Antea USA, Inc.
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Shoreview, Minnesota 55126 USA
www.anteagroup.com

Mark Retzlaff
Environmental Protection Specialist
Illinois Environmental Protection Agency
9511 Harrison St.
Des Plaines Il 60016

Re: Proposed Monitoring Well Locations
Illinois Route 113 Release
Wood River Pipeline LLC
Kankakee, IL

Dear Mr. Retzlaff:

The following describes the proposed monitoring well installation at the above referenced site. Prior to any subsurface work, JULIE (Illinois One-Call System) will be contacted by the drilling contractor and the locations of all subsurface public utilities will be marked. Borings will be advanced utilizing sonic drilling techniques and converted into proposed monitoring wells (PMW-1 through PMW-6) in the approximate locations illustrated on Figure 1.

Borings used for installation of monitoring wells will be advanced utilizing sonic drilling techniques. Sonic drilling will be accomplished utilizing sonic drill tooling supplied and operated by an Illinois licensed well driller. Soil and bedrock cores are retrieved from the sonic boreholes. During drilling the core barrel is advanced ahead of an outer casing, sealing upper reaches of the borehole from lower units. Soil and bedrock are continuously collected into the core barrel, brought to the surface in 5- to 10-foot intervals, and emptied into disposable plastic sleeves. In the field, soil and bedrock samples are described and logged on boring logs according to the Unified Soil Classification System and standard rock core logging methods by a Field Scientist. Soil cuttings and bedrock cores will be drummed (provided by drilling contractor) and stored on-site for disposal.

All down hole equipment utilized in soil borings and monitoring well installations will be decontaminated prior to, and between uses, to prevent cross-contamination. Decontamination involves steam cleaning followed by water rinsing. Liquids and solids collected during

decontamination will be drummed (provided by drilling contractor) and stored on-site for disposal.

Following completion of the borehole advancement, the monitoring wells will be installed into bedrock, which is anticipated at two (2) to three (3) feet bgs. The wells are anticipated to be installed up to 20 feet bgs. Groundwater is anticipated to be encountered at a shallow depth. Actual well depths will be dependent on field conditions; Antea™ Group field personnel will work closely with the well drillers to assure the wells are constructed such that the wells are screened at a depth where there is sufficient water for monitoring and sampling.

The monitoring wells will be constructed within the soil borings and in accordance with 77 Illinois Administrative Code 920. All monitoring wells will be completed utilizing 4-inch diameter, plastic riser pipe with a 10-foot (0.010 inch slot) plastic screen. The wells will have appropriate filter pack material with 2-feet of filter pack extending above the screened interval. A 2-foot bentonite seal will be placed above the filter pack. Grout will fill the annular space from the top of the bentonite seal to within three (3) feet of the ground surface. Cement will be utilized to seal the remaining annular space and to secure a water-tight, above-grade protective well casing on each well. All monitoring wells shall be completed as above grade "stick-up" wells.

Should you have any questions regarding this matter please contact the Kendall Rannaoja Senior Project Manager at 630-689-1102.

Sincerely,

MARK D. NELSON
062-055091
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS

Mark Nelson
Senior Engineer
IL PE Registration # 062-055091

"I attest that all site investigations or remedial activities, including review of laboratory data, that are the subject of this plan or report were performed under my direction and this document and all attachments were prepared under my direction or reviewed by me, and, to the best of my knowledge and belief, the work described in the plan or report has been designed or completed in accordance with the Act, and generally accepted engineering practices, and the information presented, including any qualified laboratory data, is accurate and complete."

cc: Andrew Maguire, USEPA Region 5

1460 LIMESTONE RIDGE
PMW-5
PMW-6
PMW-3
PMW-4
1701 INDIAN TRL
PMW-2
1550 W STATE RTE 113
PMW-1
DRAFT
Legend
Proposed Monitoring Well
Release Location
Buildings
Parcels
N
0 30 60 120 180 Feet
Proposed Monitoring Well Location Map
Illinois Route 113 Release
Wood River Pipeline LLC
Kankakee, IL
PROJECT NO.
PK14KAN1
PREPARED BY
CCM
REF SCALE
1:1,200
DATE
03/17/2014
REVIEWED BY
MAP SCALE
1 inch = 100 feet
antea group