

OHIO EPA

INADVERTENT RETURNS FROM HORIZONTAL DIRECTIONAL DRILLING



OVERVIEW

- Regulatory authority of Ohio Environmental Protection Agency (OEPA)
- Emergency response actions
- Permitting routes for impacts to “waters of the state”
- Open-cut vs. horizontal directional drilling (HDD) methods
- Closing questions/comments



OHIO EPA REGULATORY AUTHORITY

- Isolated wetland law [Ohio Revised Code (ORC) 6111.021]
- “Free froms” [Ohio Administrative Code (OAC) 3745-1-04]
- Antidegradation [OAC 3745-1-05]
- Wetland narrative criteria [OAC 3745-1-51]
- Wetland antidegradation [OAC 3745-1-54]
- Emergency response [ORC 3750.06 and OAC 3750-25], [ORC 6111, 3734, etc.]



EMERGENCY RESPONSE PROGRAM

- Emergency Response responds to releases that impact waters of the State, fish kills, or are otherwise determined to be an imminent and substantial threat to public health or the environment.
- Emergency Response will also respond to the scene of any reported release or discharge incident where local, state, or federal response partners request Ohio EPA assistance on-scene.



EMERGENCY RESPONSE PROGRAM

Ohio EPA's Emergency Response program is well established, averaging about 1200 emergency responses per year to incidents where sudden releases of hazardous materials, petroleum and/or other pollutants have occurred, posing a threat to human health and the environment



OAC 3745-1-04 (A-F) CRITERIA APPLICABLE TO ALL WATERS “FREE FROMS”

OAC 3745-1-04: The following general water quality criteria apply to all surface waters....

- A. Free from suspended solids...
- B. Free from floating debris...
- C. Free from materials entering...
- D. Free from substances entering...
- E. Free from nutrients...
- F. Free from public health nuisance...



IF AN INADVERTENT RELEASES OCCURS

1. Notify the Ohio EPA Emergency Response hotline at **(1-800-282-9378)**
2. Emergency response On-Scene Coordinator (OSC) will contact on-scene personnel to determine if immediate response is warranted
3. OSC will work with company to document and assess release, and will oversee containment and clean up measures
4. OSC will coordinate with other Agency staff as needed (e.g., Director's Office, District Operations/Management, Division of Surface Water, etc.)
5. If clean-up or mitigation becomes long-term, various Agency staff may assist to provide guidance and oversight



POST-RELEASE

- Visually determine nature and extent of release (acres of wetlands, feet or miles of stream impact)
- Mark the boundaries with flagging or GPS, or both
- Record observed depth of sedimentation at points throughout the spill area
- Determine volume of material released



POST-RELEASE

(CONTINUED)

- Monitor failure point to ensure that the release has stopped (or doesn't restart with rainfall event or with the restarting of HDD activities)
- Ensure that released material is contained and not spreading
- Remove as much spill material as possible without doing more damage to the wetland or stream (this is general advice, site-specific situations may vary)



ENFORCEMENT

- Both civil/criminal enforcement actions may occur
- Criminal violations could occur either through negligence or knowingly. Federal violations of Clean Water Act can be misdemeanors and felonies
- Illegal/unpermitted dredge/fill actions 401/404
- Unpermitted discharges impacting streams/rivers
- Enforcement driven mitigation requirements are often greater than permitted mitigation requirements



CONTINGENCY PLANNING

- Evaluate carefully high risk geology potential failure points (*e.g.*, glacial till, reclaimed strip mine areas)
- Evaluate use of chemical additives to drilling mud
- Monitor surrounding area for releases
- Maintain necessary response equipment and personnel on-hand or available on short notice to address inadvertent releases
- Train personnel to respond appropriately
- Report releases to streams or wetlands immediately to Ohio EPA spill hotline **1-800-282-9378**



CONTINGENCY PLANNING

(CONTINUED)

- Review Ohio Dept. of Natural Resources, OEPA, and Ohio Dept. of Health files for private and public drinking water wells or intakes for drinking water systems
- Review, if available, the local community's Source Water Protection Plan
- Maintain on-site a list of contact numbers for local water systems or private homeowners readily available
- Communicate with landowners
- Maintain an on-call spill response team



PERMITTING ROUTES

FOR IMPACTS TO “ SURFACE WATERS OF THE STATE”

- **“Surface waters of the state” is defined as:**
“all streams, lakes, reservoirs, ponds, marshes, wetlands or other waterways which are situated wholly or partially within the boundaries of the state, except those private waters which do not combine or effect a junction with natural surface or underground waters.”
- **Impacts to isolated wetlands**
 - Level One Isolated Wetland Permit (IWP)
 - Level Two IWP
 - Level Three IWP
- **Impacts to jurisdictional wetlands and/or streams**
 - Coverage under the nationwide permits (NWP) issued by the Army Corps of Engineers and pre-certified by Ohio EPA in a general 401 water quality certification for the NWPs
 - Individual 401 water quality certification and 404 permit



PERMITTING ROUTES: WETLAND CATEGORIES

- **Category 1** – Low quality
 - May include dominance of invasive species
- **Category 2** – Good quality
 - Can be small with lots of native species, or big with low quality plants
- **Category 3** – Pristine high quality
 - Often difficult to obtain permits
 - Must demonstrate that the project meets “public need” as defined in OAC 3745-1-50



PERMITTING ROUTES FOR IMPACTS TO ISOLATED WETLANDS

Levels of Isolated Wetland Permits (IWP)

- Level One IWP (General Permit)
 - Impacts to less than 0.5 acre of Category 1 and 2 isolated wetlands
 - 30-Day Review
- Level Two IWP
 - Impacts greater than 0.5 acre but less than 3.0 acres of Category 1 and 2 isolated wetlands
 - 90-Day Review
- Level Three IWP
 - Impacts to Category 3 isolated wetlands, and
 - Impacts > 3.0 acres of Category 2 isolated wetlands
 - 180-Day Review



PERMITTING ROUTES: FOR IMPACTS TO JURISDICTIONAL STREAMS AND/OR WETLANDS

Coverage under the “Pre-certified” nationwide permit

- Minimal impacts
- Quick turn-around
- If project meets Ohio EPA’s conditions in the general 401 WQC for the nationwide permits, no individual 401 WQC is required.

OR

Individual 401 Water Quality Certification

- Required for dredge and fill projects to wetlands or streams that do not meet the requirements of the general 401 WQC for the nationwide permit
- Usually a greater amount of impacts
- Longer review period (180 statutory review period)
- Required public notice/hearings for impacts to high quality waters
- Jurisdictional determination by U.S. Army Corps of Engineers must be completed before submitting application
- Mitigation required with all permits
- Requires avoidance and minimization



COVERAGE UNDER NWP 12 FOR UTILITY LINE ACTIVITIES

If the project meets the following conditions, it meets the State requirements for NWP 12 and no Individual 401 WQC is required:

- Impacts are not proposed to “high quality resources”
 - Streams with the designated or existing use of Exceptional Warmwater Habitat, Coldwater Habitat or Seasonal Salmonid Habitat
 - Streams designated as outstanding state water, outstanding national resource water, or superior high quality water
 - National Wild and Scenic Rivers; State Wild and Scenic Rivers
 - High quality waters that contain federally listed Threatened & Endangered species
- Impacts to Category 1 and 2 wetlands are under ½ acre
- Impacts to Category 3 wetlands are limited to 1/10 of an acre for repair, maintenance, replacement or safety upgrades for existing structures



COVERAGE UNDER NWP 12 FOR UTILITY LINE ACTIVITIES (CONTINUED)

- Impacts are under 500 LF in forested wetlands
- Impacts do not exceed 3 stream crossings per mile of stream
- Impacts do not exceed 1500 LF for the entire cumulative project



UNDERSTANDING OHIO EPA VS. U.S. ARMY CORPS OF ENGINEERS

- Corps consider each wetland and stream crossing as an individual project
 - Many individual projects can be covered under the issuance of one NWP
 - Ohio EPA considers all impacts cumulatively
- Corps typically do not require compensatory mitigation for temporary impacts
 - Ohio EPA does not distinguish between temporary and permanent impacts, and therefore requires compensatory mitigation for utility corridor work
 - Although the work zone within a corridor can be restored, there is still a temporary loss in the aquatic use and function of the water resource



IS HDD THE BEST ALTERNATIVE?

- **Evaluate Substrate**

Does your project propose HDD through unconsolidated material (e.g.. reclaimed coal lands) or glacial tills?

- If so, it may be in the best interest of the company to increase impacts and lower the risk of an inadvertent release
- Individual 401 WQC may be necessary

- **Evaluate Cost**

Does performing HDD outweigh the cost of submitting a 401 WQC application?

- The HDD process requires continuous monitoring
- More costly process
- Depending on type of resource, open-cut may be recommended over boring



THINGS TO CONSIDER WHEN DETERMINING OPEN-CUT vs. HDD

- **Evaluate wetland type and quality**
 - Ohio EPA requires avoidance of Category 3 wetlands by routing around them
- **Evaluate control of the site**
 - It's easier to control risk from an open-cut vs. an inadvertent return from HDD
- **Evaluate the seasonality.**
 - Determine which method is better for biological communities
- **Timeframe.**
 - Open-cut may be quicker than HDD with less risk of an IR



Understanding the Risk of an IR

- Stops process
- Expense of clean-up
 - Cost of HDD
- Fined up to \$10,000 per day
- Community relations impacted
- Mitigation requirements increased (double or more)
- Ohio EPA has authority to stop the project & all drilling activities until area is cleaned
 - Ohio EPA may request additional info. before allowing operations to resume
- U.S. EPA and/or Corps likely to get involved
 - Review time can be months



COMMENTS?

QUESTIONS?



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