

IOWA DEPARTMENT OF NATURAL RESOURCES
NO FURTHER ACTION CERTIFICATE
ANR Pipeline Bloomfield Meter Station

This document certifies that a portion of the property described below has satisfied regulatory standards qualifying the area for a no further action classification under Iowa's Land Recycling Program in accordance with administrative rules contained in chapter 567 Iowa Administrative Code 137. A no further action classification generally means that voluntary participants in this program have identified and assessed certain contaminants of concern and sufficiently addressed them such that the remaining risk to human health, safety and the environment is deemed acceptable according to standards adopted by the Iowa Department of Natural Resources.

A no further action classification applies to an area defined as an "affected area" which does not encompass the entire area of the parcel of real estate on which it resides. Exhibit A describes the area of soil contamination that was assessed and to which the classification applies. The no further action classification applies only to the contaminant of concern described in Exhibit B, based on known or suspected sources of contamination. Exhibit C is a narrative description of the environmental conditions addressed and not addressed and the regulatory process that has resulted in this no further action classification.

A classification of no further action grants to "protected parties" protection from future environmental liabilities pursuant to Iowa Code Chapter 455H. The scope of the liability protection generally corresponds to the scope of the environmental condition(s) that qualifies for the no further action classification. Iowa Code section 455H.301 enumerates certain conditions which could authorize re-opening regulation of the affected area and removal of liability protections to certain protected parties. Interested parties should contact the Iowa Department of Natural Resources to obtain more information on the environmental conditions assessed within the "affected area" and any potential environmental concerns not specifically addressed or associated with areas outside the affected area.

AFFECTED AREAS:

The affected area is part of the larger parcel legally described in Exhibit A. The affected area that is subject to the No Further Action Certificate is shown in the attached figure (labeled Figure 5) from Appendix A of the Mercury Site Investigation and Remediation Report for the Bloomfield Meter Station in Davis County, Iowa. This report can be found in the department file shown below.

Property owner(s) and address at the time of filing:

TransCanada
717 Texas Street
Houston, TX 77002-2761

Enrolled Participants:


TransCanada
717 Texas Street
Houston, TX 77002-2761

Department file reference:

CON 12-15 LRP - ANR Pipeline

This certificate does not constitute a warranty or a representation of any kind to any person as to the environmental condition, marketability or value of the above referenced property other than that certification required by Iowa Code section 455H.301 et seq. Interested parties should not rely solely on the representations contained in this certificate.

FOR THE DIRECTOR, IOWA DEPARTMENT OF NATURAL RESOURCES



RICHARD A. LEOPOLD
DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

State of Iowa
County of Polk



Signed or attested before me on this 9th day of April, 2010 by
Lisa Nissen, My Commission Expires 3/17/12
NOTARY PUBLIC, STATE OF IOWA

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Exhibit "A"

Property Description

The affected area covered by this No Further Action Certificate is the "area excavated to a depth of 1.5 to 1.75 feet" near the southeast corner of the ANRPL Meter Building as shown in the attached figure labeled Figure 5, Remediation Sample Location Plan.

The other attached figure (labeled Figure 2, Site Layout and Sample Location Plan) shows the entire property on which the affected area lies, which is legally described below.

A parcel of land located in the Northwest Quarter of Section 24, Township 69 North, Range 14 West of the Fifth Principal Meridian, described as – Commencing at a point 383.45 feet North and 50 feet West of the center of Section 24, township and range aforesaid, which last mentioned point is the point of beginning; thence running West 60 feet; thence North 120 feet; thence East 60 feet; thence South 120 feet to the point of beginning.

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Exhibit "B"

Contaminants of Concern

Soil is the only media of concern covered by this no further action certificate.

The only contaminant addressed by this no further action certificate is elemental mercury.

The Land Recycling Program (LRP) standard for which compliance is based is the statewide standard for soil of 23 milligrams per kilogram (mg/kg) in accordance with subrule 567 Iowa Administrative Code (IAC) 137.5(5). A statewide standard for soil represents the concentration at which normal, unrestricted exposure to soil is considered unlikely to pose a threat to human health, safety, or the environment.

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ANR Pipeline Bloomfield Meter Station

Exhibit "C"

Summary of site assessment activities

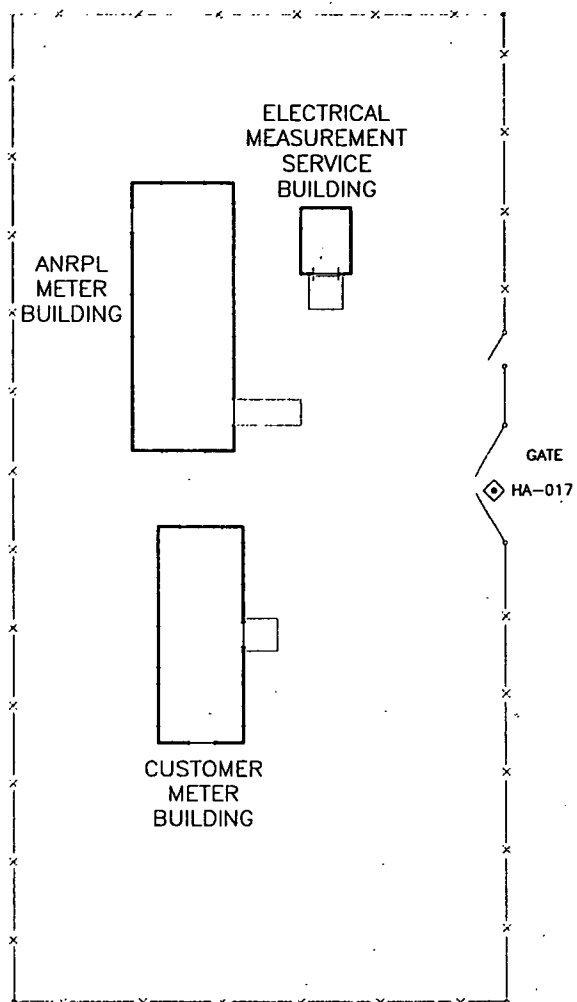
ANR Pipeline (ANRPL) operates 38 meter stations, including the Bloomfield Meter Station, along its natural gas transmission pipeline in south-central and southeastern Iowa. Mercury-containing meters were previously used at these facilities but were phased-out from the 1970's to about 1990. In June of 2004 ANRPL enrolled in the Iowa Land Recycling Program with the objective of investigating each facility where mercury was known to have been used and conducting remediation, as necessary, to provide for unrestricted use.

ANRPL personnel familiar with the Bloomfield Meter Station facility were interviewed and pertinent records were reviewed. The resultant information was used to target areas for sampling mercury.

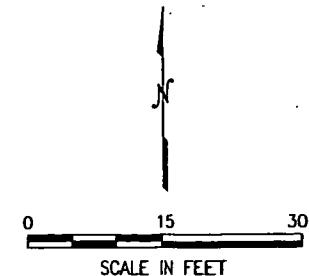
Soil sampling was conducted at targeted outside locations. Mercury in excess of the soil action level of 23 mg/kg was found at one location (affected area) near the southeast corner the ANRPL Meter Building at the Bloomfield Meter Station. Removal and off-site disposal of soil containing mercury in excess of 23 mg/kg was conducted at the affected area. Confirmatory soil sample results revealed mercury less than the 23 mg/kg standard. Therefore, the affected area at the Bloomfield Meter Station complies with the statewide soil standard for mercury and meets the criteria for a no further action determination.

A mercury-vapor survey was conducted inside the meter building to identify potential areas of mercury contamination on building surfaces. A mercury-vapor screening action level of 0.05 milligrams per cubic meter was established. Mercury vapors near the floor drain were found in excess of the screening level. Multiple efforts to clean the drain resulted in reduced vapor concentrations, but still about twice the vapor screening level. The Iowa Department of Natural Resources did not require additional action to reduce the mercury vapor at this location because only one of the ten confirmation samples collected around the drain exceeded the screening level and the location of the single exceedence is not within the normal breathing zone. It should be noted that the no further action determination does not apply to air, since the mercury-vapor screening was only used to identify mercury on building surfaces and was not used to assess potential exposure from inhalation of mercury vapors, which is not expected to be significant.




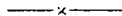
The areal extent and levels of mercury found in soil samples at the Bloomfield Meter Station do not suggest a threat to groundwater. Furthermore, the leaching test, which was conducted to determine if excavated soils were classified as hazardous waste, revealed no evidence of leaching of mercury. Therefore, the Iowa Department of Natural Resources concluded that mercury likely does not pose a significant threat to groundwater at the ANRPL Bloomfield Meter Station site. However, the no further action determination does not apply to groundwater, since investigative activities did not specifically address groundwater.



MERCURY SOIL ANALYTICAL RESULTS		
BORING I.D.	SAMPLE DEPTH (FEET)	LAB Hg (mg/kg)
HA-017	0-0.5	0.061 J
HA-017	0.5-1	0.085 J
ACTION LEVEL 1A DNR: 23		





LEGEND

-  ASSESSMENT SOIL SAMPLE LOCATION
-  DOOR LOCATION
-  WINDOW LOCATION
-  FENCE

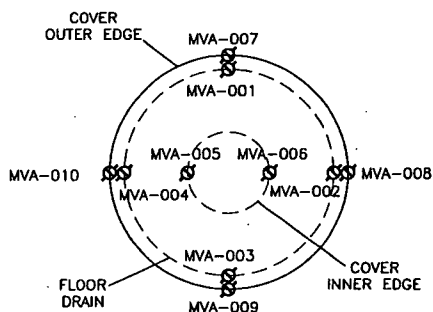
NOTES

1. BASE MAP DEVELOPED FROM FIELD SKETCH DURING SITE INVESTIGATION ACTIVITIES PROVIDED BY GZA.
2. SAMPLING LOCATIONS WERE APPROXIMATELY DETERMINED BY LINE OF SIGHT REFERENCING AND TAPE MEASURED DISTANCE FROM EXISTING SITE FEATURES. THESE DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.
3. J INDICATES AN ESTIMATED RESULT GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT, BUT LESS THAN THE REPORTING LIMIT.
4. ALL LABELS ON SAMPLE POINT IN FIGURES ARE CONDENSED. ONLY THE SUFFIX IS USED IN NOTATION.

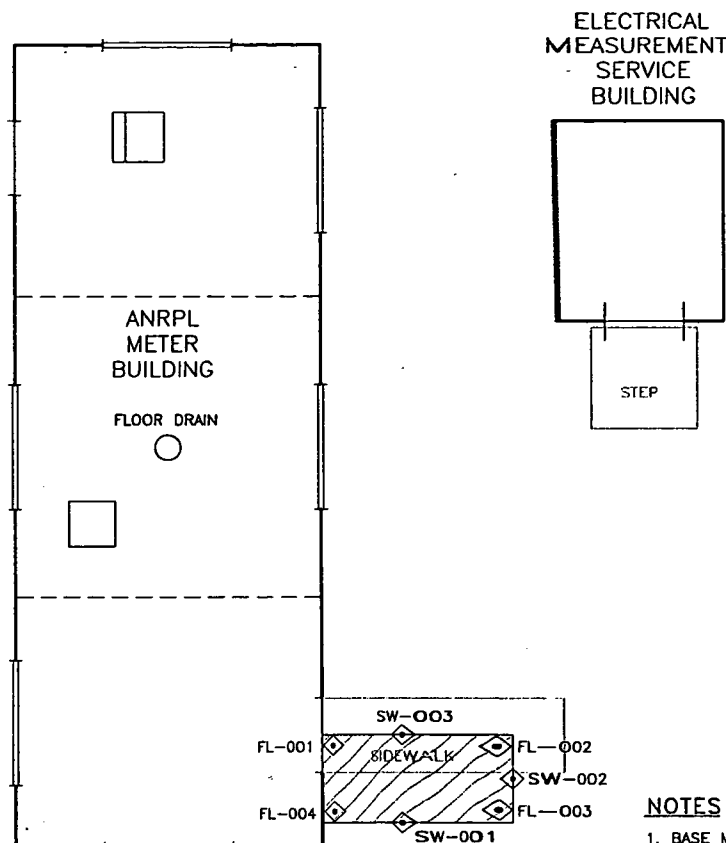
FIGURE 2	
SITE LAYOUT AND SAMPLE LOCATION PLAN MERCURY INVESTIGATION AND REMEDIATION REPORT BLOOMFIELD METER STATION DAVIS COUNTY, IOWA	
 ANR Pipeline an El Paso company	
<small>We warrant that the information contained herein was prepared by and is the property of GZA GeoEnvironmental, Inc. It is not to be used for any other purpose or project without the written consent of GZA GeoEnvironmental, Inc. The drawings and data are not to be used for any other purpose without the written consent of GZA GeoEnvironmental, Inc. All rights of invention are reserved.</small>	
 GZA GeoEnvironmental, Inc.	
DRAWN BY: MVT	DATE: 01-07-05
CHECKED BY: MER	REVISED:
APPROVED BY:	PROJECT NO: 68408.15

MERCURY SOIL ANALYTICAL RESULTS		
BORING I.D.	SAMPLE DEPTH (FEET)	LAB Hg (mg/kg)
FL-001	1.5-1.75	0.26
FL-002	1.5-1.75	0.055 J
FL-003	1.5-1.75	0.041 J
FL-004	1.5-1.75	0.074 J
SW-001	1.3	0.038 J
SW-002	1.3	1.6
SW-003	1.3	0.039 J

POST REMEDIATION MERCURY VAPOR RESULTS		
SAMPLE I.D.	JEROME Hg (mg/m ³)	LUMEX (P-MODE) Hg (mg/m ³)
COVER		
MVA-001	0.014	0.002025
MVA-002	0.008	0.002221
MVA-003	0.028	0.008402
MVA-004	0.014	0.005797
MVA-005	0.004	0.006509
MVA-006	0.038	0.003637
DRAIN		
MVA-007	0.039	0.006600
MVA-008	0.005	0.010390
MVA-009	0.025	0.009923
MVA-010	0.116	0.000213
ACTION LEVEL: 0.05		



DETAIL OF FLOOR DRAIN
NOT TO SCALE

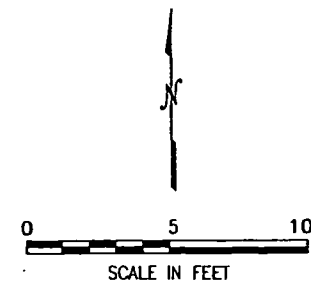


ELECTRICAL
MEASUREMENT
SERVICE
BUILDING

STEP

ANRPL
METER
BUILDING

FLOOR DRAIN





LEGEND

- ◊ VERIFICATION SOIL SAMPLE LOCATION
- ⊗ MERCURY VAPOR SURVEY SAMPLE LOCATION
- |— DOOR LOCATION
- |— WINDOW LOCATION
- x— FENCE
- - - FLOOR CRACK
- ▨ AREA EXCAVATED TO A DEPTH OF 1.5-1.75 FEET

NOTES

1. BASE MAP DEVELOPED FROM FIELD SKETCH DURING SITE INVESTIGATION ACTIVITIES PROVIDED BY GZA.
2. SAMPLING LOCATIONS WERE APPROXIMATELY DETERMINED FROM TAPE MEASUREMENTS FROM EXISTING SITE FEATURES. THESE DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.
3. MERCURY VAPOR SURVEY SAMPLE LOCATIONS TAKEN USING A JEROME MERCURY VAPOR ANALYZER, MODEL 431-X.
4. J INDICATES AN ESTIMATED RESULT GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT, BUT LESS THAN THE REPORTING LIMIT. U INDICATES A RESULT LESS THAN METHOD DETECTION LIMIT.
5. ALL LABELS ON SAMPLE POINT IN FIGURES ARE CONDENSED. ONLY THE SUFFIX IS USED IN NOTATION.

FIGURE 5	
REMEDIATION SAMPLE LOCATION PLAN ANRPL METER BUILDING MERCURY INVESTIGATION AND REMEDIATION REPORT BLOOMFIELD METER STATION DAVIS COUNTY, IOWA	
	ANR Pipeline an El Paso company
	GZA GeoEnvironmental, Inc.
DRAWN BY: MVT	DATE: 11-17-04
CHECKED BY: MER	REVISED:
APPROVED BY:	PROJECT NO: 68408.15