



December 8, 2014

Mr. Mostafa Mehran
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118

**Re: Notification of Implementation of the
Addendum to the Soil Vapor Monitoring Plan
Whirlpool Corporation
Fort Smith, Arkansas
EPA No. ARD042755389
AFIN No. 66-00048
CAO LIS 13-202**

Dear Mr. Mehran:

ENVIRON International Corporation (ENVIRON), on behalf of Whirlpool Corporation, is submitting this notification to the Arkansas Department of Environmental Quality (ADEQ) that implementation of the Addendum to the Soil Vapor Monitoring Plan will commence during the week of December 15, 2014. Work will consist of an initial boring to a depth of 15 feet below ground surface (bgs) to characterize soil types in the respective borings at each of five respective properties. These initial borings will be grouted closed after completion.

Based upon the results of the initial soil borings, details for installation of shallow and deep soil vapor points will be specified. In addition, if shallow water bearing zones are encountered, details for installation of shallow groundwater monitoring wells will be specified. Soil vapor and shallow groundwater monitoring well construction diagrams will be completed for installation in January 2015. The scope for soil vapor and shallow groundwater monitoring wells is provided as Attachment A.

The new soil vapor monitoring points and shallow groundwater monitoring wells are tentatively scheduled for installation during the week of January 12 or 19, 2015. The soil vapor and shallow groundwater monitoring wells will be sampled the following week tentatively scheduled for the week of January 26, 2015. The data for the respective sample locations will be compiled after receipt which is anticipated to be approximately two weeks after the sampling event. The data will be provided to ADEQ and the respective property owners within one week of receipt of the laboratory data. The respective property owners will then be requested to indicate whether they desire to have subslab vapor/crawl space and indoor air sampling performed for the respective properties.

The respective properties owners have requested Whirlpool attempt to maintain confidentiality regarding the specific properties where sampling will be performed. Although complete confidentiality may not be possible, Whirlpool will make every attempt to maintain the confidentiality of the property owners during the soil vapor monitoring efforts and we welcome the input from ADEQ on how best to meet the wishes of the property owners.

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If you have any questions or comments please contact me at your earliest convenience.

Sincerely,

ENVIRON International Corporation



Michael F. Ellis, PE
Principal

LIST OF ATTACHMENTS

Appendix A: Drilling Scope of Work

APPENDIX A

Drilling Scope of Work

Drilling Scope

Addendum to the Soil Vapor Monitoring Plan

The Whirlpool Corporation - Ft. Smith, Arkansas

INITIAL SOIL BORING COMPLETION

During an initial mobilization, an investigative boring will be performed at each of the five proposed locations for the respective nested soil vapor monitoring points and shallow groundwater monitoring wells to a total depth of approximately 15 feet below ground surface (bgs). The boring will be logged to identify the depths of shallow permeable zones that may produce water. Each boring will be continuously sampled and the soil samples logged and field screened with a photoionization detector (PID) by an ENVIRON geologist. Two to three soil samples will be collected from each boring based upon the results of field screening with a PID with an emphasis on collection of soil samples within permeable zones, if encountered. Soil samples will be analyzed for VOCs using EPA Method 8260. The boring may be performed using hollow stem auger or sonic drilling techniques. The boring will be properly abandoned after completion.

The two existing soil vapor points (VP-1 and VP-2) will be abandoned during the mobilization for the investigative boring.

Based upon the results of the initial soil borings, details for installation of shallow and deep soil vapor points will be specified. In addition, if shallow water bearing zones are encountered, details for installation of shallow groundwater monitoring wells will be specified. The soil vapor monitoring point and shallow groundwater monitoring well construction diagrams will be completed prior to mobilization for installation of these monitoring points in January 2015.

SOIL VAPOR POINT INSTALLATION

In January 2015 new soil vapor points will be installed at or near each of the five investigative borings. Each soil vapor monitoring point will be installed in a separate boring with protective casing (shallow and the deeper soil vapor monitoring point) grouted in-place and allowed to set a minimum of 24 hours before advancing the boring to install the respective soil vapor screen and casing. Protective casing will be installed to better facilitate monitoring of the specific depth where the soil vapor screen is set to reduce or eliminate influences from the surface or other potential shallow permeable zones that may produce water at the specific depth to be monitored for the respective soil vapor point. The depths of the protective casing and soil vapor screen and casings will be determined after completion of the initial borings in December 2014.

The new soil vapor sample points will be installed to two separate depths in separate borings at each of the five locations. The soil vapor point screen shall consist of a 6 inch long, 3/8 inch diameter stainless steel screen installed at the desired depth (up to depths of 15 feet bgs) connected to 1/4 inch outside diameter wire-reinforced nylon, thick wall Teflon tubing, or equivalent installed from the screen to the ground surface. The tubing shall be capable of withstanding standard vacuum associated with soil vapor sampling protocols without collapsing. A sand pack shall be installed in the soil vapor point annulus surrounding the stainless steel screen to approximately 0.5 to 1 foot above the top of the screen followed by an annular

bentonite seal above the top of the sand pack to within two feet of the surface. The remainder of the annular space will be grouted with a bentonite/cement grout (minimum of 2 feet of grout will be placed); however, 1 inch diameter PVC well casing or similar protective casing shall be installed at the surface to protect the ¼ inch soil vapor tubing (i.e. soil vapor tubing shall be placed within the 1 inch diameter pipe near the surface for protection from abrasion or damage from the bentonite/cement grout).

The soil vapor monitoring point will be completed at the surface with a traffic rated flush mount protective cover installed within a concrete apron. Drill cuttings/spoil and purge water will be properly managed and contained in drums to facilitate characterization and disposal following completion of the soil vapor points.

MONITORING WELL INSTALLATION

If shallow groundwater is encountered while performing the initial borings in December 2014, shallow groundwater monitoring wells will be installed at or near each of the five investigative borings in January 2015. Each shallow groundwater monitoring point will be installed in a separate boring with protective casing (shallow and the deeper groundwater monitoring point, if groundwater is present at two depths) grouted in-place and allowed to set a minimum of 24 hours before advancing the boring to install the respective groundwater well screen and casing. Protective casing will be installed to better facilitate monitoring of the specific depth where the well screen is set to reduce or eliminate influences from other potential permeable zones that may produce water at the specific depth to be monitored for the respective well. The depths of the protective casing and well screen and casing will be determined after completion of the initial borings. The protective casing shall be installed approximately one foot below the surface to limit issues with future abandonment.

Each groundwater well will be constructed with a 2 inch diameter PVC, 6 inch to 1 foot long well screen and 2 inch diameter PVC well casing to the surface. A 20/40 grade sand pack will be installed in the well annulus around the PVC screen to approximately 1 foot above the top of the screen followed by a 1 to 2 foot annular bentonite seal. The remainder of the annular space will be grouted with a bentonite/cement grout (minimum of 2 feet of grout will be placed). The minimum well depth will be 5 feet which will consist of a 1 foot annular bentonite seal. All newly constructed monitoring wells will be properly developed in accordance with ADEQ guidance (Interim Policy PRCR 96-4 Section L Page 9).

The drilling and installation of the new monitoring wells will be completed using hollow stem auger or sonic drilling techniques. The wells will be completed at the surface with a traffic rated flush mount protective cover installed within a concrete apron. The wells will be properly developed after installation is complete. Drill cuttings/spoil and purge water will be properly managed and contained in drums to facilitate characterization and disposal following completion of the borings and monitoring wells.