

RAN 5 PROJECT

Storm Water Pollution Prevention Plan

Roxul USA, Inc. Jefferson County, West Virginia

> July 2017 Revised October 2017

Revision Summary Log

Change No.	Description of Change	Date	Comments

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1.0 INTRODUCTION

The United States Environmental Protection Agency (EPA) controls storm water and sewer discharges through its National Pollutant Discharge Elimination System (NPDES) and provides guidance to municipalities, states and federal permitting authorities on how to meet storm water pollution control goals as flexibly and cost-effectively as possible. Construction activities that disturb more than three (3) acres during the life of the project, or are part of a larger common plan of development, are required to submit a Site Registration Form and prepare a Storm Water Pollution Prevention Plan (SWPPP) as part of the permit application. The EPA has delegated responsibility for implementation of these regulations to state agencies.

The West Virginia Department of Environmental Protection (WVDEP), Division of Water and Waste Management (DWWM) regulates storm water discharges through its West Virginia General Water Pollution Control Permit program. The regulations also require construction sites, disturbing more than one (1) acre of land, to prepare a storm water pollution prevention plan. The goal of this plan is to improve water quality by reducing pollutants in storm water discharges. Construction activities potentially produce many different kinds of pollutants that may adversely impact storm water.

The main pollutant of concern at construction projects is sediment, which can become entrained in storm water runoff following excavation and/or grading activities that remove protective vegetative cover. When the storm water runoff carrying these sediments reaches a lake or stream and slows down, the suspended sediments are deposited, which can choke the river channel or cover areas where fish spawn and aquatic plants grow. The particles also cloud waters causing aquatic respiration problems potentially resulting in the death of fish and plants in these ecosystems.

Construction activities may also involve the use of toxic or hazardous materials, including petroleum products, building materials, such as asphalt, sealants and concrete, and other chemicals that can be harmful to humans and aquatic life.

The objectives of this plan are:

- To identify potential sources of pollution that may be reasonably expected to affect the quality of storm water discharges associated with construction activities.
- To describe those practices, controls, and Best Management Practices (BMP) to be used to minimize storm water pollution.
- To assure compliance with the terms and conditions listed in the Permit.

The Thrasher Group, Inc., (Thrasher) has prepared this SWPPP for the Ran 5 Project to satisfy West Virginia (WV) SWPPP requirements for a new construction site disturbance. A Site Registration Application has been completed to obtain regulatory coverage through

the WV general permit for storm water discharges associated with oil and gas related construction activities.

Copies of the SWPPP will be maintained at Roxul field office.

Project Name

RAN 5 Project

Applicant

Roxul USA Inc. Attention: Janusz Tchorzewski Address: 4594 Cayce Road, Byhalia, MS 38611

<u>Preparer</u>

The Thrasher Group, Inc. Attention: Robert Severt Address: 600 White Oaks Boulevard, Bridgeport, WV 26330 Contact Information: 304-624-4108; rsevert@thrashereng.com

This SWPPP will be reviewed and amended during construction as necessary whenever there is a design change or process that could increase the exposure of construction materials to storm water, when a WVDEP representative determines that a modification to the SWPPP is necessary, or whenever there is a spill, leak, release, or unauthorized discharge from the site. Revisions to the SWPPP required as a result of a site inspection will be completed immediately. Reports, inspections, and certifications associated with this SWPPP and Groundwater Protection Plan (GPP) will be retained by Roxul for at least 3 years.

Appendix B presents a list of government agencies that may need to be notified if impacted storm water is released to a water way, if there is a non-storm water discharge event or if there is a spill/release of a hazardous material.

Thrasher conducted stream and wetland investigations for Ran 5 Project on July 17 and July 18, 2017. One (1) isolated palustrine emergent (PEM) wetland was identified during field investigations. Of the aquatic resources associated with the project's environmental area of interest (AOI), this wetland lies within the limits of disturbance but will not be impacted during construction.

Consultations and clearances from the WVDNR Wildlife Resources Section (rare, threatened and endangered species and sensitive habitats review), the State Historic

Preservation Office (Section 106 consultation) and the US Fish and Wildlife Service (Section 7 consultation) shall be obtained prior to construction.

1.1 Project Location

The proposed Ran 5 Project Site is located in Jefferson County, WV within the Charles Town, Martinsburg, Middleway, and Shepherdstown USGS 7.5 minute quadrangle. The proposed site will be located at 365 Granny Smith Lane southeast of Kearnyesville, WV. Approximate center coordinates of the site are 39.375353°N, 77.877569°W as shown on the attached USGS Site Location Map, **Appendix A**.

1.2 Project Description

This SWPPP covers site construction activities associated with the installation of the Ran 5 Project, its above ground related facilities and utility infrastructure. Construction activities associated with installation include but are not limited to: brush hogging and removing top vegetative cover, grading, filling, and compacting the proposed construction limits of disturbance (LOD) and associated activities to prepare the site.

The total area of disturbance will be approximately 99 (98.79) acres within the LOD. The proposed Ran 5 Project will consist of constructing the Roxul plant, support buildings, parking lots, upgrading an existing access road, and installing public utilities.

Vehicle access to the LOD will be granted through the use of an existing access road, to be upgraded as part of the proposed project.

1.3 Climate

Annual precipitation in Jefferson County WV averages approximately 39 inches. Most of the precipitation originates as frontal storms, with some of it deposited as snow, or from thunderstorms.

From May through September, precipitation comes primarily from thunderstorms, with the preponderance of storms occurring from June through August. Thunderstorms occasionally produce intense showers that can deposit 1.5 inches or more of rain within a few hours. Flash floods sometimes occur in streambeds that are normally dry.

1.4 Soils

There are three (3) soil types located within the area of disturbance for the Ran 5 Project site. The soil types exist in different layers which change from the surface layer to the depth where bedrock is present. The soils present within the project area of disturbance consist of a mixture of the following:

• Hagerstown silt loam, 3 to 8 percent slopes, very rocky

- Hagerstown silt loam, 8 to 18 percent slopes, very rocky
- Hagerstown-Rocky outcrop complex, 8 to 15 percent slopes

The soils in the project area are primarily well draining soil with no frequency of ponding and only some rare or occasional flooding. A soils map showing the entire area of disturbance is included in **Appendix D**.

1.5 Surface Water Drainages

Surface water runoff and discharges from the site project area will be controlled by structural devices that slow runoff and cause ponding or direct runoff towards ditches to be controlled by diversions, rock check dams, silt fence, and sediment basins. Details of these features are shown on the Erosion & Sediment Control (E&S) Plans provided in **Appendix E**.

In compliance with the Clean Water Act (CWA), the WVDEP established water quality standards under Title 47CRS2. The water quality standards include designated uses, water quality criteria and anti-degradation policies. To maintain these standards, the WVDEP assigned specific tiers depending on the level of protection needed to maintain water quality and/or existing uses. A Tier 3 classification is given to protect outstanding national resource waters including Federal Wilderness Areas specifically designated federal waters, high quality waters, or naturally reproducing trout streams in state parks, national parks, and national forests. Thrasher conducted a desktop analysis to examine known stream classifications along the alignment. No Tier 3 streams were identified in the Ran 5 Project Site.

2.0 CONSTRUCTION ACTIVITY

Construction of the Ran 5 Project Site is proposed to begin in September 2017 and the estimated construction completion will be April 2018.

Ran 5 Project has secured necessary agreements from private landowners whose property will contain the proposed site. The site construction will include the following activities listed below:

- Clearing, grading and stockpiling of top soil;
- Backfilling and compacting;
- Cleanup, grading, surface roughening, and seeding.

Earthmoving activities will be limited to the proposed LOD as presented in the enclosed plans and detail drawings. Disturbed areas have been limited to the proposed LOD necessary for the excavation of the proposed site development, access road, and to minimize aquatic impacts to the least amount practical. Earthmoving will also be limited

appropriately for weather conditions, specifically during rainfall events. Topsoil will be segregated in agricultural, wetland, and residential areas. Disturbed areas will be permanently stabilized upon completion of construction. All revegetation of disturbed areas associated with this Project will be completed in accordance with the E&S Plans and BMP Technical Installation Details provided in **Appendix D**.

Storm water outfalls, drainage control within the LOD, and materials handling, loading and storage areas are described in the following sections.

2.1 Location of Storm Water Outfalls

Local drainage for the majority of the site is directed via topographic changes and drainage ditches as shown on the USGS Site Location Map **Appendix A** and Erosion and Sediment Control Plan, **Appendix D**. Storm water draining away from the site is expected to leave the project area through storm water erosion controls such as diversions, rock check dams, silt fence, rock outlet protection, and through small drainage channels. The storm water runoff will then flow through stabilized, well vegetated grass swales or into a sediment basin.

2.2 Drainage Control within the LOD

Diversions, rock check damns, silt fence, erosion control matting and diversionary earthen berms will be used to prevent or control storm water running onto the project area. Structural control measures will be used to protect slopes and dissipate erosive energy along hill slopes, and shoulders of access roads to prevent excess sediment runoff.

During construction of the site, engineering controls and work practices will be employed to prevent potential storm water impacts resulting from erosion of excavated materials or chemical impacts due to storm water coming into contact with construction materials, fuel products or equipment. Low-lying areas within the LOD will collect storm water runoff and create small water bodies. Within these areas storm water will be allowed to evaporate, infiltrate and flow through erosion control devices into vegetated drainage channels. Sediment will be maintained within the LOD by the use of diversions, compost filter sock, silt fence, and erosion control matting.

2.3 Materials Handling, Loading, and Storage Areas

Materials handling, loading, and storage areas will be located away from natural storm water drainages or surrounded with earthen berms to prevent storm water impact. Construction materials and chemical storage will be kept covered with secondary containment practices implemented where applicable to prevent storm water impacts.

Small amounts of storm water impounded within secondary containment structures are expected to be lost through evaporation. Ran 5 Project or approved subcontractor

personnel will inspect large accumulations of storm water, and if no impacts are observed (e.g., oil sheens, oil skims, or other evidence of chemical impact) within the secondary containment, the storm water will be allowed to evaporate. If the impounded storm water exhibits signs of impact, such as sheen waters or oil skim, then the storm water will be properly disposed of offsite by a vacuum truck contractor and documented on the Secondary Containment Drainage log contained in **Appendix E**.

3.0 POTENTIAL POLLUTION SOURCES

The following is a description of potential sources of pollutants to storm water discharges.

During construction, possible contaminates include diesel fuel, hydraulic oil, and antifreeze, all being components of machinery on site. Common de-icing chemicals may be used during winter months. Vehicles may also leak motor oil, unleaded gasoline, antifreeze, and transmission fluid.

4.0 GROUNDWATER PROTECTION PLAN

The following section provides a description of BMPs including physical structures, employed to protect groundwater resources. The use of a combination of physical BMPs, good work practices, and storing fuels, chemicals, and materials in covered and isolated areas will prevent groundwater impacts.

4.1 Introduction

While the USEPA has enacted federal laws for general groundwater protection on a national basis such as the Safe Drinking Water Act, individual states in cooperation with local governments are responsible for implementing specific and locally focused groundwater protection strategies. Thrasher has prepared this GPP in accordance with the requirements of the WV Groundwater Protection Rule, 47 C.S.R. 58 § 4.11 and the General Water Pollution Control Permit (Permit No. WV-116815). The Groundwater Protection Rule was promulgated by the WVDEP, DWWM and became effective on June 1st, 1994. The General Water Pollution Control Permit is also under the purview of the WVDEP-DWWM, and became effective on June 12th, 2013. The General Water Pollution Control Permit does not require that the GPP be submitted to the DWWM for review, but a copy of this document must be prepared and kept on the project site.

Construction activities potentially produce many different kinds of pollutants that may adversely impact groundwater. These activities may involve the use of hazardous materials, including petroleum products, building materials such as asphalt, sealants and concrete, and other chemicals that can be harmful to humans and aquatic life. The objectives of this Plan are:

- 1.0 To identify potential sources of pollution associated with project construction that may be reasonably expected to affect the quality of storm water discharges associated with project construction, and subsequently adversely impact groundwater.
- 2.0 To describe those practices, controls, and Best Management Practices (BMPs) to be used to minimize groundwater pollution.
- 3.0 To ensure compliance with the terms and conditions listed in the Construction Storm water Permit and Groundwater Protection Rule.

Thrasher has prepared this GPP for the Ran 5 Project to satisfy the requirements of the West Virginia Groundwater Protection Rule and Construction Storm water General Permit. Copies of this GPP will be maintained at the field office.

<u>Project Name and Location</u> Ran 5 Project Jefferson County, West Virginia Lat: N 39.375353 & Long: W -77.877569 for the center of the project site

<u>Owner/Operator</u> ROXUL USA Inc. 4594 Cayce Road Byhalia, MS 38611

<u>Project Contact</u> The Thrasher Group, Inc c/o Robert Milne, Project Manager 600 White Oaks Boulevard Bridgeport, WV 26330 Business Phone: 304-326-6141

This GPP will be reviewed and amended during construction as necessary whenever there is a LOD design change or process that could increase the exposure of construction materials to groundwater, or whenever there is a spill, leak, release, or unauthorized discharge from the Site. Any revision to the GPP required as a result of a site inspection will be completed immediately. All reports, inspections, and certifications associated with this GPP will be retained by Roxul for at least 3 years.

4.2 Existing Groundwater Quality

Jefferson County is within a prevalent karst area. Additionally, it does have bedrock units which appear to be conducive to yielding sufficient quantities of water for industrial or public use. There are two public drinking water wells within 2,000 feet of the property. Both are located to the southwest. Fox Glen utilities and North Jefferson Elementary own the wells. Both wells are up gradient of our site and appear to be unaffected by site activities. Well Head and Source Water protection areas are unknown. The project site location's immediate receiving streams are tributaries of Shaw Run and Opequon Creek, located in the Potomac River Watershed.

The soils located within the area of disturbance for the site consist of silt loams. The soils in this area are primarily well draining soils with a moderate to slow infiltration rate. A soils map showing the entire area of disturbance is included in **Appendix C** of the SWPPP.

4.3 Operations That May Potentially Contaminate Groundwater Resources

Project construction is scheduled to begin in September 2017 and finish in April 2018. Construction activities that could affect or contaminate ground water resources include:

- Stockpiling of top soil;
- Potential leakage of fuel or engine fluids from heavy equipment used for clearing, grading, compacting, installation, and backfilling the site;
- Onsite fuel tanks and mobile refueling;
- Equipment staging and material laydown areas

There is some potential that any of the above activities could contaminate soil and groundwater in the project area. The BMPs described in Sections 4.0 and 5.0 were designed to control the release of contaminants to the ground surface and groundwater supply. Therefore, only minor discharges associated with operating heavy machinery (e.g. an accidental release of brake fluid) are anticipated.

4.4 Procedures Designed to Protect Groundwater from Potential Contamination

The following section provides a description of BMPs -- including physical structures -employed to protect groundwater resources. The use of a combination of physical BMPs, good work practices, and storing fuels, chemicals, and materials in covered and isolated areas will prevent groundwater impacts.

Construction activities

During project construction, engineering controls and work practices will be employed to prevent potential groundwater impacts resulting from chemical impacts due to storm water coming into contact with construction materials, fuel products or equipment. Low-lying

areas within the ROW will collect storm water runoff and create small water bodies. Within these areas storm water will be allowed to evaporate, infiltrate and flow through erosion control devices into vegetated drainage channels.

Materials Handling

Materials handling, loading, and storage areas will be sited away from natural storm water drainages. Construction materials and chemical storage containers (including drip pans placed under equipment fill ports during fueling activities) will be kept covered with secondary containment practices implemented where applicable to prevent groundwater impacts.

Small amounts of storm water impounded within secondary containment structures are expected to be lost through evaporation. Roxul or approved subcontractor personnel will inspect large accumulations of storm water, and if no impacts are observed (e.g., oil sheens, oil skims, or other evidence of chemical impact) within the secondary containment, the storm water will be allowed to evaporate. If the impounded storm water exhibits signs of impact, such as a sheen or oil skim, then the storm water will be properly disposed of offsite by a vacuum truck contractor and documented on the Secondary Containment Drainage log.

Equipment Cleaning and Maintenance Activities

Cleaning and maintenance of equipment will not take place within 50 feet of aquatic features. Additionally, these activities will take place within designated containment areas in order to prevent products from entering the groundwater.

Sumps/Tanks Carrying Contaminants

Sumps and tanks will not be located within or adjacent to any aquatic features and will be located in areas equipped with secondary containment.

4.5 Potential Pollution Sources and Proposed Best Management Practices

Section 3 provides a description of potential materials/pollutants that will be on site during construction. Some of these materials contain potential pollutants that may become associated with groundwater contamination. The table below shows the materials, potential pollutants associated with the materials and the BMPs that will be used on-site to prevent the possible discharge of pollutants. Below is a description of the procedures and facilities used to protect groundwater quality from the list of potential contaminating sources mentioned in **Section 3**.

Necessary actions will be taken in order to avoid spills during construction. The contractor will have the necessary absorbents on hand to secure any of the possible contaminates in the event of a spill. Federal, state, and local rules and regulations will be followed in the

disposal of any captured spills. Compost filter sock sediment traps/with pipe slope drains to discharge water, clean water diversion ditches, and compost filter sock around the perimeter of the fill slopes will be utilized to prevent sedimentation and erosion. Best Management practices will be utilized on site and maintained during construction as indicated on the Erosion and Sediment Control Plans. These BMPs are also applicable to the General Water Pollution Control Permit - which regulates storm water, and the 404 Program under the Clean Water Act, which regulates streams and wetlands.

4.6 Conditions

The following conditions apply under the Groundwater Protection Rule (47 C.S.R. 58 § 4.11):

- No wastes should be used for deicing, fills, etc., unless provided for in existing regulations.
- All employees shall be instructed and trained on their responsibility to ensure groundwater protection. Job procedures shall provide direction on how to prevent groundwater contamination.
- Inspections shall take place every seven days as part of the storm water requirements. Storm water inspections will ensure that all elements and equipment associated with the GPP are in place, properly functioning, and appropriately managed.

5.0 STORM WATER MANAGEMENT CONTROLS

The following sections provide a description of BMPs including physical structures, employed to prevent soil erosion, work practices and managerial controls used to prevent storm water impacts, and fuels, chemicals, and materials handling practices. The use of a combination of physical BMPs, good work practices, and storing fuels, chemicals, and materials in covered and isolated areas will prevent storm water impacts.

Storm water management controls include both structural controls and non-structural controls, as summarized below and in the following sections.

Structural Controls

- Soil erosion and sediment controls including barriers on the leeward side of excavated materials, stabilization of storm water outfalls, and installation of berms to divert storm water from the outfalls, sediment barriers installed on both sides of wetland and stream crossings and stabilized construction entrances (where applicable);
- Dust control measures;

- Construction site housekeeping;
- Final stabilization.

Non-Structural Controls

- Development of a SWPPP document and establishing a SWPPP Team;
- Providing employee training;
- Recordkeeping and reporting; and,
- Revisions to the SWPPP.

Other non-structural controls include:

- Implementing storm water controls before beginning construction;
- Considering wind direction, soil types, topography and drainage features in project design;
- Prohibiting or modifying work practices that may cause or increase erosion; and,
- Scheduling work for times of the year or times of the day when precipitation is less likely.

5.1 Soil Erosion and Sediment Controls

The Erosion and Sediment (E&S) control measures for construction activities consist of sediment basins, silt fence, diversions, erosion control matting, temporary/permanent seeding, and mulching. BMP technical installation details and standards can be found in **Appendix D**. Straw/hay bales will not be used as an E&S control.

5.2 General Construction Sequence

PHASE 1 CONSTRUCTION SEQUENCE

- 1. Locate all existing utilities. The contractor shall notify Miss Utility of West Virginia at 1-800-245-4848 a minimum of two (2) days prior to any excavation or construction.
- 2. Install all perimeter erosion and sediment controls (silt fence, diversions, sediment basins, traps, inlet protection, stabilized construction entrance, etc.).
- 3. Remove and dispose of all material not suitable for fill: brush, logs, debris, etc.
- 4. Strip and stock topsoil for reuse in finish grading.

PHASE 2 CONSTRUCTION SEQUENCE

- 1. Excavate and rough grade roads and pad.
- 2. Install storm drains and rock outlet protection.
- 3. Complete fine grading. All disturbed areas shall be dressed to a neat and finished appearance and stabilized with seed and mulch or stone.
- 4. After complete stabilization of the drainage area, remove erosion and sediment control facilities and dress and stabilize as required.
- 5. Convert detention basin to permanent storm water basin.

6. Final project clean up and demobilization.

Note: inspections of erosion and sediment controls will occur at least once every seven calendar days and within 24 hours after any storm event greater than 0.5 inches per 24 hour period. Any required repairs or maintenance should be made immediately. Temporary BMPs will be removed upon achieving vegetative stabilization (70% site revegetation).

5.3 General BMP Installation Sequence

- A rock construction entrance shall be provided at all locations where construction traffic will be accessing a paved road directly from a disturbed area.
- Temporary sediment barriers, including appropriately sized silt fence will be placed downslope of work areas and around soil stockpiles, as needed.
- Stockpile slopes will be two to one or flatter, and stockpiles will not exceed 35 feet in height.
- Appropriately sized fencing will be placed around wetlands and water bodies in and adjacent to the work area prior to any construction activities.
- Site dewatering, if needed, will be conducted using a pump and hose. Water will be released into a filter bag that will be located in a well-vegetated upland area.
- For three to one or steeper slopes, the disturbed area will be vertically tracked. Erosion control fabric will be installed.
- Temporary sediment barriers will be maintained, until vegetation has become established with a uniform coverage of density of 70 percent or more within the LOD. Once this coverage has been obtained, appropriate controls will be removed from the work area. Areas disturbed during the removal of the erosion controls will be stabilized immediately. The 70 percent requirements refers to the total area vegetated and not a percent of the site.
- All waste material will be transported off-site for recycling and/or disposal. Where feasible, construction waste materials will be recycled (i.e., used for silt fence, filter bags, etc.) or will be taken to the nearest Roxul facility or an approved disposal facility for disposal. As stated previously, excess soil material, if any will be spread and re-vegetated within the LOD. Off-site spoil and/or borrow sites must be operated under a current national pollutant discharge elimination system (NPDES) permit.

- Erosion control blankets shall not be installed on agricultural areas even if slopes are steeper than three to one. These areas may require special attention/restoration until adequate growth is achieved.
- Temporary stockpiles need silt fence / sock placed adjacent to LOD.
- Contractor is expected to minimize disturbance within the LOD.

This section describes physical erosion and sediment controls to be used for the construction of the Ran 5 Project to minimize sediment impacts to storm water runoff. All control measures will be properly selected, installed and maintained in accordance with manufacturer's specifications and good engineering practices. BMP Technical Installation Details are provided in **Appendix D**.

5.4 Dust Control

Wind is capable of causing erosion, particularly in dry climates or during the dry season. Wind erosion can occur where surface soil is loose and dry. Wind erosion may also occur in areas where vegetation is sparse or absent, and can transport sediments to where they can be washed into receiving waters during the next storm event or snowmelt runoff. None of the soil deposits in the project area are found to be susceptible to wind erosion.

The excavated top soil, ground cover, and overburden materials will be stockpiled for reuse once construction is completed. The stockpiles will be laid out perpendicular to the predominant wind direction where possible and practical.

5.5 Final Stabilization

Areas which have been disturbed are considered to be stabilized when a uniform vegetative cover with a density of 70 percent of the pre-disturbance levels has been established. Once sections of the construction are completed and the surface is compacted, topsoil will be replaced over the disturbed area, the LOD will be disked as a surface roughness BMP, and the surface will be re-seeded. Some segments may have special landowner seeding requirements/agreements.

The WVDEP has recommended types of seed mixtures for stabilization of disturbed areas. Refer to **Appendix D** details.

Erosion control blanketing (either rolled or sprayed) shall be installed or applied for slopes 3h: 1v or steeper, within 50 feet of surface water, or where soil conditions indicate blanketing is needed to achieve the required vegetative cover. See E&S Details. Sprayed on mulches and other slope stabilization materials may be used in combination with seeding techniques in select areas to promote and establish surface vegetation cover. Access roads, material storage yards, meter stations and other work areas will be stabilized with the use of permanent, physical erosion reduction methods that include, but are not limited to:

- Surface hardening covering of the soil surface with hardened products such as concrete or asphalt pavement.
- Gravel surfacing gravel surfacing will be applied in areas such as access roads, materials storage yards, and other work surfaces. Gravel surfaces will be replaced or repaired (through grading) when inspection reveals that the gravel surface is no longer effectively covering the soil surface.

If/when/where applicable, any stream that has been disturbed by the installation of the access road will be restored by stabilizing the stream banks with erosion control blankets and vegetation. For wetland disturbances, the top six to twelve inches of topsoil in wetland areas will be segregated and side cast temporarily during excavation, except in areas of standing water or saturated soils. Once the construction activity is completed, topsoil will be replaced in its original layer. This measure will be undertaken to preserve the wetland seed bank in the soils.

The approximate original contours of the Project site will be maintained or replicated; insuring the preservation of the pre-construction drainage pattern and features; and the disturbed areas will be revegetated or otherwise stabilized with pervious material.

Once the construction of the project is completed, and final stabilization is achieved, there should be little exposure for impacts to storm water. Ran 5 Project or approved subcontractor personnel will monitor/observe for areas exhibiting signs of excessive erosion during routine inspections of the project area. Any areas exhibiting excessive erosion will need erosion control maintenance. Vehicle traffic along access roads may also result in erosion.

A Notice of Termination (NOT) form will need to be filed with WVDEP following completion of the site construction, final stabilization of all disturbed areas, and removal of all temporary erosion and sediment control measures. The NOT will end the project's coverage under the NPDES General Permit for Stormwater. The project has reached final stabilization when all soil disturbing activities are complete and a uniform perennial vegetative cover with a density of 70% has been established across the site. Areas that have permanent stabilization through the use of riprap, gabions, geotextiles, etc. will count towards the 70% final stabilization requirement. All temporary erosion and sediment control measures should be removed 30 days after the site has reached final stabilization or these measures should be scheduled to be removed at an appropriate time that is agreed upon with the WVDEP. The temporary measures can also be removed when they are no longer needed if the disturbed areas, treated by the measures, are stabilized prior to the project completion.

5.6 SWPPP Team

SWPPP Team Administrator

The SWPPP Team Administrator will be Janusz Tchorzewski who will be responsible for:

- Dedicating the necessary financial and human resources to implement the SWPPP;
- Implementing spill response clean ups;
- Assigning and working with the SWPPP Team Coordinator and other subcontractor lead managers;
- Signatory authority.

SWPPP Team Coordinator

The SWPPP Team Coordinator is responsible for:

- Notifying the SWPPP Administrator of any spills;
- Coordinating various stages of Plan development and implementation;
- Coordinating employee training and conducting inspections;
- Implementing and improving housekeeping measures;
- Coordinating the implementation of the preventive maintenance program;
- Maintaining all records.

5.7 Employee Training

The SWPPP Team Coordinator will conduct quarterly training to address the areas listed below:

- Purpose and Requirements of the Storm Water Permit;
- Components of the SWPPP and Storm Water Regulations;
- BMPs and Maintenance, Good Housekeeping Procedures;
- Inspections, Record Keeping and Reporting;
- Storm Water & Non-Storm Water Discharges; and,
- Changes to the SWPPP
- Inspections & Precipitation greater than 0.5-inch per 24-hour period

Records of the training, including the topics discussed, attendees, and an evaluation of BMPs in use will be maintained by Roxul for a minimum of three years. An Employee Training Log is provided in **Appendix F**.

6.0 INSPECTION AND MAINTENANCE PROCEDURES

To meet requirements of the Storm Water Permit Number No. WV0116815, inspection and maintenance of E&SCs must occur during the project. Continued inspection and maintenance is required for specific structures after construction is completed. Inspections will also identify potential sources of pollutants that could impact storm water discharge.

The inspection program will include the following:

- A trained and qualified person familiar with the SWPPP and storm water controls will conduct LOD inspections by completing the Roxul Erosion & Sediment Control Report in **Appendix G**. Documentation of training completion will include signing the training log provided in **Appendix F**.
- 2. Inspections will cover these areas:
 - Disturbed areas without stabilization, slopes and berms;
 - Material storage areas;
 - BMPs;
 - New access roads and ditches, horizontal boring activities; and,
 - Locations where vehicles enter or exit the site;
 - Areas reclaimed but not vegetated;
 - Equipment and material staging areas.
- 3. Inspections will occur at least once every seven (7) calendar days and within 24 hours after any storm event greater than 0.5 inches per 24 hour period. Any required repairs or maintenance should be made immediately.
- 4. A log of inspections will be completed and maintained by Roxul.
- 5. Disturbed areas and material storage areas that are exposed to precipitation will be inspected for evidence of pollutants leaving the property boundary.
- 6. LOD BMPs.
- 7. Roads used for vehicle access will be inspected for evidence of off-site sediment transport.
- 8. The results of the inspections will be used to update and revise the list of potential pollutant sources identified in Section 3.1.
- 9. The SWPPP will be modified as necessary whenever there is a change in design, construction or operation that changes the potential for pollutant discharge to waters of the state. Actions taken to modify storm water control measures will be recorded and maintained with the SWPPP.

- 10. Logs of sediment control inspection must be kept with the inspectors construction records and include date, time, and condition of BMPs and any necessary maintenance. The Roxul Erosion & Sediment Control Inspection Report is included in **Appendix G**.
- 11. Temporary E&S control BMPs should be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed (70% site revegetation). Trapped sediment shall be removed or stabilized on-site. Disturbed soil resulting from removal of BMPs or vegetation shall be permanently stabilized.
- 12. Whenever inspection and/or monitoring reveals that the BMPs identified in the E&SC Plans are inadequate, the E&SC Plans shall be modified, as appropriate, in a timely manner.
- 13. Maintenance of the E&SC Plans the E&SC Plans shall be retained on-site. The E&SC Plans shall be modified whenever there is a significant change in the design, construction, operation, or maintenance of any BMP.

Maintenance will include prompt repairs and/or adjustments to erosion and sediment control structures that are deteriorating or found to be performing inadequately. Repairs should be made immediately or designated contractor(s) will maintain on-site materials necessary to make any reasonably expected repairs such as diversions, compost filter sock, silt fence, and erosion control matting.

7.0 RECORDKEEPING PROCEDURES

Records of project inspections, spills, and maintenance activities will be maintained and located at the Roxul office. If a reportable spill of petroleum hydrocarbons occurs, a Spill Report Form will be completed and reported. Records and reports are required to be maintained for a period of at least three years.

8.0 NON-STORM WATER DISCHARGES

Non-storm water discharges are not expected from construction activities. Possible exceptions include fire prevention/suppression activities and potable water used for dust control.

APPENDIX A

USGS SITE LOCATION MAP

NOTIFICATION OF PUBLIC SAFETY OFFICIALS AND GOVERNMENT AGENCIES

APPENDIX B

NOTIFICATION OF OUTSIDE PARTIES PUBLIC SAFETY OFFICIALS AND GOVERNMENT AGENCIES

Ran 5 Project

PUBLIC SAFETY NOTIFICATION

Ambulance	911
Fire	911
Law Enforcement	911

GOVERNMENT AGENCY NOTIFICATIONS - VERBAL

National Response Center	1-800-424-8802
	(24 hr/day-7 days/week)

GOVERNMENT AGENCY NOTIFICATIONS - WRITTEN

Report spills that have reached state waters to:

West Virginia Department of Environmental Protection			
Environmental Health Section	(304)	328-5210	or 5166

SOILS MAP

APPENDIX C

APPENDIX D

E&S PLANS INCLUDING BMP INSTALLATION DETAILS

APPENDIX E

SECONDARY CONTAINMENT DRAINAGE LOG

Secondary Containment Drainage Log

Location:_____

Date	Time	Secondary Containment Structure	Visible Inspection (i.e. Sheen, Skim, Chemical Impact)	Disposal Method	Signature



APPENDIX F

Ran 5 Project STORM WATER POLLUTION PREVENTION TRAINING LOG



Roxul - Storm Water Pollution Control & BMP

Environmental Training

Project Name: Ran 5 Project

Date of Training

Training Administered by

Topics Covered: Storm Water Regulations Non-Storm Water Discharges Best Management Practices **BMP** Maintenance

Storm Water Discharges Good Housekeeping Procedures Inspections & Precipitation >0.50 inches

Print Name	Signature	Company

APPENDIX G

Roxul EROSION & SEDIMENT CONTROL REPORT

APPENDIX H

DRIVING DIRECTIONS FROM WVDEP CHARLESTON OFFICE

APPENDIX I

PUBLIC NOTICE SIGN