

VOLUME 6

**FRONTIER STONE, LLC
PROPOSED FRONTIER STONE QUARRY**

APPENDIX 14

- **Stormwater Pollution Prevention Plan**

January 29, 2014

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**STORMWATER POLLUTION
PREVENTION PLAN**

**FRONTIER STONE, LLC.
FRONTIER STONE QUARRY
TOWN OF SHELBY, NEW YORK**

**STORMWATER POLLUTION
PREVENTION PLAN**

**FRONTIER STONE, LLC.
FRONTIER STONE QUARRY
TOWN OF SHELBY, NEW YORK**

**Prepared for:
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President
Frontier Stone, LLC.**

**Prepared By:
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January 21, 2014

January 2014

AUTHORIZATION AND 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 contained in this document. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained herein 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.

Signature: _____

Date: _____

David J. Mahar, President
Frontier Stone, LLC

Stormwater Compliance Summary
For Frontier Stone, LLC (Frontier) Frontier Stone Quarry
Sector J (Mineral Mining and Dressing) and SIC 1429 - Crushed and Broken Stone Mining
Town of Shelby, New York

The following is a summary of key elements of the Stormwater Pollution Prevention Plan. To be in compliance with the New York State Department of Environmental Conservation (NYSDEC) Multi-Sector General Permit (MSGP) for stormwater discharges associated with industrial activities, GP-0-12-001, you must complete the following:

Monthly

- ✓ Conduct monthly tank inspections.
- ✓ Inspect sediment trap.
- ✓ **Secondary Containment Drainage Logs.**
 - If it is ever necessary to discharge from secondary containment the accumulated stormwater will be screened for contamination (i.e., sheen);
 - Log Drainage on Secondary Drainage Log provided in Appendix N, and
 - If a release has occurred in the secondary containment then a representative sample must be collected and analyzed for pH and the presence of the substance(s) stored within the containment area and/or any other pollutants that could be present.

Quarterly

- ✓ Conduct Quarterly **Visual Stormwater Monitoring** in accordance with Section 8.1.1. for outfall 001 during the periods of:
 - January through March;
 - April through June;
 - July through September, and
 - October through December.
- Complete Inspection Forms attached in Appendix I.
- Retain the completed inspection forms in Appendix Q.
- If deficiencies are identified, document and take appropriate corrective actions.

Annually

- ✓ Conduct **Annual Comprehensive Site Compliance Evaluation** Section 8.2
 - Complete Inspection Forms attached in Appendix O.
 - Retain the completed inspection forms in Appendix Q.
 - If deficiencies are identified, document and take appropriate corrective actions.
- ✓ Conduct **Annual Dry Weather Flow Inspection** Section 8.1.2.
 - Visually inspect the discharges from Outfall 001.
 - Complete Inspection Forms attached in Appendix J.
 - Retain the completed inspection forms in Appendix Q.
 - If deficiencies are identified, document and take appropriate corrective actions.

- ✓ Conduct **Annual Benchmark Sampling** Section 8.1.3
 - Review Sampling Guidance in Appendix H.
 - Collect stormwater sample from the following location from a storm event with at least 0.1 inch of precipitation from the outfall(s) using “Stormwater Sampling Field Data Form available in Appendix H one for Outfall 001.
 - Retain completed Stormwater Sampling Field Data Form in Appendix Q.
 - Submit to State Certified Laboratory for analysis of contaminants listed in Table 4: Benchmark Parameter List.
 - Maintain sample results from lab in Appendix Q.
 - Compare results to parameters, if exceeded take appropriate action.
 - Transfer results on the DMR form and Annual Certification Report (see instructions for summation below).
 - If results of analysis of a benchmark sample exceed a cut-off concentration for one or more parameters, you must:
 - Perform corrective action to minimize exceedance;
 - Collect an additional sample at the outfall where the exceedance occurred to determine the effectiveness of corrective actions. Sampling must occur during the first six months of the following calendar year January 1 to June 30, and
 - Complete a Corrective Action Form provided in Appendix K and submit to NYSDEC by July 31 of the calendar year.

- ✓ Complete **Annual Certification Report** Section 8.3.
 - Complete Annual Certification Form which is a fillable PDF provided on the NYSDEC’s website or a copy is provided in Appendix O.
 - Include with Annual Certification Report your DMR’s provided by the NYSDEC.
 - Mail Annual Certification Report and DMR’s to the New York State Department of Environmental Conservation by **February 28th** of each year.
 - Retain the copies in Appendix Q.

- ✓ Conduct **Employee Training** Section 6.1.9.
 - All employees who “work with or in areas that contain potential sources of stormwater pollution” will receive this training on an annual basis. A record of training must be maintained and available upon request.
 - Complete Employee Training Form attached in Appendix F.
 - If deficiencies are identified, document and take appropriate corrective actions.

- ✓ Revise SWPPP Plans Section 9.0.
 - The facility shall amend the plan whenever there is a change in design, construction, operation or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the US or if the stormwater pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in the plan.
 - Revisions may include: Change in pollution prevention team members or their contact information, addition or deletion of potential pollution sources at the facility (dumpster, raw material or fuel storage).
 - Complete Table 6: Record of Revisions provided in Section 9.

General Permit Renewal

- ✓ The NYSDEC SPDES MSGP for Stormwater Discharges Associated with Industrial Activity (GP-0-12-001) became effective October 1, 2012, and will remain in effect until September 30, 2017. The facility will be notified by the NYSDEC if there are changes to the General Permit.

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GLOSSARY

BAT – Best Available Technology
BCT – Best Control Technology
BMP – Best Management Practices
BPT – Best Practicable Technology
CFR – Code of Federal Regulations
CWA – Clean Water Act
DMR – Discharge Monitoring Report
EMS – Environmental Management System
EPCRA – Emergency Planning and Community Right-To-Know Act
FWPCA – Federal Water Pollution Control Act
MS4 – Municipal Separate Storm Sewer System
MSGP – Multi-Sector General Permit
NOI – Notice of Intent
NOM – Notice of Modification
NOT – Notice of Termination
NYCRR – New York Codes Rules and Regulations
NYSDEC – New York State Department of Environmental Conservation
POTW – Publicly Owned Treatment Works
SEQRA – New York State Environmental Quality Review Act
SIC – Standard Industrial Classification
SPCC – Spill Prevention, Control and Countermeasures Plan
SPDES – State Pollutant Discharge Elimination System
SVOC – Semi-Volatile Organic Compound
SWPPP – Storm Water Pollution Prevention Plan
USEPA – United States Environmental Protections Agency
VOC – Volatile Organic Compound

1.0 INTRODUCTION

Frontier Stone's quarry is classified in industrial Sector J (Mineral Mining and Dressing) and SIC code 1429 - crushed and broken stone mining. This Storm Water Pollution Prevention Plan (SWPPP) was prepared for Frontier Stone, LLC (Frontier) to address stormwater pollution prevention at its proposed quarry located on Sour Springs Road, Town of Shelby, Orleans County, New York. Since there will be off-site discharge of stormwater related to industrial activity at this facility, Frontier must prepare a SWPPP and obtain a Multi-Sector General Permit for the discharge of stormwater. This SWPPP was prepared for the Frontier quarry by Continental Placer Inc. and will address stormwater pollution prevention at the facility. A redacted copy of the permit is provided in Appendix A.

1.1 Background

In 1972, Congress passed the Federal Water Pollution Control Act (FWPCA), also known as the Clean Water Act (CWA), to restore and maintain the quality of the nation's waterways. The ultimate goal was to ensure that rivers and streams were fishable, swimmable, and drinkable. In 1987, the Water Quality Act (WQA) added provisions to the CWA that allowed the United States Environmental Protection Agency (USEPA) to govern stormwater discharges from industrial activities. The USEPA established the Multi-Sector General Stormwater Permit, which included provisions for the development of a SWPPP by each industrial facility discharging stormwater. Regulatory implementation of this permit has been delegated to the New York State Department of Environmental Conservation (NYSDEC). The NYSDEC issued a multi-sector general permit for stormwater discharges associated with industrial activities, GP-0-12-001, on September 28, 2012. The effective date of GP-0-12-001 is October 1, 2012, and the expiration date is September 30, 2017.

Implementation and maintenance of the SWPPP will provide the Frontier Quarry personnel with the tools to reduce pollutants potentially contained in stormwater discharges. This SWPPP is to be maintained at the Frontier Quarry and is to be made available for review by the USEPA or NYSDEC or their duly authorized representatives in the event of an on-site inspection. If necessary, a copy of this plan is to be submitted to the USEPA or the NYSDEC within seven days upon receipt of request.

Frontier will file the necessary Notice of Intent (NOI) in accordance with the requirements of this permit and will be authorized to discharge stormwater under the terms and conditions of this permit 30 calendar days after the date that the NOI is received by the NYSDEC. A copy of the NOI is found in Appendix B.

1.2 SWPPP Content Check List

This SWPPP includes all of the following:

- ✓ Identification of the pollution prevention team members.
- ✓ Location and description of the facility.
- ✓ Summary of potential pollutant sources including:
- ✓ Identify areas where potential spills or releases can contribute to pollutants in discharges and their accompanying drainage points.

- ✓ A list of reportable spills and releases of petroleum and hazardous substances or other pollutants that may adversely affect water quality that occurred during the three year period prior to the date of submission of the Notice of Intent (NOI) form.
- ✓ A site map identifying the following:
 - Size of the property in acres;
 - Location and extent of significant structures and impervious surfaces;
 - Location of each outfall labeled with the outfall identification;
 - The approximate outline of the drainage area to each outfall;
 - Location of haul and access roads;
 - Direction of stormwater flow using arrows;
 - Location of all receiving waters in the immediate vicinity of the facility;
 - Location of all stormwater conveyances
 - Locations where stormwater flows have significant potential to cause erosion;
 - Location and source of runoff from adjacent property containing significant quantities of pollutants and/or volume of concern;
 - Locations of potential pollutant sources;
 - Location and description of non-stormwater discharges;
 - Locations where major spills or leaks have occurred;
 - Locations of all stormwater monitoring points, and Locations of all existing Best Management Practices (BMPs) and BCT Best Controls Technologies to reduce pollutants in stormwater discharge;
- ✓ Description of the facility inspection and monitoring plans;
- ✓ Description of the implementation schedule, training program, and provisions for amendment of the plan;
- ✓ Certification of Non-Stormwater discharges.
- ✓ Documentation of Permit Eligibility related to Endangered Species and Historic Places, if applicable.
- ✓ Monitoring and sampling data.
- ✓ A copy of the permit, the NOI authorization letter and all NOI/NOM forms.
- ✓ Sector J (Mineral Mining & Dressing) additions to the Site Map:
 - Mining site boundaries;
 - Outdoor chemical and explosives storage areas;
 - Overburden, materials, soils or waste storage areas;
 - Location of mine drainage dewatering or other process water;
 - Surface waters;
 - Boundary of tributary areas that are subject to effluent limitations guidelines, and
 - Location(s) of reclaimed areas.
- ✓ Sector J erosion and sediment control plan including details of temporary and permanent structural and vegetative measures, when applicable.

1.3 Other Plans and Documents

The Frontier Quarry is proposed at this time, pending a NYSDEC mine permit. At present the site is an agricultural field. Therefore, Frontier's only employee is Mr. David Mahar, its president. Hence, he is listed under all responsibilities at this time.

The Frontier Quarry will maintain a NYSDEC Mined Land Reclamation permit and associated Mined Land Use Plan. The site shall also minimize stormwater pollution through implementation of applicable permit conditions and/or practices specified in its Mined Land Use Plan. Copies of these documents are maintained with the "environmental files" at the corporate office.

2.0 STORMWATER POLLUTION PREVENTION TEAM

The SWPPP Coordinator for Frontier Quarry is David Mahar (Office: 716-751-9670, Cell: 716-861-8153). Mr. Mahar is also the responsible corporate person. The SWPPP coordinator and his responsibilities are shown in Table 1.

Table 1: SWPPP Coordinator and Summary of Duties

SWPPP Coordinator		
Name	Title	Phone Number
David Mahar	President	716-751-9670 716-861-8153 (cell)
Responsibilities: <ul style="list-style-type: none"> • Signatory Authority and authorize development and implementation of the SWPPP • Overall Facility Operation • Create SWPPP team • Spill Response Coordination • Authorize, initiate, and/or recommend facility and managerial improvements to prevent stormwater pollution • Oversee implementation of housekeeping, maintenance practices and monitoring procedures identified in SWPPP • Perform routine inspections and corrective action • Perform erosion and sediment control inspectional and follow up • Ensure the integrity of the non-numeric effluent BMPs/BCTs • Revise SWPPP, as needed, or requested by Team Members • Implement and oversee employee training • Ensure all samples are collected and analyzed as required by permit • Prepare DMR reports and supervise submittals • Perform Annual Comprehensive Site Compliance Evaluation 		

3.0 FACILITY DESCRIPTION

3.1 Facility Location

The proposed mine site is located in the Town of Shelby, Orleans County about 3.7 miles south of Medina, New York. The property principally fronts along Fletcher Chapel Road with a small portion along Sour Springs Road. South of the site is a National Grid power line and south of the power line is the Iroquois National Wildlife Refuge. Figure 1 is a location map of the site.

The area can be characterized as rural farmland situated on the low relief Erie-Ontario Lowlands physiographic province. There are scattered hamlets in the area such as Shelby Center, East Shelby and Alabama, however, the predominate feature of the area is the Iroquois National Wildlife Refuge.

3.2 Site Industrial Activities

The Frontier site currently is composed of active farmland cultivated in row crops such as corn and beans. The parcel being leased by Frontier is approximately 269.5± acres in size and is bisected by a National Grid power line.

Frontier proposes to develop and operate a 215.5± acre dolomite/limestone quarry on a 269.45± acre parcel. The excavation area totals 172.2± acres and mining is divided into four phases over the estimated 75 year operational life of the facility. Quarrying will be conducted by standard drill and blast technology with front-end loaders and (or) excavators feeding an in-pit primary crusher with shot rock from the muck pile. The primary crusher will follow the advancing face. Rock will be conveyed upward to the processing plant at the land surface by conveyor for further processing. Mining will occur below the groundwater table and the project includes dewatering of the quarry area. Wash water potentially to be used in the future at the processing facility will be drawn from groundwater and surface water accumulating in the pit and recirculated for reuse. Settling ponds will be located in the plant area; no offsite discharge will occur from these ponds. The site will be reclaimed by grading, replacement of topsoil, re-vegetating upland areas with an approved seed mix, and the creation of two lakes. The lakes, separated by an existing utility line, are approximately 38.9 and 161.2 acres in size. The first 50 feet of shore below the water surface will be less than five feet deep. The reclamation objective will be to create recreational lakes/wildlife habitat.

During operation of the quarry, groundwater and precipitation will seasonally accumulate in the quarry sump, the planned location being the southwest corner of phase 1 (initially). This water will be discharged via pipe to the adjacent agricultural drainage ditch.

Proposed industrial activities at the site include the operation of mobile equipment to mine the stone and for its transport in addition to stripping of overburden. Mobile equipment includes trucks, front-end loaders, excavators and a bulldozer. Operation of the equipment includes the use of diesel fuel, hydraulic oil, greases and antifreeze. Operation of the equipment has the potential to contribute particulate matter, fuel, oil, grease and antifreeze through drips, leaks and/or spills. Mobile equipment is proposed to be fueled onsite from truck mounted tanks.