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A NiSource Company

December 22, 2014

Ms. Barcy F. McNeal Director, Office of Administration Ohio Power Siting Board 180 East Broad Street Columbus, Ohio 43215

Re: In the Matter of the Construction Notice Application by Columbia Gas of Ohio, Inc. for a Certificate of Environmental Compatibility and Public Need for the Frank Road / Interstate 71 Mandatory Relocation Project. OPSB Case No. 14-2300-GA-BNR

Dear Ms. McNeal:

Columbia Gas of Ohio, Inc. ("Columbia") submits this Construction Notice, pursuant to Ohio Adm. Code 4906-5-02(B) and 4906-11-02, concerning a proposed pipeline relocation project known as the Frank Road/ Interstate 71 Mandatory Relocation Project. The Frank Road/ Interstate 71 Mandatory Relocation Project involves the relocation and installation of 750 feet of 16-inch pipeline with a Maximum Allowable Operating Pressure ("MAOP") of 174 psig. Therefore, as required by Ohio Adm. Code 4906-11-02(B) and 4906-11-02(C), please be advised of the following:

#### (1) The name of the project.

The project is identified as the Frank Road/ Interstate 71 Mandatory Relocation Project (the "Project"). A map showing the location and proposed work of the Project is attached as **Appendix A**.

# (2) A brief description of the project, including a map depicting the facility's location and the reason why the project meets the requirements for a construction notice.

The Project is a mandatory relocation project requested by the Ohio Department of Transportation due to the widening of the Frank Road underpass beneath Interstate 71. The existing line runs along the north and south side in the Frank Road right-ofway. With the expansion of underpass, approximately 1,555 feet of 16-inch highpressure pipe must be abandoned and relocated out of the right-of-way. Columbia plans to reroute the pipeline by boring 600 feet underneath Interstate 71 from Frank Road to State Route 104 (Jackson Pike). Columbia's Inadvertent Return Contingency Plan in the event that addresses any potential impacts related to horizontal directional drilling activity is attached as **Appendix B**.

In addition to the boring underneath Interstate 71, Columbia will also be installing 150 feet of relocated pipeline by open excavation along Frank Road on the east side of Interstate 71. Columbia will also be installing three 16-inch gate valves on the east side of State Route 104 (Jackson Pike).

The Project meets the requirements of a Construction Notice as it is a "rerouting or extension or new gas transmission line and associated facilities not greater than one mile in length." *See* Case No. 12-1981-GE-BRO, Finding and Order (Sept. 4, 2012) at Interim Appendix B.

# (3) If the proposed construction notice project is an electric power transmission line or gas or natural gas transmission line, a statement explaining the need for the proposed facility.

Columbia currently uses the 16-inch high-pressure steel line to transport gas throughout the greater Columbus metro area. The planned widening of the Frank Road underpass by the Ohio Department of Transportation requires Columbia to relocate this pipeline.

# (4) The anticipated construction Schedule and proposed in-service date of the project.

Construction is planned to start on or about June 1, 2015, and the in-service date of this project is expected to be on or about July 15, 2015.

# (5) The estimated capital costs of the project.

Columbia estimates the Project to cost approximately \$1,300,000.

# (6) A description of the operating characteristics, estimated number and types of structures required, and right-of-way requirements.

Columbia proposes to abandon and relocate the 16-inch, high-pressure main with an MAOP of 174 psig. Though the pipeline has an MAOP of 174 psig, Columbia will be

operating this pipeline at 130 psig. The relocated pipeline will be installed in public right-of-way on the west side of Interstate 71 and private right-of-way on the east side of SR 104 (Jackson Pike) and public right-of-way along the south side of Frank Road east of the intersection between Interstate 71 and Frank Road.

A map showing the location and proposed work of the Project is attached as **Appendix A**.

(7) An area map of not less than 1:24,000 scale clearly depicting the facility's centerline, with clearly marked streets, roads, and highways, clearly written instructions for locating and viewing the facility.

A map attached as **Appendix A** shows the information required by Ohio Adm. Code 4906-11-02(B)(7).

# (8) A list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.

The Project primarily utilizes public right-of-way to lay the 16-inch main, including the right-of-way across Interstate 71 and along the south side of Frank Rd east of the intersection between Interstate 71 and Frank Road.

Columbia is currently negotiating the only private easement needed with Inland Products, Inc., and will have such easement secured and recorded prior to beginning construction on the Project.

(C) Documentation that the chief executive officer of each municipal corporation and county, and the head of each public agency charged with protecting the environment or of planning land use in the area in which any portion of the facility is to be located have been notified of the project and have been provided a copy of the construction notice.

A copy of this Construction Notice has been sent to the following public officials concurrently with submittal to OPSB.

# Ohio Department of Transportation

Mr. Steven Fellenger ODOT Project Manager 400 E. William Street Delaware, Ohio 43015

#### Franklin County

Mr. Don L. Brown County Administrator Franklin County Board of Commissioners 373 S. High Street, 26th Floor Columbus, Ohio 43215

Mr. William Murdock Executive Director Mid-Ohio Regional Planning Commission 111 Liberty Street, Suite 100 Columbus, Ohio 43215

Mr. John O'Grady Franklin County Board of Commissioners 373 S. High Street, 26th Floor Columbus, Ohio 43215

Mr. James Schimmer Director Franklin County Community & Economic Development 150 S. Front Street, FSL Suite 10 Columbus, Ohio 43215

Mr. John R. O'Meara Executive Director Columbus and Franklin County Metropolitan Park District 1069 West Main Street Westerville, Ohio 43081-1181 Mr. Dean Ringle, PE, PS Franklin County Engineer 970 Dublin Road Columbus Ohio 43215

Ms. Marilyn Brown President Franklin County Board of Commissioners 373 S. High Street, 26th Floor Columbus, Ohio 43215

Ms. Paula Brooks Franklin County Board of Commissioners 373 S. High Street, 26th Floor Columbus, Ohio 43215

Ms. Jennifer Fish Director Franklin County Soil and Water Conservation District 1404 Goodale Boulevard, Suite 100 Columbus, Ohio 43212

#### City of Columbus

Hon. Michael B. Coleman Mayor, City of Columbus City Hall, 2nd Floor 90 West Broad Street Columbus, Ohio 43215

Mr. Andrew Ginther President, Columbus City Council City Hall, Room 231 90 West Broad Street Columbus, Ohio 43215

Ms. Cristina Parady City of Columbus Utility Coordinator Transportation Division 109 North Front Street, 3rd Floor Columbus, Ohio 43215 Columbus City Engineer Department of Public Service 109 North Front Street Columbus, Ohio 43215

Ms. Tracie Davies Director of Public Service 50 W. Gay Street Columbus, Ohio 43215-9005

Mr. Kevin Wheeler Planning Administrator Department of Development, Planning Division 109 North Front Street Columbus, Ohio 43215

Should staff of the Ohio Power Siting Board desire further information or discussion of this application, please do not hesitate to reach out to me at the information listed above.

Respectfully submitted,

/s/ Melissa L. Thompson

#### **APPENDIX A**



# Columbia Gas

# Interstate 71 HDD Crossing, Columbus, OH

# **Contingency Plan for Drill Fluids & Cuttings**

# 1 Introduction

Horizontal directional drilling is recognized as the least environmentally disturbing construction technique available for installing pipelines under rivers and other obstacles. The primary alternative to HDD would be open trenching.

The measures presented in this plan will become integral components in the construction procedure.

The equipment to be used in an HDD operation includes: HDD rig, power unit/control cab, mud pump, mud mixing/cleaning plant, backhoe, crane, and other miscellaneous support supplies and equipment.

# 2 Purpose of the plan

The purpose of this plan is to establish monitoring and response criteria that will minimize the environmental effects of the HDD operation. In particular this plan addresses the containment and control of drilling fluids. The HDD operation uses drilling fluid to facilitate the drilling of a borehole and installation of the product pipe. The fluid also serves to stabilize the surrounding formations and provide a seal that reduces the risk of the fluid migrating into the formation. The fluid is composed of naturally occurring clay and water. The clay is insoluble and made up of small particles that function as both a lubricant for the drill head and pipe and a sealant that fills the pore spaces surrounding the drill hole. Various benign, non-toxic additives may be added to the drilling fluid to optimize its properties.

# 3 Loss or release of Drilling fluid

With HDD, it is possible that some of the drilling fluids will be lost in fractures within the formation. In cases where the fracture is horizontal these lost fluids will not surface. While it is not anticipated, in other cases, drilling fluids may reach the surface (e.g., the fracture comes close enough to the surface that the pressure causes the release of drilling fluid above ground). Such a release is termed an inadvertent return.

A key to containing and controlling an inadvertent return is early detection and quick response by the HDD crew. This plan will identify the activities to be monitored and appropriate response actions to be taken to ensure that any release of drilling fluid is minimized. The plan outlines a process of monitoring the drilling fluid in order to identify a loss-of-returns situation and to determine if there is a release to the surface. Specific

measures to be taken to reduce the amount and likelihood of surfacing drilling fluid, and other actions to be taken, are included.

As stated above, the drilling fluid mixture typically consists of water and bentonite clay. Inert, non-toxic polymers may be added to the mixture to improve its properties. In the event of an inadvertent return Lost Circulation Materials (LCM) may also be added to the fluid. LCM's typically include cotton dust, cottonseed hulls, wood fiber, and mica and cedar fiber.

# 4 HDD installation process

A typical HDD installation starts with drilling a small diameter pilot hole. The pilot hole is then enlarged in successive increments until its diameter is large enough to accommodate the product pipe. This enlarging process is termed "reaming". Finally the previously assembled string of product pipe is pulled into the bore.

# 4.1 Pilot hole drilling

The drilling of the pilot hole includes the use of drilling fluid to run the drill motor or jet bit to cut through the earth material, to seal off fractures in the formation, to lubricate the drill pipe during installation, and to remove the drilled soil or cuttings from the bore. The drilling fluid is pumped down the inside of the drill pipe and exits through the drill bit. The fluid then can return to the surface at the rig site through the annular space between the outside of the drill pipe and the borehole. The fluid returning to the drill site is called "returns". At the beginning of the pilot hole, a large percentage of the drilling fluid returns to the rig site. As the drill progresses, more of the returns are absorbed by the earth or rock formation and are not returned to the rig site. At some point, gravity and friction overtake the ability of the fluid to return to the drill site. It is not uncommon to not have any of the fluid return to the drill site during the majority of the bore, without any release of the fluid to the surface. The drilling fluid is usually absorbed by the formation or is drawn down into fractures. It is important to understand that a loss of returns, even a complete loss of returns, is a fairly normal occurrence during HDD that does not necessarily mean the drilling fluid is coming to the surface or impacting the river bottom environment.

When the pilot hole is completed and the drill bit "punches out", a relatively small quantity of drilling fluid will be released at this surface point; however, it will be quickly contained and controlled.

# 4.2 Reaming and pipe pulling

Reaming will be carried out in either the same or the opposite direction from pilot hole drilling whereas pipe will be pulled in from the opposite direction. The reamer will progress from one end to the other of the drilled hole. During reaming and pipe pulling a considerable percentage of the drilling fluid used will exit the borehole at either the "entry point" or the "exit point". The returns emitted at both sites will be collected and cleaned for recycling. Normally the primary "cleaning plant" will be located at the "entry

point" next to the rig, therefore returns from the "exit point" must be cleaned with a second "pipeside" plant, or pumped back to the rig side via a "return line", or collected and trucked back via vac trucks.

During reaming and pipe pulling, drilling fluid may be lost into the surrounding formation in much the same manner as during the drilling of the pilot hole. The only significant difference is that the volumes of fluid that are used are larger.

During drilling of the pilot hole, reaming or pipe pulling, a complete and sudden loss of returns could be an indication that a significant ground fracture has been encountered. In most cases, the drilling fluids are drawn down by gravity or seal off the fracture. A complete and sudden loss of returns is a signal to the HDD crew to watch closely for a possible surface release. This plan uses this, as well as visual indications, as triggers for response and mitigation actions.

# **5** Typical Control Measures used

Typical measures that are put in place to ensure that a release of drill fluid will be effectively dealt with include the following:

# 5.1 Training

Supervisory and other key personnel that will be on site will have received training with respect to the control and containment of drilling fluid. The training includes:

- the details of this plan,
- the need for environmental protection,
- environmental resources located at or near the site,
- specific permitting conditions and requirements,
- the need to monitor the HDD operation,
- lines of communication,
- lines of authority and responsibility,
- the information the HDD contractor will need to provide to the Owner and other site representatives,
- contact names and phone numbers of the appropriate individuals and agencies, and
- Events that need to be reported and to whom.

# 5.2 HDD Monitoring

The site superintendent has the overall responsibility for monitoring the HDD operations for inadvertent returns. He may delegate this responsibility as he sees fit. The drill rig operator or driller is the individual who is responsible for monitoring drilling fluid pressures and fluid returns. In the event of a significant drop in down hole fluid

pressure or fluid returns the driller will notify the site superintendent. The superintendent, with the assistance of the more senior crewmembers is also responsible for visually monitoring the length of the bore for inadvertent returns.

During the clean up of spilled drilling fluid, the characteristics of the fluid released, quantities of fluid being cleaned up, the extent of the release and any apparent effects, and general progress of work will be documented in the daily reports submitted to the Owner and in the driller's log.

### 5.3 Response & Notification

The HDD contractor shall immediately notify Owner's representative of any sudden losses in returns or any inadvertent returns. If an inadvertent return to the ground surface or into the river bottom is observed, the HDD contractor will take certain reasonable actions to eliminate, reduce, or control the release. The actions to be taken will depend on the location and time of release, the geologic conditions there and the volume of the release. This section outlines the response measures that will be implemented for inadvertent returns to the ground surface or into a river bottom.

### 5.4 Inadvertent return to the Ground Surface

If a release occurs in an upland area, the HDD contractor will take appropriate reasonable actions to reduce, eliminate or control the release. The actions to be taken will depend on the location of the release point and the amount of fluid being released. The actions may include:

- Constructing a small pit or sand bag coffer around the release point, installing a section of geotextile filter fabric ("silt fence") and or hay bales to trap as much sediment as possible, and placing a pump hose in the pit to pump the drilling fluid back to the bore site.
- Using a Vac Truck to clean up and return the drilling fluids to the bore site to be recycled or if drill fluids are deemed unrecyclable take them to the pre approved disposal site.
- Reducing drilling fluid pressures,
- Thickening drilling fluid mixture, and
- Adding pre-approved loss circulation materials (LCM's) to the fluid mixture
- Ceasing pumping operations

Which of these actions will be implemented will depend on the specific boring conditions at the time of the release and the volume of the release. The HDD contractor, in consultation with the Owner, will determine which methods are the most appropriate to eliminate, reduce or control the release. Drilling fluid that is recovered will be recycled and reused to the extent that is practical. The HDD contractor will document the nature of the release including physical characteristics of the fluid, the location and extent (area, estimated volume and duration), the modified procedures used to reduce the rate of leakage, and the extent to which these measures are successful in controlling or eliminating the release.

# 5.5 Inadvertent return into a River Bottom

If an underwater release occurs, the HDD contractor will take appropriate reasonable actions to reduce, eliminate or control the release. The actions to be taken will depend on the location of the release point and the amount of fluid being released. The actions may include:

- reducing drilling fluid pressures,
- thickening drilling fluid mixture,
- adding pre-approved loss circulation materials (LCM's) to the fluid mixture, or
- ceasing pumping operations

The measures listed above can be used to limit or possibly stop the release of drilling fluid onto the river bottom. Which of these measures will be used will depend on the specific boring conditions at the time of the release and the volume of the release. The HDD contractor, in consultation with the Owner, will determine which methods are the most appropriate to eliminate, reduce or control the release. The HDD contractor will document the nature of the release including physical characteristics of the fluid, the location and extent (area, estimated volume and duration), the modified procedures used to reduce the rate of leakage, and the extent to which these measures are successful in controlling or eliminating the release.

#### 5.6 Returns to entry and exit points

Measures will be implemented to contain and control the drilling fluid at the HDD crossing entry point and exit point. These measures typically consist of the excavation of a small containment pit around the points. Pumps will be used to remove any fluid that collects in the pit and pump it to either a fluid cleaning system or to a steel storage tank. All drilling fluid that is recovered will be recycled and reused. It is normal that drilling fluid is spilled on the drill rig when threaded connections in the drill string are broken. This fluid will be contained and directed by means of a shallow trench to the entry pit where it will be collected and recycled.

# 5.7 Documentation

The daily reports that will be submitted to the Owner and the drillers log will contain all relevant information pertaining to any inadvertent returns and the measures implemented to contain and control them.

# 5.8 Cleanup

Immediately following the successful completion of the pipeline pullback, the HDD contractor will clean all affected areas of trash and debris. All excess drilling fluids remaining in pits and tanks will be collected and disposed of by:

- farming into the permanent ROW if permitted, or
- hauling to pre-approved disposal areas
- Final cleanup must be acceptable to the landowner, the project Owner, and controlling local, state and federal agencies.

### 5.9 Hole Abandonment Procedure

Abandoned drill holes penetrating unconsolidated materials or fractured bedrock should be sealed by grouting the entire length of the hole.

Drilled holes that have been contaminated or may cause an environmental hazard should be sealed by the pressure grout method. This is done with a conductor pipe, called a tremie pipe, starting at the end of the drill hole and slowly pulling the conductor pipe toward the entry point at a rate no faster than the grout material fills and displaces water from the hole and until the hole is completely filled. The grout mixture used should be a Portland cement mixed with 2 to 10 percent high solids bentonite clay mixed according to the correct water-to-cement ratio. Commercially available premixed bentonite grout designed for sealing wells may also be used. Drill pipe may be used as conductor pipe.

Abandonment must be acceptable to the landowner, the project Owner, and controlling local, state and federal agencies.

# 5.10 Post Project follow-up

Post project follow-up will only be necessary if a major or sustained release of drilling fluid occurs. The post project follow-up will include:

- video taping the locations where the release occurred
- determining if environmental impact has occurred, and
- developing remediation actions in conjunction with the appropriate agencies

#### This foregoing document was electronically filed with the Public Utilities

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Summary: Application Construction Notice Application of Columbia Gas of Ohio, Inc. for a Certificate of Environmental Compatibility and Public Need for the Frank Road / Interstate 71 Mandatory Relocation Project electronically filed by Ms. Melissa L. Thompson on behalf of Columbia Gas of Ohio, Inc.