

Mohawk Solar
Draft Inadvertent Return Plan

Montgomery County, New York

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Contact Information

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New York State Department of Environmental Conservation (Permits)	New York State Department of Environmental Conservation (Spills)	United States Coast Guard National Response Center
NYSDEC Region 4 1130 North Westcott Road Schenectady, NY 12306-2014 (518) 357-2456 (Schenectady Permitting office)	NYS Spill Hotline: 1-800-457-7362	NRC Hotline: 1-800-424-8802

I. PURPOSE OF THE PLAN

Mohawk Solar, LLC (the Applicant), a wholly-owned subsidiary of Avangrid Renewables, LLC (Avangrid Renewables) prepared this Inadvertent Return Plan (the Plan) to address the potential inadvertent return of the drilling lubricant utilized during the proposed jack and bore method at the Mohawk Solar Project (the Project).

The jack and bore method is commonly used to install buried utilities in sensitive resources. The primary potential impact associated with this method is the inadvertent release of casing lubricant (bentonite slurry) to the surface during construction, commonly referred to as “frac-out”. The objective of this plan is to provide procedures for minimizing the release of drilling fluids into waterbodies or adjacent surface soils and to provide procedures to remediate the release. The plan is to be implemented by the Contractor under the supervision of the Applicant to contain, control, and clean up any release of drilling fluid during the jack and bore activities of the Project.

II. THE JACK AND BORE METHOD

A. Jack and Bore Activity

The jack and bore installation method involves digging a bore pit and receiving pit, one on each side of the obstacle. The underground crossing is installed by setting up a drilling or auguring machine in the bore pit. The bore or augured path is typically installed horizontally but an upward angle is allowable. The auguring bit is cooled by drilling fluid which is typically a bentonite clay solution. Both the drilling pit and the receiving pits need to be sized for fluid containment for recovery. A splice pit or vault may be installed on one side of the crossing to allow the UG cable to be pulled through the bore and spliced into the cable being laid on the opposite side of the obstacle.

B. Jack and Bore Lubricating Fluid

Bentonite slurry is a non-toxic, fine clay material that acts as a lubricator during the jack and bore process. While the slurry is not inherently hazardous, it will settle at the bottom of waterways which can potentially harm some aquatic species as a result of any unintended leaks or surface returns. The risks of inadvertent returns occurring is site-specific.

C. Monitoring and Minimization Measures

Prior to starting the jack and bore activities, the following measures will be implemented:

- Conducting field survey of the bore pit locations for evidence of sensitive habitats or biological resources, if not previously completed;
- Demarcating construction limits; and
- Installing erosion control devices per the SWPPP.

The monitoring procedures will include:

- Inspection along the drill path;
- Continuous examination of drilling mud pressures and returns flows;
- Periodic documentation of status of conditions during drilling activities; and

The contractor will address an inadvertent return immediately upon discovery.

III. RESPONSE PLAN

A. Upland Release

The contractor will place containment structures at the affected area to prevent migration of the release.

If the amount of the release is large enough to allow collection, the drilling mud released into containment structures will be collected and disposed of per the Cutting Disposal procedures at the end of this document. If the amount of the release is not large enough to allow collection, the affected area will be diluted with fresh water and restored as necessary. Steps will be taken to prevent silt-laden water from flowing into wetlands or water bodies.

All disturbed areas associated with the project will be stabilized and restored per the specifications outlined in the project SWPPP.

B. Water Body Release

If a release occurs within a water body, the contractor will attempt to place containment structures at the affected area to prevent migration of the release if feasible. If the amount of surface return exceeds that which can be collected using small pumps, drilling operations will be suspended until surface volumes can be brought under control. Once contained, drilling fluid will be removed by pumping, vacuuming or by hand, and disposed of at an approved upland disposal site (see additional information under Cutting Disposal).

C. Notification

Following any drilling mud release during the jack and bore activities, the drilling contractor shall notify the Environmental Inspector. If the Environmental Inspector determines the release affects wetlands or instream areas, he or she will immediately notify the Applicant. The NYSDEC shall be notified within 2 hours of the event, as long as the notification does not interfere with the response activities.

The Inspector and the Applicant will complete the necessary agency notifications as appropriate including the preparation of a monitoring report to document the leak location, estimated volume of spill and clean-up efforts. A plan to prevent further inadvertent return events shall be evaluated at this time.

D. Sealing and Abandonment of Drill Hole

The following measures will be implemented in the event that drilling cannot continue along the designated drill path due to excessive leakage:

- The initial drill hole will be abandoned by filling it with bentonite slurry and plugging the surface opening with a cement grout;
- Re-drill a new hole along a different alignment path and beginning from a point behind where the leakage occurred.

E. Fluid/Cutting Disposal

Uncontaminated drill cuttings and drilling muds from drilling processes which utilize only air, water, or water-based drilling fluids are considered to be construction and demolition debris under 6 NYCRR Part 360 (Solid Waste) and can be disposed of at either construction and demolition (C&D) debris landfills or at municipal solid waste (MSW) landfills. Drill cuttings from drilling processes which utilize and oil-based mud or polymer-based mud containing mineral oil lubricant are considered to be contaminated and can only be disposed of at MSW landfills. Dewatered drilling muds including any oil-based mud or polymer-based mud containing mineral oil lubricant can only be disposed of at MSW landfills. If drilling fluid is found to be impacted/contaminated, the contractor will defer to Mohawk Solar LLC for disposal instructions.

IV. RESTORATION

Following clean up, restoration and revegetation will follow in accordance with the Project's revegetation plan. Applicant will monitor the release site as appropriate to assure adequate restoration.