | | | | |
| None | | | | 30. 3000 | | | | | | |
| Other (specify): | | | | | | | | | | |
| Release Detection Type | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Visual Monitoring | | | | | | | | | | |
| Interstitial Monitoring | | | | | | | | | | |
| Groundwater Monitoring | | | | | | | | | | |
| Vapor Monitoring | Щ | | | | | | | | | |
| None | | | | | | | | | | |
| Other (specify): | | | | | - | | | | | |
| IX-C. DESCRIPTION | | | | | | | | | S | |
| Formal Inspection (API 653) | | Tank | | RAGE CAPACITY IS ONE MILLION GALLONS OR MORE Tank Tank Tank Tank | | | | ank | | |
| Last External Inspection Date (MM/DD/YYYY) | | dills | - | uiii. | - | GIII | (3011) | | - | COTIN |
| Last Internal Inspection Date (MM/DD/YYYY) | | | | | | | | | | |
| X. CLOSURE | IN DI A | CE DEM | OVAL | OP CHA | NGE IN | HSE Cha | ab tell disast | Santa Santa | 751906 | |
| the second of th | THE REAL PROPERTY. | The second second | Tank | The Parket of Street, or other Persons | CHARLES CO., Co., Co., Co., Co., Co., Co., Co., Co | THE RESERVE OF THE PERSON NAMED IN | NAME OF TAXABLE PARTY. | Contract of the last of the la | T-7-17 | |
| Tank and Piping Status Closed in Place | Tank | Piping | П | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Removed/Dismantled | H | H | H | H | H | | H | H | H | H |
| Conversion/Change in Use | - | - | H | | H | H | | - | H | - |
| (NO LONGER STORES PETROLEUM) | | | | | | | | | | |
| Closure Site Assessment Completed | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Closure Assessment items to be enclosed with this form include: Site Map; Soil Sample Results or Records of Monthly Leak Detection Monitoring for the Previous 12 Months; Copy of Building Permit; and Photographs of Sampled Area. | □ No | □ No | □ No | □ No | □ No | □ No | □ No | □ No | □ No | □ No |
| Evidence of a Leak Detected | Yes No | Yes No | Yes No | Yes No | Yes No | Yes No | Yes No | Yes No | Yes No | Yes No |
| Date Last Used (MM/DD/YYYY) | | | | | | | | | | |
| Date Closed (MM/DD/YYYY) | | | | | | | | | | |
| Comments: | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

| IX-A. DESCRIPTION FOR NEW I | NSTAL | LATIONS | , RENE | WALS, | AMEND | MENTS | & CLO | CLOSURES | | THE RESIDENCE AND PROPERTY. | | that apply | | | | | | | | | | | | | | | | | | |
|--|--------------------------------|--|--------------------|--------|----------------|----------------|--------------------------------|-----------------------|---------------|--|--|------------|--|-----------|--|--|--|--|------|--|--|--|--|--|--|--|--|------|--|--|
| vner Tank Identification Number | G | -01 | F | 1-01 | Pit | D-01 | Main | t. D-01 | C. Aleman | A STATE OF THE STA | | | | | | | | | | | | | | | | | | | | |
| ∠∈Q Tank Identification Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tank Status | □ New ■ Re□ Amendmen □ Closure | | New [| | ☐ New [☐ Amend | Renewal diment | ☐ New [☐ Amend ☐ Closur | Renewal Iment e | ☐ New ☐ Amend | | | | | | | | | | | | | | | | | | | | | |
| Date of Installation (MM/DD/YYYY) | | 2006 | 11/ | 2006 | | | 1994 | | | | | | | | | | | | 1994 | | | | | | | | | 1994 | | |
| Tank Capacity (Gallons) >660 (Compartments of a compartment tank are considered to be separate tanks and should be registered and treated as such) | 8 | 000 | 8 | | | 6500 | | | | 6500 | | | | 7,000,000 | | | | | | | | | | | | | | | | |
| Substance Stored | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | | | | | | | | | | | | | | | | | | | |
| Gasoline | | | | SE EST | | | | No. | | A STATE OF | | | | | | | | | | | | | | | | | | | | |
| Diesel | | - 80/82 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kerosene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heating Oil | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lubricating Oil | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Used Oil | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asphalt (petroleum based) | | | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jet Fuel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aviation Gasoline | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethanol | | | | | | | | | | THE REAL PROPERTY. | | | | | | | | | | | | | | | | | | | | |
| E85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Biodiesel | | | | | | | | | | 13.5 | | | | | | | | | | | | | | | | | | | | |
| Other (specify): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Materials of Construction | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | | | | | | | | | | | | | | | | | | | |
| Bare Steel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Insulated Steel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Concrete Coated/(ConVault Type Tank) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Galvanized Steel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fiberglass/FRP/PVC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copper/Brass | | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other (specify): | Took | Disins | Tonk | Dining | Tools | Dining | Table | Distan | Total | Distan | | | | | | | | | | | | | | | | | | | | |
| Tank & Piping Type Single Wall | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | | | | | | | | | | | | | | | | | | | |
| Double Wall | | | | | | | | | H | H | | | | | | | | | | | | | | | | | | | | |
| Cathodic/Corrosion Protected | | | | H | H | H | H | H | H | H | | | | | | | | | | | | | | | | | | | | |
| Double Bottom | H | The same of | H | | | | | - | H | | | | | | | | | | | | | | | | | | | | | |
| Lined Interior | H | A STATE OF THE STA | H | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shop Fabricated/Built | H | | Н | FEE. | H | St. | H | | | | | | | | | | | | | | | | | | | | | | | |
| Portable/Skid | | | | | | | H | | | | | | | | | | | | | | | | | | | | | | | |
| Horizontal | | | | | | | | | H | | | | | | | | | | | | | | | | | | | | | |
| Vertical | n | | n | | n | | ñ | | | | | | | | | | | | | | | | | | | | | | | |
| Vaulted-below grade | | | | | ī | 201 | n | | Ħ | | | | | | | | | | | | | | | | | | | | | |
| Piping Totally Above Ground | | | THE REAL PROPERTY. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Piping Totally Below Ground | | | | | | | | | | П | | | | | | | | | | | | | | | | | | | | |
| Piping Both Above and Below Ground | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other (specify): | messes place | | | | | | 2.7 | | MARKET . | | | | | | | | | | | | | | | | | | | | | |
| Foundation Type | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | | | | | | | | | | | | | | | | | | | |
| Concrete | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Concrete w/Coating or Release Prevention Barrier (RPB) | | · 注话 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Steel/Saddle/Runner/Beam | | 100 | | | | | | | П | | | | | | | | | | | | | | | | | | | | | |
| Earthen | | | | | | Water to be | | 0.52(2) | П | | | | | | | | | | | | | | | | | | | | | |
| Ring Wall | | | | | | | | | | - | | | | | | | | | | | | | | | | | | | | |
| Other (specify): | | | | | | | | - | | | | | | | | | | | | | | | | | | | | | | |
| of Type | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | | | | | | | | | | | | | | | | | | | | |
| Not Applicable-Horizontal Tank | | | | | | vio a en | | With Alexander | | W. TEN | | | | | | | | | | | | | | | | | | | | |
| Fixed Cone-Weided/Bolted | | | | | | Or. F. | | | | | | | | | | | | | | | | | | | | | | | | |
| Floating | | -1-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other (specify): | | 7 | | | | | | | 41-76-7 | The state of the s | | | | | | | | | | | | | | | | | | | | |

| ODCP | Number | | | | | | | 10/27/2014 Facility AST total storage capacity (aggregate of ASTs > 660 gallons) | | |
|---|---------|-----------|--------|---------------|--------------|-------------|---------------|--|-----------|--------------|
| Piping Pressure Test (hydro/API 570/inert) | | 7/2013 | | | | | | | | |
| Last Test Date (MM/DD/YYYY) Secondary Containment | 01/0 | 7/2013 | | | _ | | | | - | _ |
| Date Certified by a PE (MM/DD/YYYY) | 12/0 | 2/2013 | 12/02 | 2/2013 | 12/02 | 2/2013 | 12/02 | 2/2013 | | |
| Containment Type | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Dike/Berm/Wall | | | | | | See See | | | | |
| Sorbent Material | | | | | | te sta | | | | |
| Curbing | | DE ST | | | | | | - | | Sec. 1 |
| Retention Pond | | | | | | | | | | |
| Weirs/Boom | | scindin | | | | | | | | |
| Culverts/Gutters | | | | | | | | | | |
| Diversion Pool | | | | | | BEET | | | | |
| None | | | | | | | | | | 3/7/ |
| Other (specify): | 1 | | | | | | | | | - Orez Nazan |
| Release Prevention Barrier | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Double Wall | | | | | | | | | | 1000 |
| Double Bottom | | | | | | | | | | |
| Coated Concrete | | | | | | | | | | |
| Dike/Berm Excavation Liner | | | | ENERGY | | | | | | 14.5 |
| Polyethylene Jacket | | | | | | | | | | |
| None | | | | | | | | | | |
| Other (specify): | | | | | | | | | | |
| Release Detection Type | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Visual Monitoring | | | | | | | | | <u> </u> | H |
| Interstitial Monitoring | | \perp | | \vdash | | | | | | H |
| Groundwater Monitoring | | | | | | | 님 | | | H |
| Vapor Monitoring | | | | | | | | - | - | H |
| None | | | | | | | | | | |
| Other (specify): | 1500 | IENALINIO | TAIRBA | TIONS I | DENIEW | ALC AN | D A BACK | IDAKENI | | |
| IX-C. DESCRIPTION (ONLY COMPLETE | N FOR I | V TOTAL S | TOPAGE | HUNS, F | S ONE MIL | ALS, AN | ONS OR M | NDIVIEN I | 5 | |
| Formal Inspection (API 653) | | ank | | ank | | ank | | ank | T | ank |
| Last External Inspection Date (MM/DD/YYYY) | | Turn | | | | | | | | |
| Last Internal Inspection Date (MM/DD/YYYY) | | | - No. | | | | - | | | |
| X. CLOSURE | IN PI A | CE REN | IOVAL | OR CHA | NGE IN | USE Che | ck all that a | ennly | THE PARTY | 1 3 5 |
| Tank and Piping Status | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |
| Closed in Place | | | П | П | | П | | П | П | |
| Removed/Dismantled | ī | | | | | | | | | |
| Conversion/Change in Use | | Ē | n | | n | n | n | | П | П |
| (NO LONGER STORES PETROLEUM) | | | 7 | | | | | | | |
| Closure Site Assessment Completed | Yes | Yes | ∐Yes | ∐Yes | Yes | Yes | ∐Yes | Yes | Yes | Yes |
| Closure Assessment items to be enclosed with this form include: Site Map; Soil Sample Results or Records of Monthly Leak Detection Monitoring for the Previous 12 Months; Copy of Building Permit; and Photographs of Sampled Area. | ☐ No | □ No | □ No | □ No | □ No | □ No | □ No | □ No | □ No | □ No |
| Evidence of a Leak Detected | Yes No | Yes No | Yes No | Yes No | ☐Yes ☐ No | Yes No | Yes No | Yes No | Yes No | Yes |
| Date Last Used (MM/DD/YYYY) | - | | | | | | | | | |
| Date Closed (MM/DD/YYYY) | | | | | | | - | | | |
| Comments: | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Ward Environmental Services PLLC

November 10, 2017

Mike Chopski Rockydale Quarries Corporation 4592 Franklin Road, SW Roanoke, VA 24014

Via email: mchopski@rockydalequarries.com

Re: Fuel Tank Secondary Containment Certification 6,000-gallon Off-Road Diesel Fuel Tank (#MAINT. D-01) Rockydale – Roanoke Quarry WES Project Number 17-035

Dear Mr. Chopski:

Based on my evaluation performed on November 8, 2017, I hereby certify that the secondary containment structure for the 6,000-gallon Off-Road Diesel Fuel Tank (#MAINT. D-01) is in compliance with the applicable requirements of 40 CFR Part 112, the Uniform Statewide Building Code and its referenced model codes and standards, 9 VAC 25-91-130.B.2, and 29 CFR 1910.106.

Sincerely,

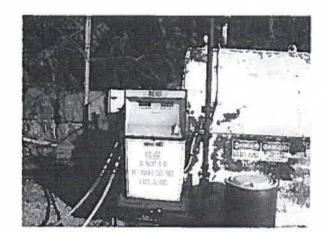
Ross A. Ward, P.E.

President

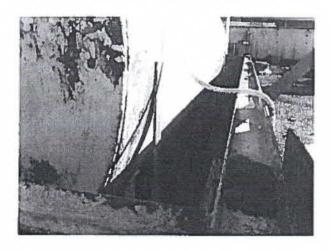
cc: Keith Holt

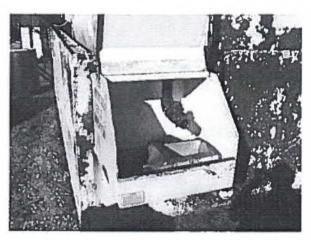
Rockydale Quarries Corporation Rockydale – Roanoke Quarry

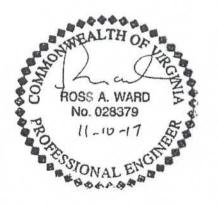
| Unit | Dimensions (Ft.) | Area (Sq. Ft.) | Wall Height (Ft.) | Volume (Cu. Ft.) | Volume (Gallons) (7.48 Gallon/Cu. Ft.) |
|--|---------------------|-------------------|----------------------|---------------------|---|
| Tank Farm (rectangular with steel walls) | 20.67 x 11 | 227.37 | 4 | 909.5 | 6,803 |
| Total Available Secondary Containment \ | 6,803 | | | | |
| Secondary Containment Volume By Perce | entage of Large: | st Tank Witl | hin Tank Farm (6 | ,000 Gallons) | 113% |











Ward Environmental Services PLLC

November 10, 2017

Mike Chopski
Rockydale Quarries Corporation
4592 Franklin Road, SW
Roanoke, VA 24014
Via email: mchopski@rockydalequarries.com

Re: Secondary Containment Certification Welding Shop Oil Storage Tank Farm Rockydale – Roanoke Quarry WES Project Number 17-035

Dear Mr. Chopski:

Based on my evaluation performed on November 8, 2017, I hereby certify that the secondary containment structure for the Welding Shop Oil Storage Tank Farm is in compliance with the applicable requirements of 40 CFR Part 112, the Uniform Statewide Building Code and its referenced model codes and standards, 9 VAC 25-91-130.B.2, and 29 CFR 1910.106.

Sincerely,

Ross A. Ward, P.E.

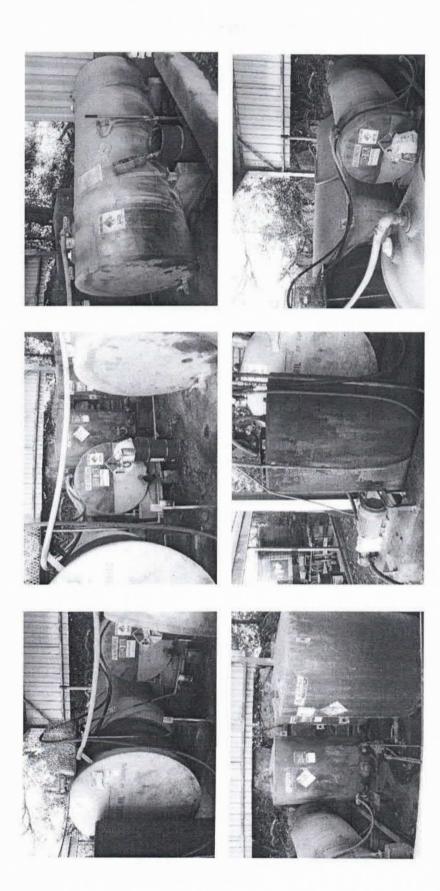
Ra G Word

President

cc: Keith Holt

| | Rockyda | le Quarrie | Rockydale Quarries Corporation | ion | | |
|---|----------------------------|--------------------------|---|---|---------------------|--|
| Welding Shop Oi | אטטא il Storage Tank Fa | iale – noai irm Secon | กบะหงุนสเe – หงิสแบหย Quarry Tank Farm Secondary Contain | אטכה אסכון Shop Oil Storage Tank Farm Secondary Containment Volume Verification | erification | |
| Unit | Dimensions (Ft.) | Diameter (Ft) | Area (Sq. Ft.) | Avg. Height (Ft.) | Volume (Cu. Ft.) | Volume (Gallons) (7.48 Gallon/Cu. Ft.) |
| Tank Farm SectionA (concrete walls) | 18.5 x 24 | | 444 | 1 | 444 | 3,321 |
| Tank Farm SectionB (concrete walls) | 4.25 x 22 | -1 | 93.5 | 1 | 93.5 | 669 |
| Steel Tank #PMI-EP-68 (cylindrical) | i | 5.33 | 22.3 | $(1-0.333) = .667^{1}$ | 14.9 | <111> |
| Steel Tank #PMI-15-40 (cylindrical) | X | 5.33 | 22.3 | $(1-0.333) = .667^{1}$ | 14.9 | <111> |
| Steel Tank #PMI-10-WT (cylindrical) | x | 5.33 | 22.3 | $(1-0.333) = .667^{1}$ | 14.9 | <111> |
| Steel Tank #Rock Drill Oil (cylindrical) | | 4 | 12.6 | 1 | 12.6 | <94> |
| Total Available Secondary Containment Volume | ume | | | | | 3,593 |
| Secondary Containment Volume By Percentage of Largest Tank Within Tank Farm (3,000 Gallons) | age of Largest Tank W | ithin Tank Fa | ırm (3,000 Ga | (lons) | | 120% |
| Notes | | | | | | |

Notes: ¹ Calculated as Tank Farm wall height minus steel cradle height (4")



Ward Environmental Services PLLC

November 10, 2017

Mike Chopski
Rockydale Quarries Corporation
4592 Franklin Road, SW
Roanoke, VA 24014
Via email: mchopski@rockydalequarries.com

Re: Fuel Tank Secondary Containment Certification 6,000-gallon Off-Road Diesel Fuel Tank (#PIT D-01) Rockydale – Roanoke Quarry WES Project Number 17-035

Dear Mr. Chopski:

Based on my evaluation performed on November 8, 2017, I hereby certify that the secondary containment structure for the 6,000-gallon Off-Road Diesel Fuel Tank (#PIT D-01) is in compliance with the applicable requirements of 40 CFR Part 112, the Uniform Statewide Building Code and its referenced model codes and standards, 9 VAC 25-91-130.B.2, and 29 CFR 1910.106.

Sincerely,

Ross A. Ward, P.E.

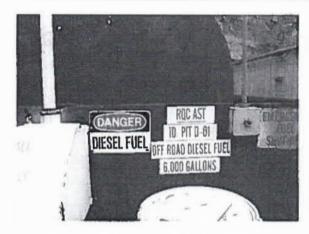
President

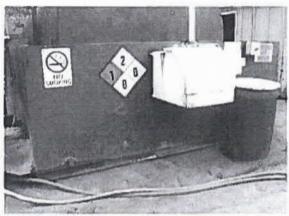
cc: Keith Holt

Rockydale Quarries Corporation Rockydale – Roanoke Quarry

AST #PIT D-01 Secondary Containment Volume Verification

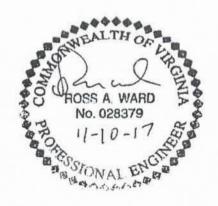
| Unit | Dimensions (Ft.) | Area (Sq. Ft.) | Wall Height (Ft.) | Volume (Cu. Ft.) | Volume (Gallons) (7.48 Gallon/Cu. Ft.) |
|--|---------------------|-------------------|----------------------|---------------------|---|
| Tank Farm (rectangular with steel walls) | 20.67 x 11 | 227.37 | 4 | 909.5 | 6,803 |
| Total Available Secondary Containment | /olume | | <u> </u> | | 6,803 |
| Secondary Containment Volume By Perc | entage of Large | st Tank Wit | nin Tank Farm (6 | ,000 Gallons) | 113% |











Ward Environmental Services PLLC

November 10, 2017

Mike Chopski Rockydale Quarries Corporation 4592 Franklin Road, SW Roanoke, VA 24014

Via email: mchopski@rockydalequarries.com

RE:

2017 Annual STI Inspection of Aboveground Storage Tanks

Rockydale - Roanoke Quarry WES Project Number 17-035

Dear Mike:

Ward Environmental Services PLLC (WES) recently completed the 2017 annual external Steel Tank Institute (STI) inspections of the three (3) oil containing aboveground storage tanks (ASTs) at the Rockydale Quarries Corporation (Rockydale) Roanoke Quarry facility located at 4592 Franklin Road SW in Roanoke, Virginia. The exterior surfaces, appurtenances, and associated piping of the following ASTs were visually inspected by a professional engineer (PE):

| | | Rockydale Quarries Corporation Rockydale – Roanoke Quarry Aboveground Oil Storage Tanks | |
|-------------|----------------------------|---|--|
| Tank No. | Tank Capacity (in gallons) | Tank Type | Contents |
| R-01 | 10,000 | Double-walled steel horizontal/cylindrical | Off Road Diesel fuel |
| D-02 | 10,000 | Double-walled steel horizontal/cylindrical | Off Road Diesel fuel (currently not in use) |
| G-02 | 3,000 | Double-walled steel horizontal/cylindrical | Gasoline |

BACKGROUND

The annual inspection was performed in accordance with the STI Standard for the Inspection of Aboveground Storage Tanks (SP001, 5th Edition) and as required by applicable Federal Spill Prevention, Control, and Countermeasure regulations (40 CFR Part 112.8(c)(6)) and State (9 VAC 25-91-10 et seq) code requirements.

STI-SP001 prescribes a testing procedure involving monthly and annual visual inspections, combined with potential periodic non-destructive testing (NDT) following a schedule based on tank size, tank age, release detection methods, and presence of a release prevention barrier. However, the Standard states that NDT is not required for double-wall steel ASTs.

In accordance with STI-SP001 Table 5.5, *Table of Inspection Schedules*, a Category 1 AST that is between 0 and 5,000-gallons can be inspected on a monthly and annual basis to satisfy the integrity testing requirements of STI-SP001. Category 1 ASTs ranging between 5,001- and 30,000-gallons in volume are required to be subjected to

Mike Chopski November 10, 2017 Page 2 of 3

periodic inspections (monthly visual inspections conducted by authorized facility personnel and an annual inspection by a Professional Engineer), and a formal external inspection (FEI) by a certified STI-SP001 inspector once every 20 years. Performing the periodic visual inspections and conducting a FEI for the Category 1 ASTs satisfies the integrity testing requirements set forth in 40 CRF Part 112.

INSPECTION OBSERVATIONS

WES conducted the annual visual inspection of the tanks on November 8, 2017. The completed inspection forms for the Rockydale – Roanoke Quarry are attached. The inspection forms indicate several visual observations of the AST to which WES feels Rockydale should be alerted.

The following observations are provided only as a broad synopsis to aid your future planning:

- Tank D-02 needs to be situated and bolted onto a properly engineered reinforced concrete pad;
- Tank D-02 needs to be piped for service and include a removed fill containment box;
- Install a Type K leak detection device on the interstitial space on Tank #D-02; and
- Properly ground Tank #D-02.

RECOMMENDATIONS

WES makes the following recommendations:

G Word

Conduct an FEI of Tanks #R-01 and #D-02. Tests should be performed by a firm certified in accordance
with the American Petroleum Institute (API) Standard 653 – Tank Inspection and the Steel Tank Institute
(STI) Standard for Inspecting Aboveground Storage Tanks (SP001 5th Edition). However, this test can also
be performed by a Professional Engineer (PE) if acknowledged by the owner that PE is not an API-653
certified inspector.

If you have any questions or concerns, please contact me at (804) 514-3331.

Sincerely,

Ross A. Ward, PE President

cc: Keith Holt

Attachments

ROSS A. WARD
No. 028379



Photo #1 – 10,000-gallon off-road diesel fuel tank (R-01).

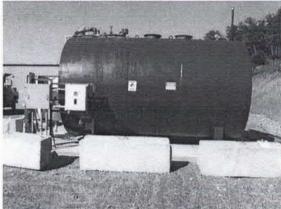


Photo #2 – 10,000-gallon off-road diesel fuel (R-01). Note: Clock level gauge, manhole/emergency vents, and primary vent.

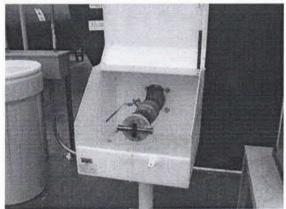


Photo #3 - R-01 overfill prevention fill box/valve.

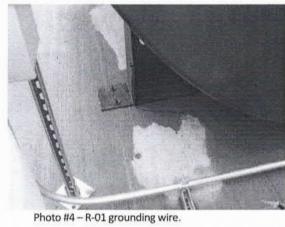




Photo #5 – 3,000-gallon gasoline tank (G-02)

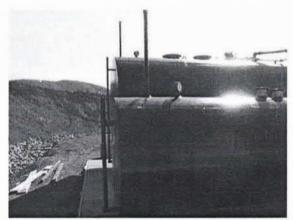


Photo #6 - Interstitial space monitoring tubes (R-01 and G-02)

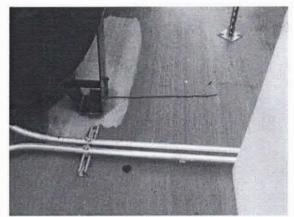


Photo #7 - G-02 grounding wire.

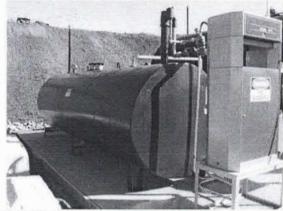


Photo #8 - 3,000-gallon gasoline AST (G-02) with dispenser.

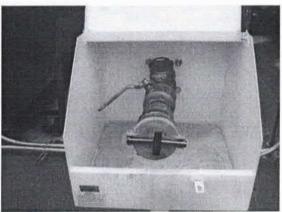
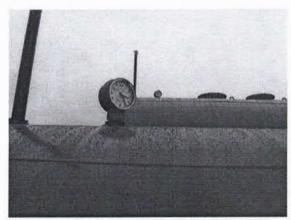


Photo #9 – G-02 overfill prevention fill box/valve.



Photo #10 - G-02 emergency vents.



Photos #11 – Clock level gauge and primary vent on G-02.

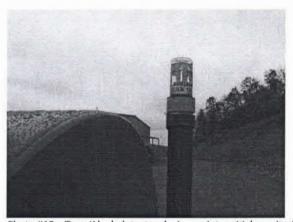


Photo #12 – Type K leak detector device on interstitial monitoring tube. Typical of both tanks.

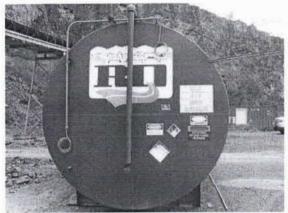


Photo #13 – 10,000-gallon off-road diesel fuel tank (D-02).

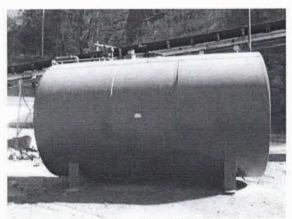


Photo #14 – 10,000-gallon off-road diesel fuel tank (D-02).

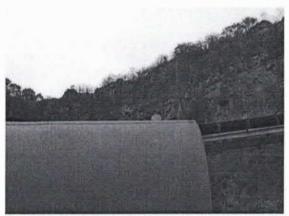


Photo #15 – D-02 clock level gauge and interstitial monitoring tube.

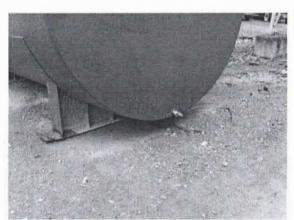
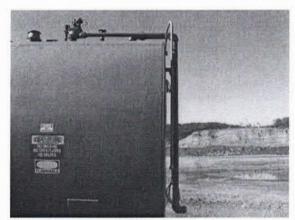


Photo #16 - Drain pipe/valve for D-02.



Photos #17 – Unconnected fill and supply piping on D-02.



Photo #18 – 10,000-gallon off-road diesel fuel tank (D-02).

STI SP001 AST Record

| OWNER INFORMATION | FACILITY INFORMATION |
|--|--|
| Rockydale Quarries Corporation | Rockydale Roanoke Quarry |
| Name 2343 Highland Farm Road NW | Name 4592 Franklin Road, SW |
| Number and Street Roanoke, VA 24017 | Number and Street Roanoke, VA 24014 |
| City, State, Zip Code | City, State, Zip Code |

| CRDM: | Containment: | | × | Construction: | Dimensions: 17' Long x 10' Diameter | Manufacturer: Highland Tank® | | | Design: X | SPECIFICATION: | TANK ID D-02 (formally G-01) | |
|--|---------------------|---------------------------|----------------------|---|--|--------------------------------------|---------|-------|---------------|----------------|------------------------------|--|
| × |] Earthen Dike | ☐ Double-Bottom | X Coated Steel | ☐ Bare Steel | ong x 10' Diameter | land Tank® | Unknown | □ API | X UL 142 | | mally G-01) | |
| Type: Elevated AST for visual detection of leaks | Steel Dike | X Double-Wall | ☐ Concrete | ☐ Cathodical | Ca | Content | | | SWRI | | l | |
| for visual detecti | ☐ Concrete [| | □ Pia | lly Protected (Che | Capacity: 10,000 Gallons | Contents: Off-Road Diesel Fuel | | | | | | |
| on of leaks | Synthetic Liner | ☐ Lined Date Installed: _ | ☐ Plastic/Fiberglass | ck one: A. Galva | | | | | X Horizontal | | | |
| | X Other Do | | ☐ Other | anic or B. Impr | e of Service Date | Construction Date: 2007 | | | ☐ Vertical | | | |
| | Double-Walled Steel | | | ☐ Cathodically Protected (Check one: A. ☐ Galvanic or B. ☐ Impressed Current) Date Installed: | Last Change of Service Date: Currently out of service. | | | | X Cylindrical | | | |
| | | | | | | Last Repair/Reconstruction Date: N/A | | | | | | |
| | | | | | | | | | | | | |

STI SP001 Formal External Inspection Checklist

General Inspection Information:

| 10,000-gallon Off-Road Diesel Fuel AST #D-02 | Tank Inspected (ID #'): Rockydale Roanoke Quarry – 10,000-gallon Off-Road Diesel Fuel AST #D-02 |
|--|---|
| Inspector Name: Ross A. Ward, PE | Prior Inspection Date: N/A - First Inspection |
| Next FEI Date: November 2027 | Inspection Date: November 8, 2017 |

Formal External Inspection Guidance:

- The Formal External Inspection (FEI) is intended for monitoring the external AST condition and its containment structure based upon Section 7.0 of the 2011 Steel Tank Institute SP001 AST Inspection Standard, 5th Edition. Sections 7.2, 7.3, 7.4, 7.6, and 7.7 not applicable to double-walled AST.
- Remove promptly upon discovery standing water or liquid in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem
- manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section. Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank
- Retain the completed checklists for 10 years.

| N) N) N)N) | N N N A | N N A A | 5 3 3 4 3 5 | | | | | 1 |
|---------------------------|--|---|--|----------------------------------|--|--|--|---|
| or ring wall 2.3 Supports | or ring wall | 2.2 Concrete pad | 2.1 Foundation | .0 Tank Foundat | 1.2 CRDM | 1.2 Interstitial space | 1.0 Tank Containment 1.1 Containment Ch structure | |
| 20 | Check for corrosion, paint failure, etc. | Cracking or spalling? | Settlement or foundation washout? | 2.0 Tank Foundation and Supports | Check for accumulation of liquid | Check for accumulation of liquid | Task ment Check for: Holes or cracks in secondary containment wall Washout Corrosion Leakage Paint failure Tank settling | |
| | □Yes* X No □ N/A | □Yes* □ No X N/A | □Yes* X No | | □Yes* X No □N/A | □Yes* X No □N/A | Status □Yes* X No □N/A | |
| | Supports welded to AST. | Concrete pad not constructed at time of inspection. | AST currently placed on bare soil. AST to be place on reinforced concrete pad when put in service. | | No accumulation of liquid (water and/or oil) observed with respect to continuous release detection method. | No accumulation of liquid (water and/or oil) observed. | Comments Double-walled steel AST (UL 142). No breach to outer secondary containment wall. No leakage observed. Tank appears level with no settling. | |

| Item | Task | Status | Comments |
|--------------------------------------|---|------------------|--|
| 2.5 Tank grounding | Strap secured and in good condition? | □Yes* □ No X N/A | AST not currently grounded. Ground wire will be through concrete foundation. |
| 2.6 Stairways and handrails | Check for broken welds, bent members, and corrosion | □ Yes □No* X N/A | |
| 3.0 Piping and Piping Connections | ping Connections | | |
| 3.1 Leakage or signs of stress | Check for: • Leakage • Corrosion • Degradation | □Yes* □ No X N/A | AST not currently piped. |
| 3.2 Supports | Check for sagging and insufficient bracket spacing | □Yes* □ No X N/A | Piping not currently place on supports. |
| 4.0 Tank Shell, He | eads, Roof | | |
| 4.1 Coating Check for failure | Check for coating failure | □Yes* X No | Green coating in excellent condition. |
| 4.2 Steel condition | Check for: Dents Buckling Bulging Corrosion | □Yes* X No | No corrosion observed. |
| 4.3 Roof slope | Check for low points and standing water | □Yes* X No □N/A | None observed. AST is a horizontal/cylindrical tank. |
| 4.4 Nameplate | Check nameplate data for accuracy | □ Yes □No* X N/A | No nameplate on AST. |
| 5.0 Tank Equipment | ent | | |
| 5.1 Vents | Verify that components are moving freely and vent passageways are not obstructed for: • Emergency vent covers • Pressure/vacuum vent poppets • Other moving vent components | □Yes* X No | All appurtenances in good working order. |
| 5.2 Valves | Check the condition of all valves for leaks, corrosion and damage. | □Yes* X No | All valves in good working order. |
| 5.3 Drain Valves | Check the condition of drain valve | □Yes* X No | Drain valve sealed. No evidences of leaks. |

| Item | Task | Status | Comments |
|---|--|------------------|--|
| 5.4 Interstitial leak detection equipment | Check condition of equipment, including: Panel is clearly marked for leak detection. The wire connections of electronic gauges for tightness and corrosion Activate the test button, if applicable. | □Yes* □ No X N/A | Mechanical Type K (float) leak detection device to be mounted on interstitial monitoring tube located on end of AST. |
| 5.5 Spill containment | a. If corrosion, damage, or wear has | □Yes* □ No X N/A | No piping therefore no containment box. |
| boxes on fill pipe | compromised the ability of the unit to perform spill containment functions, replace the unit. | | |
| | b. Inspect the connections to the AST for tightness, as well as the bolts. | □Yes* □ No X N/A | No piping therefore no containment box. |
| | nuts, washers tor condition and replace if necessary. | | |
| | c. Does equipment operate as required? | X Yes □No* □N/A | Tank level device is a Morrison brand clock type gauge and appropriate for tank. Gauge is sized correctly for tank. |
| | d. Confirm device is suited for above ground use by the | X Yes □No* □N/A | |
| 6.0 Miscellaneous | | | |
| 6.1 Electrical wiring and boxes | Are they in good condition? | □Yes* □ No X N/A | AST not currently wired for service. |
| 6.2 Labels and tags | Ensure that all labels and tags are intact and readable. | X Yes □No* □N/A | Tank labeling in good condition. This include tank ID, capacity, NFPA placard, and Hazard placard. |
| 6.3 Review prior inspections | Review prior formal and periodic inspections | X Yes □No* ⊡N/A | No previous FEI. |
| Additional Comments: | ments: | | |

STI SP001 AST Record

| OWNER INFORMATION | FACILITY INFORMATION |
|--|--|
| Rockydale Quarries Corporation | Rockydale Roanoke Quarry |
| Name 2343 Highland Farm Road NW | Name 4592 Franklin Road, SW |
| Number and Street Roanoke, VA 24017 | Number and Street Roanoke, VA 24014 |
| City, State, Zip Code | City, State, Zip Code |

| TANK ID G-02 | | | | |
|------------------------------|--------------------------------------|------------------------|---|---|
| SPECIFICATION: | Z. | | | |
| Design: | X UL 142 | SWRI | X Horizontal | ☐ Vertical X Cylindrical |
| | □ API | - | | |
| | Unknown | | | |
| Manufacturer: Highland Tank® | ighland Tank® | Contents: Gasoline | asoline Construction Date: 2007 | e: 2007 Last Repair/Reconstruction Date: N/A |
| Dimensions: 18 | Dimensions: 18' Long x 5-4" Diameter | | Capacity: 3,000 Gallons Last Change of Servi | Last Change of Service Date: October 27, 2017 |
| Construction: | ☐ Bare Steel | ☐ Cathodically P | ☐ Cathodically Protected (Check one: A. ☐ Galvanic or B. ☐ Impressed Current) | Impressed Current) Date Installed: |
| | X Coated Steel | ☐ Concrete | ☐ Plastic/Fiberglass ☐ | Other |
| | ☐ Double-Bottom | X Double-Wall | ☐ Lined Date Installed: | |
| Containment: | ☐ Earthen Dike | ☐ Steel Dike ☐ C | ☐ Concrete ☐ Synthetic Liner X Other | r Double-Walled Steel |
| CRDM: | × | Type: Elevated AST for | Type: Elevated AST for visual detection of leaks | |
| Release Preven | Release Prevention Barrier: | Туре: | | |
| | | | | |

STI SP001 Formal External Inspection Checklist

General Inspection Information:

| Prior Inspection Date: N/A – First Inspection Inspector Name: Ross A, Ward, PE Tank Inspected (ID #'): Rockydale Roanoke Quarry – 3,000-gallon Gasoline AST #G-02 |
|---|
|---|

Formal External Inspection Guidance:

- The Formal External Inspection (FEI) is intended for monitoring the external AST condition and its containment structure based upon Section 7.0 of the 2011 Steel Tank Institute SP001 AST Inspection Standard, 5th Edition. Sections 7.2, 7.3, 7.4, 7.6, and 7.7 not applicable to double-walled AST.
- Remove promptly upon discovery standing water or liquid in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.

Retain the completed checklists for 10 years.

| | completed encomies for to yours. | 9 | |
|----------------------------------|--|-----------------|--|
| Item | Task | Status | Comments |
| 1.0 Tank Containment | nent | | |
| 1.1 Containment | Check for: | □Yes* X No □N/A | Double-walled steel AST (UL 142). No breach to outer secondary containment wall. No |
| structure | Holes or cracks in secondary containment wall Washout | | leakage observed. Tank appears level with no settling. |
| | Corrosion | | |
| | Leakage | | |
| | Paint failure Tank settling | | |
| 1.2 Interstitial | Check for | Yes* X No □N/A | No accumulation of liquid (water and/or oil) observed. |
| space | accumulation of liquid | | |
| 1.2 CRDM | Check for | □Yes* X No □N/A | No accumulation of liquid (water and/or oil) observed with respect to continuous release |
| | accumulation of liquid | | detection method. |
| 2.0 Tank Foundation and Supports | ion and Supports | | |
| 2.1 Foundation | Settlement or foundation washout? | □Yes* X No | None observed. 25' x 25' x 6" reinforced concrete pad. |
| 2.2 Concrete pad or ring wall | Cracking or spalling? | □Yes* X No □N/A | None observed. |
| 2.3 Supports | Check for corrosion, paint failure, etc. | □Yes* X No □N/A | None observed. |
| 2.4 Water drainage | Water drains away from tank? | X Yes □No* □N/A | |
| | | | |

| Item | Task | Status | Comments |
|--------------------------------|---|------------------|--|
| 2.5 Tank grounding | Strap secured and in good condition? | X Yes □No* □ N/A | Ground wire through concrete foundation. |
| 2.6 Stairways and handrails | Check for broken welds, bent members, | □ Yes □No* X N/A | |
| o O Dining and Di | and corrosion | | |
| 3.0 Piping and Pi | 3.1 Piping and Piping Connections | WILL THE THE THE | |
| 3.1 Leakage or signs of stress | Check for: • Leakage • Corrosion | □Yes* X No □N/A | None observed. Supply piping to fuel dispenser. |
| 3.2 Supports | Check for sagging and insufficient bracket | _Yes* X No _N/A | All supports/fasteners secure and unbroken. |
| 4 0 Tank Shell H | eads Roof | | |
| 4.1 Coating Check for failure | Check for coating failure | □Yes* X No | Green coating in excellent condition. |
| 4.2 Steel condition | Check for: Dents Buckling Bulging Corrosion | □Yes* X No | No corrosion observed. |
| 4.3 Roof slope | Check for low points and standing water | □Yes* X No □N/A | None observed. AST is a horizontally mounted cylindrical tank. |
| 4.4 Nameplate | Check nameplate data for accuracy | □ Yes □No* X N/A | No nameplate on AST. |
| 5.0 Tank Equipment | ent | | |
| 5.1 Vents | Verify that components are moving freely and vent passageways are not obstructed for: • Emergency vent covers • Pressure/vacuum vent poppets • Other moving vent components | Yes* X No | All appurtenances in good working order. |
| 5.2 Valves | Check the condition of all valves for leaks, corrosion and damage. | □Yes* X No | All valves in good working order. |
| 5.3 Drain Valves | Check the condition of drain valve | □Yes* X No | Drain valve sealed. No evidences of leaks. |

| all Check condition of equipment, including: • Panel is clearly marked for leak detection. • Panel is clearly marked in leak leak detection. • Panel is clearly marked for leak detection. • Panel is clearly marked for leak detection. • Panel is clearly marked for leak detection. • Panel is clearly marked in leak leak leak detection. • Panel is clearly marked for leak detection. • Panel is clearly marked for leak leak leak leak leak leak leak leak | Item | Task | Status | Comments |
|--|---|--|---------------------------|--|
| a. If corrosion, damage, or wear has compromised the ability of the unit to perform spill containment functions, replace the unit. b. Inspect the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer bus Are they in good condition? Ensure that all labels and tags are intact and readable. Yes* X No □N/A □Yes* X No □N/A X Yes □No* □N/A □Xes* No □N/A □X | 5.4 Interstitial leak detection equipment | 은 것 | X Yes _No* _N/A | at) leak detection |
| a. It corrosion, damage, or wear has compromised the ability of the unit to perform spill containment functions, replace the unit. b. Inspect the connections to the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer bus Are they in good condition? Ensure that all labels and tags are intact and readable. X Yes \(\text{No} \text{N/A} \) X Yes \(\text{No} \text{N/A} \) Ensure that all labels and periodic inspections | i i | applicable. | | |
| compromised the ability of the unit to perform spill containment functions, replace the unit. b. Inspect the connections to the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer bus Are they in good condition? Ensure that all labels and tags are intact and readable. Or Review prior formal and periodic inspections Ves \(\) No* \(\) N/A | 5.5 Spill containment | a. If corrosion, damage, or wear has | Yes* X No N/A | Containment box in good working order. Ball valve in normally closed position and in good working order. |
| ability of the unit to perform spill containment functions, replace the unit. b. Inspect the connections to the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer bous Are they in good condition? Ensure that all labels and tags are intact and readable. The Review prior formal and periodic inspections A specific tightness, as well as the bolts, nuts, washers for condition and replace if necessary. X Yes \[\] No* \[\] N/A \[\] N/A \[\] Are they in good condition? X Yes \[\] No* \[\] N/A \[\] Are they in good condition? X Yes \[\] No* \[\] N/A \[\] Are they in good condition? X Yes \[\] No* \[\] N/A \[\] Are they in good condition? | boxes on fill | compromised the | | good working order. |
| perform spill containment functions, replace the unit. b. Inspect the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer tous Are they in good condition? Ensure that all labels and tags are intact and readable. X Yes \(\text{No*} \) \(\text{N/A} \) X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) Are they in good condition? X Yes \(\text{No*} \) \(\text{N/A} \) | pipe | ability of the unit to | | |
| containment functions, replace the unit. b. Inspect the connections to the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer ous Are they in good condition? Ensure that all labels and tags are intact and readable. The Review prior formal inspections Are the unit. I Yes* X No \(\) N/A X Yes \(\) No* \(\) N/A X Yes \(\) No* \(\) N/A I N/A X Yes \(\) No* \(\) N/A X Yes \(\) No* \(\) N/A I | 16 | perform spill | | |
| b. Inspect the connections to the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer bus Are they in good condition? Ensure that all labels and tags are intact and readable. or Review prior formal and periodic inspections | | replace the unit. | | |
| connections to the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer NOUS Are they in good condition? Ensure that all labels and tags are intact and readable. Or Review prior formal and periodic inspections | | b. Inspect the | □Yes* X No □N/A | All parts in good condition |
| AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer ous Are they in good condition? Ensure that all labels and tags are intact and readable. or Review prior formal and periodic inspections AST for tightness, as well as the bolts, and tags are intact and readable. X Yes \(\text{No*} \) \(\text{N/A} \) \(\text{N/A} \) \(\text{N/A} \) | | connections to the | | |
| nuts, washers for condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer ous Are they in good condition? Ensure that all labels and tags are intact and readable. or Review prior formal and periodic inspections X Yes \(\) No* \(\) N/A \(\) N/A \(\) N/A \(\) N/A | | AST for tightness, as well as the bolts. | | |
| condition and replace if necessary. c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer ous Are they in good condition? Ensure that all labels and tags are intact and readable. or Review prior formal and periodic inspections C. Does equipment X Yes \(\) No* \(\) N/A X Yes \(\) No* \(\) N/A X Yes \(\) No* \(\) N/A | | nuts, washers for | | |
| c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer bus Are they in good condition? Ensure that all labels and tags are intact and readable. or Review prior formal and periodic inspections X Yes \(\) No* \(\) N/A | | condition and replace | | |
| c. Does equipment operate as required? d. Confirm device is suited for above ground use by the manufacturer bus Are they in good condition? Ensure that all labels and tags are intact and readable. The Review prior formal and periodic inspections X Yes SNO* SNIA X Yes SNIA | | if necessary. | | |
| d. Confirm device is suited for above ground use by the manufacturer NOUS Are they in good condition? Ensure that all labels and tags are intact and readable. Or Review prior formal and periodic inspections X Yes \(\) No* \(\) N/A \(\) No previous FEI. | | c. Does equipment | X Yes \Quad No* \Quad N/A | Tank level device is a Morrison brand clock type gauge and appropriate for tank. Gauge is sized correctly for tank |
| suited for above ground use by the manufacturer Nous Are they in good condition? Ensure that all labels and tags are intact and readable. Or Review prior formal and periodic inspections Suited for above ground use by the manufacturer X Yes \(\) No^* \(\) N/A corrosion observed on wiring. Tank labeling in good condition. placard. Placard. No previous FEI. | 400.50 | d. Confirm device is | X Yes \Quad No* \Quad N/A | |
| ground use by the manufacturer **Dous** Are they in good condition? Ensure that all labels and tags are intact and readable. Treadable. X Yes \(\text{No*} \square \text{N/A} \) X Yes \(\text{No*} \square \text{N/A} \) Tank labeling in good condition. placard. Yes \(\text{No*} \square \text{N/A} \) No previous FEI. | | suited for above | | |
| Are they in good condition? Ensure that all labels and tags are intact and readable. Treadable. X Yes \(\)No* \(\)N/A corrosion observed on wiring. X Yes \(\)No* \(\)N/A placard. Yes \(\)No* \(\)N/A No previous FEI. | | ground use by the | | |
| Are they in good condition? Are they in good X Yes \(\text{NO*} \(\text{NNA} \) All conduit and wiring in good condition? Ensure that all labels and tags are intact and readable. Tank labeling in good condition. placard. Tank labeling in good condition. placard. X Yes \(\text{NO*} \(\text{NNA} \) No previous FEI. | 6.0 Miscellaneous | (TA) | | |
| Ensure that all labels and tags are intact and readable. Tank labeling in good condition. placard. Review prior formal and periodic inspections X Yes □No* □N/A No previous FEI. | 6.1 Electrical wiring and boxes | 2000 | X Yes □No* □N/A | All conduit and wiring in good condition. All wire connection junction boxes tight with no corrosion observed on wiring. |
| Review prior formal X Yes □No* □N/A and periodic inspections | 6.2 Labels and tags | Ensure that all labels and tags are intact and readable. | X Yes □No* □N/A | Tank labeling in good condition. This include tank ID, capacity, NFPA placard, and Hazard placard. |
| | 6.3 Review prior inspections | Review prior formal and periodic inspections | X Yes □No* □N/A | No previous FEI. |

STI SP001 AST Record

| OWNER INFORMATION | FACILITY INFORMATION |
|--|--|
| Rockydale Quarries Corporation | Rockydale Roanoke Quarry |
| Name 2343 Highland Farm Road NW | Name 4592 Franklin Road, SW |
| Number and Street Roanoke, VA 24017 | Number and Street Roanoke, VA 24014 |
| City, State, Zip Code | City, State, Zip Code |

| TANK ID R-02 | |
|-------------------------------------|---|
| SPECIFICATION: | |
| Design: X UL 142 | SWRI X Horizontal Vertical X Cylindrical |
| □ API | |
| ☐ Unknown | |
| Manufacturer: Highland Tank® | Contents: Off-Road Diesel Fuel Construction Date: 2007 Last Repair/Reconstruction Date: N/A |
| Dimensions: 17' Long x 10' Diameter | Capacity: 10,000 Gallons Last Change of Service Date: October 27, 2017 |
| Construction: Bare Steel | ☐ Cathodically Protected (Check one: A. ☐ Galvanic or B. ☐ Impressed Current) Date Installed: |
| X Coated Steel | ☐ Concrete ☐ Plastic/Fiberglass ☐ Other |
| ☐ Double-Bottom | X Double-Wall |
| Containment: | ☐ Steel Dike ☐ Concrete ☐ Synthetic Liner X Other Double-Walled Steel |
| CRDM: X | Type: Elevated AST for visual detection of leaks |
| Release Prevention Barrier: | Type: |

STI SP001 Formal External Inspection Checklist

General Inspection Information:

| | Tank Inspected (ID #'): Rockydale Roanoke Quarry – 10,000-gallon Off-Road Diesel Fuel AST #R-01 | Prior Inspection Date: N/A - First Inspection Inspector Name: Ross A. Ward, PE | Inspection Date: November 8, 2017 Next FEI Date: November 2027 |
|--|---|--|--|
|--|---|--|--|

Formal External Inspection Guidance:

- Tank Institute SP001 AST Inspection Standard, 5th Edition. Sections 7.2, 7.3, 7.4, 7.6, and 7.7 not applicable to double-walled AST. The Formal External Inspection (FEI) is intended for monitoring the external AST condition and its containment structure based upon Section 7.0 of the 2011 Steel
- environment, inspect the liquid for regulated products or other contaminants and disposed of it properly. Remove promptly upon discovery standing water or liquid in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.

Retain the completed checklists for 10 years.

| Item | Item Task | Status | Comments |
|----------------------------------|--|-----------------|--|
| 1.0 Tank Containment | nent | | |
| 1.1 Containment | Check for: | Yes* X No □N/A | Double-walled steel AST (UL 142). No breach to outer secondary containment wall. No |
| Silvinie | Notes of Clacks in secondary containment wall Washout Corrosion Leakage Paint failure Tank settling | | reakage observed. Tank appears iever with no setting. |
| 1.2 Interstitial | Check for | □Yes* X No □N/A | No accumulation of liquid (water and/or oil) observed. |
| space | accumulation of liquid | | 8 6 2 |
| 1.2 CRDM | Check for | □Yes* X No □N/A | No accumulation of liquid (water and/or oil) observed with respect to continuous release |
| | accumulation of liquid | | detection method. |
| 2.0 Tank Foundation and Supports | ion and Supports | | |
| 2.1 Foundation | Settlement or foundation washout? | □Yes* X No | None observed. 25' x 25' x 6" reinforced concrete pad. |
| 2.2 Concrete pad or ring wall | Cracking or spalling? | □Yes* X No □N/A | None observed. |
| 2.3 Supports | Check for corrosion, paint failure, etc. | □Yes* X No □N/A | None observed. |
| 2.4 Water drainage | Water drains away from tank? | X Yes □No* □N/A | |

| Item | Task | Status | Comments |
|--------------------------------------|--|--------------------------------------|--|
| 2.5 Tank grounding | Strap secured and in good condition? | X Yes \(\text{No*} \(\text{N/A} \) | Ground wire through concrete foundation. |
| 2.6 Stairways and handrails | Check for broken welds, bent members, and corrosion | □ Yes □No* X N/A | |
| 3.0 Piping and Piping Connections | ping Connections | | |
| 3.1 Leakage or signs of stress | Check for: • Leakage • Corrosion • Degradation | □Yes* X No □N/A | None observed. Supply piping to fuel dispenser. |
| 3.2 Supports | Check for sagging and insufficient bracket spacing | □Yes* X No □N/A | All supports/fasteners secure and unbroken. |
| 4.0 Tank Shell, Heads, Roof | eads, Roof | | |
| 4.1 Coating | Check for coating failure | □Yes* X No | Green coating in excellent condition. |
| 4.2 Steel condition | Check for: Dents Buckling Bulging Corrosion Cracking | □Yes* X No | No corrosion observed. |
| 4.3 Roof slope | Check for low points and standing water | □Yes* X No □N/A | None observed. AST is a horizontally mounted cylindrical tank. |
| 4.4 Nameplate | Check nameplate data for accuracy | Yes No* X N/A | No nameplate on AST. |
| 5.0 Tank Equipment | ent | | |
| 5.1 Vents | Verify that components are moving freely and vent passageways are not obstructed for: • Emergency vent covers • Pressure/vacuum vent poppets • Other moving vent | Yes* X No | All appurtenances in good working order. |
| 5.2 Valves | Check the condition of all valves for leaks, corrosion and damage. | □Yes* X No | All valves in good working order. |
| 5.3 Drain Valves | Check the condition of drain valve | □Yes* X No | Drain valve sealed. No evidences of leaks. |

| Item | Task | Status | Comments |
|------------------------------|---|--------------------------------------|--|
| al Che ection equ | Check condition of equipment, including: Panel is clearly marked for leak detection. The wire connections of electronic gauges for tightness and corrosion Activate the test button, if | X Yes \(\text{No*} \(\text{N/A} \) | Mechanical Type K (float) leak detection device mounted on interstifal monitoring tube located on end of AST. |
| A A Spill | applicable. | Yes* Y No N/A | |
| ainment | damage, or wear has | 200 20100 | good working order. |
| | compromised the | | good worming order. |
| | ability of the unit to | | |
| реп | perform spill | | |
| con | containment functions, | | |
| b. Ir | b. Inspect the | □Yes* X No □N/A | All parts in good condition |
| con | connections to the | | |
| AST | AST for tightness, as well as the holts | | |
| nuts | nuts, washers for | | |
| con | condition and replace | | |
| if ne | if necessary. | | |
| c. D | c. Does equipment | X Yes □No* □N/A | Tank level device is a Morrison brand clock type gauge and appropriate for tank. Gauge is |
| COE | operate as required? | VV - NI-* NIIA | Sized Correctly for lank. |
| a. C | suited for above | V Les DNO DNA | |
| grou | ground use by the | | |
| mar | manufacturer | | |
| 6.0 Miscellaneous | | | |
| 6 4/7 | Are they in good condition? | X Yes □No* □N/A | All conduit and wiring in good condition. All wire connection junction boxes tight with no corrosion observed on wiring. |
| 1 | that all labels | Y Vos No* NIA | |
| 6.2 Labels and Ens tags reac | Ensure that all labels and tags are intact and readable. | X Yes □No* □N/A | Tank labeling in good condition. This include tank ID, capacity, NFPA placard, and Hazard placard. |
|) | 450.0. | | |



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Gauge Accuracy Report

| G-02 | Gas | 342 | 32,, | "I+ | Pass |
|-------------|---------------|-----------|-------------------|---------|----------|
| R-01 | 305 | W C | 2250 | 24.1 | Воод |
| 10 4 | Diesel | +5 | 5.52 | "S.+ | Pass |
| 70 | | | | | |
| Used Oil | Used Oil | 8,, | 8 | 0,, | Pass |
| 60 | | 31 | | | |
| IiO bəsU | Used Oil | LZ | 25.75" | 25.1- | Pass |
| 70 | | | | | |
| liO bəsU | liO bəsU | | 44,, | 0,, | Pass |
| 10 | HO DOSO | 0.1 | 67:01 | 67 | cen I |
| Used Oil | LiO bəsU | 18 | 18.25" | + .25" | Pass |
| Ebe8 bwi | Eb68 | L | | 0 | Pass |
| 04w21 | ED69 | LEL | ···L | 220 | росц |
| PMI | 04W2I | "St | "St | 00 | Pass |
| TW 01 | | | | | |
| IM d | TW 01 | | 27.5" | 05.+ | Pass |
| D-01 | | | | | |
| Maint. | Off Rd Diesel | 342 | 32.75" | | Pass |
| D-05 | | 509-98-55 | C-0000 & ACC00000 | r ereas | 5,000,00 |
| тiЧ | Off Rd Diesel | "S.I4 | "ST.14 | +.25" | Pass |
| D-01 | | | | | |
| 1iq | Off Rd Diesel | 39: | 34.75" | "SZ.I- | Pass |
| Tank # | Product | Reading | Actual | -/+ | Results |

Comments: Pit D-02 was tested on May 15, 2018.

FINAL REPORT

EZY 3 LOCATOR PLUS

MANUFACTURED BY: ESTABROOK'S INC., 1-877-368-7215

September 11, 2017

| | | | mation: | Operator Info |
|---|--|--------------------------------------|--|-----------------|
| • | NOT APPLICABLE X | VIER INTRUSION | W NOISURTNI A3 | TAW ON |
| | | CK ONFA ONE) | | |
| | | | | |
| | (A Series of A Se | ANK <u>FAILS</u> THE CRITERIA SET FO | | |
| | | L (WET) PORTION LEAK | EFOM SEODUCT LEVE | a |
| | | ANK <u>EALLS</u> THE CRITERIA SET FO | ILLAGE (DRY) PORTION | ı |
| | | | na v naskum monate, namendo – v nijev m jestova se i v 1900-evenile. | X |
| | C BEAEVES: | TERISTIC OF A LEAK | ACOUSTIC CHARAC | THE |
| | | | 509 (20-9) | |
| | ALOPS AV , | Rosnok | Gasoline | PRODUCT TYPE |
| | ocky Mount Rd | A 164 Old R | 3000 Gallons | ULLAGE VOL. |
| • | ydale Quarry | LOCATION Rock | o Gallons | PRODUCT VOL. |
| | 2 | TAUK # | Gallons 3000 | TOTAL TANK VOL. |

Facility ID #

Telephone #

Expiration Date

Certification #

P.O. Box 531 Cloverdale, Virginia 24077 Phone: 540-312-8467 Fax: 540-400-8865

540.312.8467

1/21/2018

136374



Address

Testing Firm

Sign Name

Print Name

PO Box 537 Cloverdale, VA 24077

Environmental Solutions

Ended: WATER INTRUSION TEST PERIOD Majet In :usBeg "A" Factor ...0.0 10,0 ited to smill = 08 x 80. = 0875 + Product Ground Calculation for Test Period: 76.0 of molto8 Average: C9 #3 **C9** #5 Cal #1 :bebbA 72 m Dia. Helght WATER SENSOR CALIBRATION 2:30 PM Test Ended: Beside Tanks Where: 039.0 2:15 PM Test Began: BY: Stick 0.550 2:00 PM Blower Tumed Off: Depth of Groundwater Determined: 0.650 1:46 PM Test Prèssure Reached: 1:30 PM Blower Started: PRESSURE TIME **ACOUSTIC TEST TIME** 0.600 (Z) ISd-/+ **TEST PRESSURE** NOTE: If Line 6 is Less Than .5 PSI Line 7 Shall be .5 PSI (9) ISd 000.0 129 & bbb sydwia Total Head Pressure Minus Outside Water Pressure (S) ISY-/+ 000.0 INCHES OF WATER OUTSIDE TANK 000.0 **8£0.** (4) ISd Line 1 + Line 2 = Total Positive Head Pressure In Tank 000.0 (5) IS9 INCHES OF WATER IN TAUK 000.0 **860.** PSI (2) WEIGHT OF PRODUCT INCHES OF PRODUCT 920.0 000.0 (I) ISd PRESSURE SENSOR CALCULATION Roanoke, VA 24014 Gasoline PRODUCT TYPE 4764 Old Rocky Mount Rd 3000 Gallons ULLAGE VOL **Воскудаю Спапу** LOCATION o Gallons PRODUCT VOL. # XNAT 3000 Gallons TOTAL TANK VOL Facility ID # Monday, September 11, 2017 DATE WANUFACTURED BY: ESTABROOK'S INC., 1-877-368-7215 DATA SHEET PRESSURE CALCULATION & WATER SENSOR CALIBRATION EXY 3 LOCATOR PLUS



| Rockydale Quarry 4754 Old Rocky Mount Rd Roanoke, VA 24014 | Location: | Four Star Petroleum 1119 Beaumont Rd Roanoke, VA 24019 | Customer: |
|--|-----------|--|-----------|
|--|-----------|--|-----------|

| September 11, 2017 | Dates |
|--------------------|-------------|
| Rick Trogdon | Technician: |

PRECISION LINE TICHTNESS TEST

| Conclusion: | Pass | Pass | |
|------------------------|-------------|-------------|--|
| Leak volume (ICL-FCL): | 0100. | 0000. | |
| Final cylinder | 0670. | 0770. | |
| fuitisi cylinder: | 0080. | 0770. | |
| Isolation dispenser: | Shear Valve | Shear Valve | |
| idumd nonelosi | Ball Valve | Ball Valve | |
| Pump Manufacturer: | FE Petro | Red Jacket | |
| Line Construction: | Steel | Steel | |
| Produce | Regular | Diesel | |

Comments:

Note: Pressurized Lines and leak detectors must be tested annually Threshold +/- .005 GPH for 30 minutes P/D 0.10 leak 100% PA 0%

FINAL REPORT

EZY 3 LOCATOR PLUS

DATE

MANUFACTURED BY: ESTABROOK'S INC., 1-877-368-7215

September 11, 2017

| | 1/51/5018 | Certification # Expiration Date | Rick Trogdon | emsN hind Sign Name |
|-----------|---|------------------------------------|------------------------------|------------------------|
| | | | | Operator Info |
| ja | NOT APPLICABLE X | ER INTRUSION | TTAW WOISION WATE | 'AN ON |
| | | K ONLY ONE) | | |
| | : | SOR INDICATES: | WATER SEN | |
| | T FORTH BY THE U.S. EPA. | IK <u>byitë</u> lhe cimleriv se. | тніѕ имрекскоимр ѕтокьсе тли | |
| | CAK | (WET) PORTION LE | BEFOM BEODUCT LEVEL | and a second of |
| | т гоктн ву тне и.с. ерр. | K <u>FAILS</u> THE CRITERIA SET | ТНІЅ ОИDERGROUND STORAGE TAN | |
| | | | ULLAGE (DRY) PORTION L | |
| | | | MANAGEMENT OF BELLOO | |
| | ET FORTH BY THE U.S. EPA. | NK PASSES THE CRITERIA S | THIS UNDERGROUND STORAGE TAN | 1/ |
| | 9 | | ANY L LINGIL | X |
| | EVK BEAEVES: | ERISTIC OF A LI | E ACOUSTIC CHARACT | IHT |
| 7 | many the second of the second of the second | | R-01 (ON ROAD) | |
| | noke, VA 24014 | EOR | Diesel | PRODUCT TYPE |
| | id Rocky Mount Rd | O 4924 | 10000 Gallons | ULLAGE VOL. |
| | Sockydale Quarry | госудом в | 0 Gallons | PRODUCT VOL. |
| 124 13 | | TANK # | Gallons 10000 | IOVALIANK VOL. |

Facility ID #

enonqeleT

P.O. Box 531 Cloverdale, Virginia 24077 Phone: 540-312-8467 Fax: 540-400-8865

540.312.8467



Address

Testing Firm

PO Box 537 Cloverdale, VA 24077

Environmental Solutions

| | | Water In | | Began: | TEST PERIOD | MOIZURTMI RETA |
|------------|-----------------------------|----------------|------------|--------------------|---------------------|---|
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| avilla a | to to to | | | 12:00 PM | • | Test Ended: |
| le Tanks | 101 101 | Λ. | 099'0 | MA 34:11 | | Test Began: |
| tick | oth of Groundwater Deternal | dec | 0.660 | MA 05:11 | | Blower Turned Off: |
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| | | | PRESSURE | BMT MA 00:11 | | Blower Started: |
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| (4) ISH | 000.0 | _ = | 9 | £0. | × | 0.0 |
| (5) 129 | 000.0 | = | ık | Pressure in Tar | | INCHES OF WATER |
| (S) IS4 | 000.0 | | | εο. | x | 0.0 |
| (r) isa — | 000.0 | | | O.03 WEIGHT OF | xx | 0.0 INCHES OF PRO |
| , | NOIT | YTODTY: | 2EN2OK C | PRESSURE | | |
| | | | | | | |
| | Rosnoke, VA 24014 | | | 1080 | 10 | PRODUCT TYPE |
| P | 4764 Old Rocky Mount Ro | | - | 10000 Gallons | | ULLAGE VOL. |
| | Rockydale Quarry | NOTADO | | 0 Gallons | | PRODUCT VOL |
| • | ı | # MMAI | | Sallons | 10000 | TOTAL TAUK YOL |
| | | Facility ID #. | _ | 111, 2017 | nday, Septembe | OM STAD |
| | | # CI 14#1003 | | | | |
| | ATA SHEET | ra . | | (<u>1284</u> 0000 | was results and the | WYNNEYCLINED B |



| Rockydale Quarry 4754 Old Rocky Mount Rd Roanoke, VA 24014 | | Rockydale Quarry 4754 Old Rocky Mount Rd Roanoke, VA 24014 | Customer: |
|--|--|--|-----------|
|--|--|--|-----------|

| May 15, 2018 | Date: |
|--------------|-------------|
| Rick Trogdon | Technician: |

PRECISION LINE TIGHTNESS TEST

| Conclusion: | Pass | |
|------------------------|-------------|--|
| Leak volume (ICL-FCL): | 0100. | |
| Final cylinder: | 0140. | |
| Initial cylinder: | 0450. | |
| Isolation dispenser: | Shear Valve | |
| Isolation pump: | Ball Valve | |
| Pump Manufacturer: | Red Jacket | |
| Line Construction: | Steel | |
| Product: | Pit D02 | |

Comments:

Mechanical Line Leak Detector Test

| Pass/Fail | Pass | |
|----------------|------------|--|
| Model: | FXIVD | |
| Leak Detector: | Red Jacket | |
| Product: | Pit D02 | |

Comments:

Note: Pressurized Lines and leak detectors must be tested annually Threshold +/- .005 GPH for 30 minutes P/D 0.10 leak 100% PFA 0%



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Aboveground Storage Tank Ultrasonic Thickness Test

Tank Pit D01 External Wall 6000 gallons Off Rd Diesel

| ui 657. | Actual Shell Thickness (West) |
|---------|---------------------------------|
| ni 202. | Actual Shell Thickness (East) |
| ni 822. | Actual Shell Thickness (South) |
| ni 632. | Actual Shell Thickness (North) |
| ni 262. | Actual Shell Thickness (Bottom) |
| ni 002. | Actual Shell Thickness (Top) |
| | Design Shell Thickness Unknown |
| | |

Results: The measurements taken with the NDT-NOVA 100-D Ultrasonic Thickness Gauge as well as the visual tank evaluation confirm the tank has met the AST inspection requirements according to American Petroleum Institute Standard 635



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Aboveground Storage Tank Ultrasonic Thickness Test

Tank # G01

External Wall
6000 Gallons
Temp Closed

| ni 791. | Actual Shell Thickness (West) |
|---------|---------------------------------|
| ui 961. | Actual Shell Thickness (East) |
| ni 291. | Actual Shell Thickness (South) |
| ni 991. | Actual Shell Thickness (North) |
| ni 791. | Actual Shell Thickness (Bottom) |
| ni 291. | Actual Shell Thickness (Top) |
| | Design Shell Thickness Unknown |

Results: The measurements taken with the NDT-NOVA 100-D Ultrasonic Thickness Gauge as well as the visual tank evaluation confirm the tank has met the AST inspection requirements according to American Petroleum Institute Standard 635



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Aboveground Storage Tank Ultrasonic Thickness Test

Tank #Maint. Dol External Wall 6000 Gallons Off RdDiesel

| ni 862. | Actual Shell Thickness (West) |
|---------|---------------------------------|
| ni 922. | Actual Shell Thickness (East) |
| ni 792. | Actual Shell Thickness (South) |
| ni 732. | Actual Shell Thickness (North) |
| ni 892. | Actual Shell Thickness (Bottom) |
| ni 272. | Actual Shell Thickness (Top) |
| | Design Shell Thickness Unknown |

Results: The measurements taken with the NDT-NOVA 100-D Ultrasonic Thickness Gauge as well as the visual tank evaluation confirm the tank has met the AST inspection requirements according to American Petroleum Institute Standard 635



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Aboveground Storage Tank Ultrasonic Thickness Test

Tank #PMI 10WT

External Wall
1000 Gallons
Motor Oil

| ni 881. | Actual Shell Thickness (West) |
|---------|---------------------------------|
| ni 891. | Actual Shell Thickness (East) |
| ni TEI. | Actual Shell Thickness (South) |
| ni 201. | Actual Shell Thickness (North) |
| ni TeI. | Actual Shell Thickness (Bottom) |
| ni 821. | Actual Shell Thickness (Top) |
| | Design Shell Thickness Unknown |

Results: The measurements taken with the NDT-NOVA 100-D Ultrasonic Thickness Gauge as well as the visual tank evaluation confirm the tank has met the AST inspection requirements according to American Petroleum Institute Standard 635



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Aboveground Storage Tank Ultrasonic Thickness Test

Tank PMI 15w40
External Wall
1000 Gallons
Motor Oil

Design Shell Thickness Unknown
Actual Shell Thickness (Top)
Actual Shell Thickness (Bottom)
Actual Shell Thickness (South)
Actual Shell Thickness (South)
Actual Shell Thickness (East)
Actual Shell Thickness (East)
Actual Shell Thickness (West)
Actual Shell Thickness (West)
Actual Shell Thickness (West)

Results: The measurements taken with the NDT-NOVA 100-D Ultrasonic Thickness Gauge as well as the visual tank evaluation confirm the tank has met the AST inspection requirements according to American Petroleum Institute Standard 635



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Aboveground Storage Tank Ultrasonic Thickness Test

Tank PMI EP68
External Wall
1000 Gallons
Motor Oil

| ni 791. | Actual Shell Thickness (West) |
|---------|---------------------------------|
| ni 201. | Actual Shell Thickness (East) |
| ni 401. | Actual Shell Thickness (South) |
| ni 401. | Actual Shell Thickness (North) |
| ni 201. | Actual Shell Thickness (Bottom) |
| ni 201. | Actual Shell Thickness (Top) |
| | Design Shell Thickness Unknown |

Results: The measurements taken with the NDT-NOVA 100-D Ultrasonic Thickness Gauge as well as the visual tank evaluation confirm the tank has met the AST inspection requirements according to American Petroleum Institute Standard 635



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Aboveground Storage Tank Ultrasonic Thickness Test

Tank Used Oil 01 External Wall 1000 Gallons Used Motor Oil

| ni 421. | Actual Shell Thickness (West) |
|---------|---------------------------------|
| ni 021. | Actual Shell Thickness (East) |
| ni 001. | Actual Shell Thickness (South) |
| ni ccl. | Actual Shell Thickness (North) |
| ni ccl. | Actual Shell Thickness (Bottom) |
| ni EEI. | Actual Shell Thickness (Top) |
| | Design Shell Thickness Unknown |

Results: The measurements taken with the NDT-NOVA 100-D Ultrasonic Thickness Gauge as well as the visual tank evaluation confirm the tank has met the AST inspection requirements according to American Petroleum Institute Standard 635

P.O. Box 531 Cloverdale, Virginia 24077 Phone: 540-312-8467 Fax: 540-400-8865



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Aboveground Storage Tank Ultrasonic Thickness Test

Tank Used Oil 02
External Wall
1000 Gallons
Used Motor Oil

| ni 021. | Actual Shell Thickness (West) |
|---------|---------------------------------|
| ni 821. | Actual Shell Thickness (East) |
| ni 181. | Actual Shell Thickness (South) |
| ni ccl. | Actual Shell Thickness (North) |
| ni 821. | Actual Shell Thickness (Bottom) |
| ni 001. | Actual Shell Thickness (Top) |
| | Design Shell Thickness Unknown |
| | |

Results: The measurements taken with the NDT-NOVA 100-D Ultrasonic Thickness Gauge as well as the visual tank evaluation confirm the tank has met the AST inspection requirements according to American Petroleum Institute Standard 635



P.O. Box 531 Cloverdale, Virginia 24077 Phone: 540-312-8467 Fax: 540-400-8865



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Aboveground Storage Tank Ultrasonic Thickness Test

Tank Used Oil 03
External Wall
3500 Gallons
Used Motor Oil

| ni 921. | Actual Shell Thickness (West) |
|---------|---------------------------------|
| ni eeI. | Actual Shell Thickness (East) |
| ni 181. | Actual Shell Thickness (South) |
| ni 821. | Actual Shell Thickness (North) |
| ni 921. | Actual Shell Thickness (Bottom) |
| ni 201. | Actual Shell Thickness (Top) |
| | Design Shell Thickness Unknown |

Results: The measurements taken with the NDT-NOVA 100-D Ultrasonic Thickness Gauge as well as the visual tank evaluation confirm the tank has met the AST inspection requirements according to American Petroleum Institute Standard 635

Rick Trogdom

P.O. Box 531 Cloverdale, Virginia 24077 Phone: 540-312-8467 Fax: 540-400-8865



Rockydale Quarries 4754 Old Rocky Mount Rd Roanoke, VA 24014

Date: November 13, 2017

Aboveground Storage Tank Ultrasonic Thickness Test

Tank Used Oil 04
External Wall
1000 Gallons
Used Motor Oil

| ni 821. | Actual Shell Thickness (West) |
|---------|---------------------------------|
| ni 921. | Actual Shell Thickness (East) |
| ni 821. | Actual Shell Thickness (South) |
| ni Tel. | Actual Shell Thickness (North) |
| ni TeI. | Actual Shell Thickness (Bottom) |
| ni 001. | Actual Shell Thickness (Top) |
| | Design Shell Thickness Unknown |

Results: The measurements taken with the NDT-NOVA 100-D Ultrasonic Thickness Gauge as well as the visual tank evaluation confirm the tank has met the AST inspection requirements according to American Petroleum Institute Standard 635

Rick Trogdon

APPENDIX C

RESPONSIBLE FACILITY PERSONNEL
GOOD HOUSEKEEPING CHECKLIST
QUARTERLY ROUTINE FACILITY INSPECTION FORM
QUARTERLY ABOVEGROUND STORAGE TANK INSPECTION FORM
NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION
ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)
DIKE DRAINAGE LOG
PRODUCT SPILL LOG

Responsible Facility Personnel

| Mike Chopski | Mine Manager | 540-705-7150 |
|--------------------|----------------------------|--------------|
| Rusty Epperson | General Foreman | 540-588-1457 |
| Brian Glisson | Plant Foreman | 540-682-0554 |
| Steve Muncy | Pit Foreman | 540-204-7443 |
| Lee Thomas | Maintenance Foreman | 540-769-7367 |
| Jerry Price | Mobile Maintenance Manager | 540-676-3291 |
| Dallas Satterfield | E, H & S Coordinator | 540-597-5017 |

Good Housekeeping Checklist

| Good Housekeeping procedures and reminders posted in appropriate locations around the workplace. |
|--|
| Housekeeping inspections conducted on a regular basis. |
| Materials containers stored away from direct traffic routes to prevent accidental spills. |
| Materials containers identified, marked and labeled. |
| Materials containers stacked according to manufacturer's instructions to avoid damage from topping and/or improper weight distribution. |
| Materials containers stored on pallets or similar devices to prevent corrosion which can result from contact with moisture on the ground. |
| Floors, ground surfaces and containment areas kept dry and clean by regularly using brooms, shovels, vacuum cleaners or cleaning machines. |
| Outside areas kept in a neat and orderly conditions. |
| Garbage and waste materials routinely collected and disposed. |
| Evidence of drips, leaks or spills. |
| Utility equipment/vehicles maintained and serviced per operation and maintenance manuals. |
| Walkways and passageways easily accessible, safe and free of protruding objects, materials or equipment. |

QUARTERLY ROUTINE INSPECTION FORM

| Location | Evidence of Spills/Leaks | Evidence of Trash/Scrap Accumulation | Comments/General Observations/Drainage System Observations/Pollution Potential/Preventive Maintenance |
|--------------------------------|-----------------------------|--|---|
| Upper Lube Pad* | | | |
| Upper Maintenance Shop* | | | |
| Lower Lube Pad* | | | |
| Truck Maintenance Shop* | | | |
| Solid Waste Dumpsters | | | |
| Drainage Conveyance Systems | | | |
| Retention Basin #2, Outfall #3 | | | |
| Retention Basin #3, Outfall #2 | | | |
| Retention Basin #4, Outfall #6 | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

^{*}Area includes aboveground oil storage tanks and/or other containers of potential storm water pollutants.

| - | Y=Yes | N=No | Z |
|---|------------|------|---|
| | Inspector: | | ŭ |
| | Date: | | |

/A=Non Applicable omments

QUARTERLY ABOVEGROUND STORAGE TANK INSPECTION FORM

Complete this inspection record monthly for each oil storage tank and associated piping. Visually inspect the tank and piping and place a check or an X in the appropriate box for each item. If any item needs elaboration, do so in the comments space provided. Attach any additional descriptions and comments on a separate sheet of paper.

Time:

| Inspector: | Tank Capa | acity: | | <u> </u> ≥ |
|--|-----------|--------|-----|------------|
| Tank Number: | Tank Con | tents: | | |
| ITEM | YES | NO | N/A | COMMENTS |
| Exterior surfaces show signs of leakage | | | | |
| External coatings are bubbled, cracked, or damaged | П | | П | |
| Tanks are rusted, pitted, or deteriorated | | П | | |
| Bolts, rivets, or seams are damaged, cracked, or rusted | | | | |
| Welds are cracked or non-uniform | | | | |
| Tank foundation has eroded or settled | П | | | |
| Tank supports are deteriorated or buckled | | | В | |
| Leak detection system is damaged or does not operate property | | | | |
| Monitoring equipment is non-functional | В | | | |
| Overflow protection is not properly positioned | | | | |
| Valves are leaking, deteriorated, or damaged | | | | |
| Vents and pressure release devices are obstructed | | | | |
| External stairway/ walkways have spots where water can accumulate | | | | |
| Water has accumulated in pumping system containment pan | | | | |
| Level controls are inoperative | | | | |
| Piping rusted or leaking | | | | |
| Security measures are non-functional | | | | |
| Spill Response Material/Fire Protection Equipment are available and contain minimum materials. | 0 | | | |

Yes: Non-Compliance

Date:_

No: Compliance

N/A: Not Applicable

Retain Form for 3 Years

NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION

| Date of Test or Evaluation | Outfall Observed During the Test or Evaluation | Method Used to Test or Evaluate Discharge | Describe Results from Test for the Presence of Non- Storm Water Discharge | Identify Potential Significant Sources | Name of Person Who Conducted the Test or Evaluation |
|--|--|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| CERTIFICATION | ATION | | | | |
| I, prepared und information s gathering the that there are | ler my direction or supervisio submitted. Based on my inque information, the information significant penalties for subm | Corporate Officer), on with a system desi uiry of the person or a n submitted is, to the mitting false informa | prepared under my direction or supervision with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing | eat this document and all bersonnel properly gather an or those persons directlief, true, accurate, and cof fine and imprisonments. | attachments were and evaluate the ally responsible for omplete. I am aware it for knowing |
| violations. | | | | | |
| A. Name & | A. Name & Official Title (type or print) | | B. Area (| B. Area Code and Telephone No. | |
| C. Signature | | | D. Date Signed | Signed | |
| | | | | | |

Dike Drainage Log

Instructions: This record will be completed by responsible personnel when rainwater collected in secondary containment structure surrounding the aboveground storage tank(s) is authorized to be discharged directly to the ground surface.

| Signature | | | | | |
|-------------------------------|--|--|-----|--|--|
| Comments | | | | | |
| Time Finished | | | | | |
| Time Started | | | | | |
| Presence of Oily Sheen? (Y/N) | | | | | |
| Date | | | i i | | |

**Copies of inspection reports and records will be maintained in Appendix C.

ROCKYDALE – ROANOKE QUARRY ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

| | ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION | (ACSCE |
|-------|---|--------|
| | | |
| DATE: | | |

EVALUATORS:

REVIEW OF SWPPP:

REVIEW OF FACILITY OPERATIONS (TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING):

Mine materials and associated rash that may have or could come into contact with storm water. Leaks or spills that have occurred within the past three years. Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site. Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas. Review of training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of BMPs

INSPECTION OF POLLUTANT SOURCES AND STORMWATER OUTFALLS (TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING):

Evidence of, or the potential for, pollutants entering the drainage system. Evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall

EVALUATION OF BMP EFFECTIVENSS:

ANNUAL OUTFALL EVALUATION FOR UNAUTHORIZED DISCHARGES

SUMMARY:

RESPONSIBLE CORPORATE OFFICER SIGNATURE(S):

I certify under penalty of law that the preceding 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 directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true and 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.

| Signature | Print Name | Title | Date | |
|-----------|------------|-------|------|--------------|
| Signature | Print Name | Title | Date | , |

ROCKYDALE – ROANOKE QUARRY OIL SPILL REPORT

| The spill occurred at (site location, date, time): | |
|--|--|
| I estimate the quantity of the spill to be (gallons or barrels and type of oil): | |
| Source of the discharge: | |
| Description of the affected media (i.e. soil, storm-water, river): | |
| Cause of the discharge: | |
| Damages or injuries caused by the discharge: | |
| Actions being used to stop, remove, and mitigate the effects of the discharge: | |
| Was an evacuation of the area required? | |
| Name of person who completed report: | |

APPENDIX D

TRAINING DOCUMENTATION

Spill Response and Storm Water Pollution Prevention Training Record Rockydale - Roanoke Quarry Roanoke, Virginia

| Date | Name of Employee | Training Exercise | Employee Signature |
|------|------------------|-------------------|--------------------|
| | | | |
| | | | |
| | | | |
| | | | |
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| | | W | |
| | | | |

APPENDIX E

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA (CASHC)

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA (CASHC)

| Facility Name: | | Rockydale - Roanoke Qua | arry | | | | |
|----------------|---|--|---|--|--|---|--|
| Faci | lity Address: | 4592 Franklin Road, SW, | Roanoke, V | A | | | |
| | Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons? | | | | | | |
| | Yes | No | X | | | | |
| | secondary containment plus sufficient ground storage tank area? | a total oil storage capacity at that is sufficiently large to oil storage tank plus sufficiently | o contain the ent freeboard | capacity of the la | argest aboveground oil | storage tank | |
| | 165 | | Λ | | | | |
| | at a distance (as calc formula) such that a c For further description "Guidance for Facility to this part, section 10 | a total oil storage capacity ulated using the appropriat discharge from the facility of n of fish and wildlife and sen y and Vessel Response Plans , for availability) and the ap | te formula in could cause in sitive envirous: Fish and W plicable Area | Attachment C-III njury to fish and v nments, see Apper Vildlife and Sensiti | I to this appendix or a wildlife and sensitive en dices I, II, and III to Do ive Environments" (see | comparable nvironments? OC/NOAA's | |
| | at a distance (as calc formula) such that a di | a total oil storage capacity ulated using the appropriat ischarge from the facility wo | e formula in | Attachment C-II | I to this appendix or a | | |
| | Yes | No | | X | | | |
| | experienced a reportab | e a total oil storage capaci ble oil spill in an amount gre No | | qual to 10,000 gal | | | |
| | | | Certificatio | n | | | |
| | | | | | | | |
| doci | ument and that based of | law that I have personally on my inquiry of those indiv rue, accurate, and completed | viduals respo | | | | |
| Sign | nature of Responsible (| Corporate Officer | | | | | |
| | Toseph W. Alt | 1 1 2 | | | | | |
| Prin | ited Name | | | | | | |
| C | FO | | | | | | |
| Title | | | | | | | |
| | 1/16/19 | | | | | | |
| Date | | | | | | | |