

**EXHIBIT
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HEARTLAND GREENWAY PIPELINE SYSTEM

Inadvertent Return Contingency Plan for Horizontal Directional Drilling

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DRAFT



General

Inadvertent return of drilling fluid is a potential concern when the Horizontal Directional Drill (HDD) is used under sensitive habitats, waterways, and areas of concern for cultural resources. The HDD method uses bentonite slurry, which is a fine clay material as a drilling lubricant.

The purpose of a Contingency Plan is to:

- Minimize the potential for and timely detection of an inadvertent return associated with horizontal directional drilling activities.
- Protect areas that are considered environmentally sensitive (streams, wetlands, other biological resources, cultural resources).
- Ensure an organized and efficient response in the event of a release of drilling fluid.

To minimize the potential for an inadvertent return, the Contractor shall develop protocols to be implemented for the protection of sensitive cultural and biological resources. The Contractor shall implement proactive instream erosion control devices at each HDD location based on the factors at those locations. The Contractor shall be required to provide a final Inadvertent Return Contingency Plan prior to the start of HDD activities.

Drilling Fluid

The selection and proper utilization of drilling fluid is key to a successful HDD process. Drilling fluid is made up of primarily water and bentonite (de-hydrated clay) having pH values between 8 and 10. Bentonite is a naturally occurring, non-toxic, inert substance that meets NSF/ANSI-60 Drinking Water Additive Standards and is frequently used for drilling potable water wells.

Therefore, the ecological and environmental impacts of an inadvertent release of drilling fluid into a water body is a temporary increase in local turbidity until the drilling fluid dissipates with the water current or settles out.

Bentonite serves many notable purposes in the HDD process, which includes but is not limited to:

- Cleans the drilled cuttings from the bore hole and cools the drilling tools,
- Transports cuttings to the surface for recycling,
- Aids in stabilizing formations by supplying a cohesive nature to the surrounding geological formation and preventing fluid loss from the bore hole,
- Provides lubrication for the drill string and downhole assembly, which reduces friction forces at the formation,
- Drives a down-hole drill motor for rock drilling,
- Provides hydrostatic fluid pressure in the bore hole to offset ground formation pressures.

Drilling fluid is composed of a carrier fluid and solids. The selected carrier fluid for this crossing



consists of water (approximately 96%) and an inorganic, bentonite clay (approximately 4%).

The selection of which brand to use is typically based on price, availability, and proximity to the proposed drill site.

Best Management Practices

Best management practices are utilized for prevention, containment, and control of drilling fluid. Containment of drilling fluids will be attained through various precautions implemented prior to positioning the major pieces of equipment on the proposed sites. Configuration considerations are made for site geology, topography, storm water management and erosion control.

Contractor personnel shall be required to undergo pre- construction training to discuss preemptive measures and early response procedures and techniques specific to this project as identified below. This training will introduce Contractor personnel to the appropriate chain of communication leading up to suspending of drilling operations should that action become necessary.

The following topics shall be addressed during the training session:

- Preventative Methods to Invoke Prior to and During Construction;
- Details of the Spill Plan and Inadvertent Return Contingency Plan;
- Environmental Protection;
- Mitigative Resources Available at the site for Environmental Protection;
- Site Specific Permit Conditions;
- Monitoring of HDD operations (Recognize the Potential Areas of Inadvertent Release/Spill);
- Chain of Authority and Responsibility;
- Chain of Communication;
- List of Contact names and phone numbers of governing agencies to be posted;
- Incidents that must be reported and the person to report them to,

Contractor drilling personnel shall be trained in the safe handling and use of drill fluids and materials associated with directional drilling. Every drill project has a designated supervisory person responsible for implementation and execution of environmental policy, safety monitoring and reports, and implementation of mitigation plans. The Project Supervisor shall be well-versed in the written procedures and policy maintained and is responsible for carrying them out.

At the entrance site, typically a pit is excavated to the approximate dimensions of 6'L x 6'W x 4'D for containment and processing of drilling returns. The exit sump pit will also be excavated to the approximate dimensions of 6'L x 6'W x 4'D to contain drilling fluids for re-cycle and re-circulation into the mud system.



Inadvertent Release Response & Control

Typically, lost circulation has the highest probability of occurring while the pilot hole is being drilled due to the smaller bore-hole annulus and the relatively large volume of solids being displaced and carried out in the drilling fluid. In the course of drilling the pilot hole, circulation will often be temporarily lost as the pilot bit is advanced through more permeable or less competent sections of the ground formation when fluid pressures are at a maximum. As the pilot bit advances beyond these sections of the bore-hole fluid pressure will fall and circulation within the bore-hole will naturally be re-established. Much of the fluid lost to the formation under the greater pressures will return back to the bore-hole as the pressures fall, in which case the drilling fluid is not likely to migrate to the surface or the river. It is also possible for the drilling fluid to leave the bore-hole and migrate in a direction other than the ground surface or the wetland, in which case it may never be observed even if circulation is lost for long periods of time.

The use of an environmentally safe drilling fluid ensures that even in the unlikely event of fluid loss at sensitive areas, there will be no adverse environmental impact other than a temporary minor increase in turbidity until the drilling fluid dissipates. It is important to note that any temporary increase in turbidity as a result of inadvertent drilling fluid loss while directional drilling the crossing will be several orders of magnitude less than that of an open-cut crossing.

Should the driller believe that circulation is being completely lost the following procedures shall be implemented:

- Temporarily cease drilling operations, including pump shut down;
- Dispatch experienced observers as required to monitor the area in the vicinity of the crossing, for inadvertent returns of drilling fluid at the surface or in an environmentally sensitive area;
- Identify the position of the drill head in relation to the point of entry
- Re-start the pump and stroke the bore-hole up and down in stroke in an effort to size the bore-hole annulus and re-open the circulation pathway.

Observers will continuously monitor for inadvertent fluid returns as long as the pump remains on.

If circulation is re-established, drilling will proceed as usual and monitoring for inadvertent fluid will take place once again if the rate of drilling returns progressively decreases at the fluid entry pit. If circulation is not re-established, monitoring for inadvertent fluid returns to the ground surface and river will continue and drilling will proceed.

The Contractor shall observe the amount of inadvertent return and determine appropriate collection method. If the amount of inadvertent return is not great enough to allow practical collection, the affected area shall be diluted with fresh water and allowed to dry and dissipate naturally back into the earth.

If inadvertent drilling fluid returns are observed to be surfacing above-ground at a location that is inaccessible, i.e., along the bed of a water body, or, into the water, the following procedures will be followed:



- Ensure that all reasonable measures within the limitations of the technology have been taken to re-establish circulation;
- Upon approval from company or company representative, continue drilling with the minimum amount of drilling fluid required to penetrate the formation and successfully install the product line.

If inadvertent drilling fluid returns are observed to be continuously surfacing above ground at an accessible location, the Contractor shall implement procedures that may include the following:

- Cease pumping of drilling fluid;
- Contain the location such that the drilling fluid cannot migrate across the ground surface;
- Identify appropriate materials and equipment used for containment;
- Excavate a small sump pit at the location and provide a means for the fluid to be returned to either the drilling operations or a disposal site (i.e., pump through hose or into tanker);
- Notify on-site contractor supervisor and Owner representative as required by the communication plan;
- Continue drilling operations after company/company representative approval
- Clean-up once inadvertent returns are contained/controlled;
- Fluid pumped to a secure containment vessel;
- Area is diluted with water;
- Area is restored to original condition.

Communication Plan

(To be determined by Contractor) Project contacts are as follows:

Contacts	Phone No.	Affiliation
Drilling Contractor <i>On-Site Representative</i> TBD Project Manager	TBD	TBD
Drilling Contractor <i>On-Site Representative</i> TBD Drill Superintendent-HDD RIG#1	TBD	TBD



Drilling Contractor <i>On-Site Representative</i> TBD Drill Superintendent-HDD RIG#2 (If Needed)	TBD	TBD
Drilling Contractor <i>Off-Site Representative</i> TBD Assist. Operations Manger	TBD	TBD

In case of emergency, the following shall be notify by the on-site inspector who will invoke the communication plan in the following manner: The representative chain of communication is as follows;

Contacts	Phone No.	Affiliation
TBD	TBD	TBD
<i>After Hours Contact</i>		

The Company Representative will contact the following Organizations as needed;

Contacts	Phone No.	Affiliation
TBD	TBD	TBD