



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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217/524-3300

August 5, 2010

Certified Mail

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Shell Oil Products US
Attn: Mr. Kevin Dyer
17 Junction Drive
PMB #399
Glen Carbon, Illinois 62034

WRB Refining LLC Wood River Refinery
Attn: Mr. David Dunn
900 South Central Avenue
P.O. Box 76
Roxana, Illinois 62084

RECEIVED

AUG 10 2010

Re: 1191150002 -- Madison County
Equilon
ILD080012305
Log No. B-43-CA-16; B-43-CA-18
RCRA Permit
Permit CA

Dear Mr. Dyer and Mr. Dunn:

This is in response to three submittals made on your behalf by Robert B. Billman, URS regarding an investigation being conducted along the west property line of the North property of the WRB Refining, LLC Wood River Refinery in Roxana, Illinois and the area immediately west of the refinery's North Property. The Equilon Enterprises facility which is the subject of this letter has been assigned Illinois EPA Identification Number 1191150002. This facility is physically located at the WRB Refining, LLC Wood River Refinery in Roxana, Illinois; the Illinois EPA Identification Number for the refinery is 1190905013. Equilon Enterprises is the operator for Site Number 1191150002 as it has contractual responsibilities to carry out certain remedial activities at the refinery, including those required by a RCRA permit (Log No. B-43 and associated modifications); Equilon and its corporate predecessors actually owned and operated the refinery until 2000.

On May 12, 2009, Illinois EPA approved a plan for conducting an investigation in the area mentioned above which includes: (1) the area around a groundwater monitoring well referred to as "P-60" (which is a part of the groundwater monitoring/remediation system associated with the RCRA permit for the Equilon facility); and (2) the area in the vicinity of the 1986 benzene release from an underground pipe near the intersection of Illinois Route 111 and Rand Avenue. A drawing showing the general location of the areas investigated is provided as Attachment A to this letter.

The three submittals which are the subject of this letter are associated with various aspects of the approved investigation; these submittals include:

1. A September 16, 2008 memorandum from Mr. Billman to Amy Boley, IEPA, received by Illinois EPA on September 18, 2009 (the date of the memo is incorrect; the memorandum

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Collinsville • 2009 Mall Street, Collinsville, IL 62234 • (618) 346-5120

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should have September 16, 2009 as its date). Among other things, this submittal proposed the installation of four wells in the residential portion of Roxana;

2. A February 18, 2010 submittal which included a document entitled "Report, Dissolved Phase Groundwater Investigation and P-60 Free Phase Product Delineation," and dated February 2010. This submittal described the results of an investigation conducted in the area of concern and proposed certain additional investigation efforts.
3. A May 18, 2010 submittal which contained a completed RCRA Corrective Action Certification form.

Illinois EPA has completed its review of Mr. Billman's submittals and has the following comments:

1. Contrary to the statements on Page ES-4 and 4-3 of the February 2010 report, the soil vapors analyzed in the near vicinity of the 1986 benzene release site and along Chaffer Street may indeed pose a risk, as many analytical results indicate that benzene is present in these vapors at levels greatly exceeding the Tier 1 soil gas remediation objectives currently proposed by Illinois EPA and those used USEPA in the nearby Village of Hartford.
2. The investigation efforts documented in the February 2010 report did not meet the requirements of Condition 9 of Illinois EPA's May 12, 2009 letter approving a workplan for conducting these investigation efforts. Specifically, additional soil gas sampling points were not installed, as necessary, to determine the extent of soil vapor containing contamination at levels great than those in Table 7 of the workplan (this table presented a target value of 41 mg/m³ for benzene). Additional investigation efforts must be carried to clearly define the extent the contaminated soil vapors beneath the village of Roxana. These efforts should be carried out in accordance with the procedures previously approved by Illinois EPA. A report documenting the results of this investigation must be submitted to Illinois EPA by December 31, 2010; this report should be developed in general accordance with the February 2010 report mentioned above as well as USEPA and IEPA guidance.
3. The existing vapor monitoring points must continue to be sampled on a quarterly basis (starting with the July-August 2010 sampling event) and analyzed for benzene, hexane and other petroleum hydrocarbons using a modified USEPA Method TO-15 or similar analysis. As gasoline is complex mixture of hundreds of hydrocarbons, these additional hydrocarbons can be used to further characterize the soil gas. Detection limits for compounds with action levels should not be greater than the action level. During sample collection, the VMPs should be screened using a flame ionization detector, a photo-

ionization detector, and an explosion meter; in addition samples should be screened for methane. The required collection and reporting efforts must be carried out in accordance with the schedule set forth in Condition 7.d below. The actual reports documenting the results of the required efforts should be developed in general accordance with the February 2010 report mentioned above as well as USEPA and IEPA guidance.

4. Within forty-five days of the date of this letter, a workplan must be developed in accordance with previously approved documents as well as USEPA and IEPA guidance and submitted to Illinois EPA for review and approval which contains procedures for carrying out the following activities:
 - a. An evaluation of possible vapor intrusion into residence near the west fence line of the Wood River Refinery. Homes a minimum of 200' from VMP-1, 2, 4, 5, 6 and 11 should be screened using a flame ionization detector, a photo-ionization detector, and an explosion meter; in addition these homes should be screened for methane (a drawing showing the location of these soil vapor monitoring points is attached). In addition, the indoor air and sub-slab soil gas at each residence should be sampled using summa canisters for benzene, hexane and other petroleum hydrocarbons.
 - b. The offering of interim measures to protect any residents where elevated sub-slab hydrocarbons are detected. Interim measures may include sealing cracks in the walls/floor of basements, sealing basement walls, installing a barrier between exposed soil and air within residence in areas such as crawl spaces, sealing/fixing drains, installing air purifiers, installing vent fans and installing monitoring equipment. An additional interim measures which may need to be considered is the installation of sub-slab depressurization systems and an area wide soil vapor extraction system.
 - c. Collection of sub-slab and indoor air samples should be collected from the building and vapor monitoring points at the Roxana Public Works Yard.
5. While a drawing showing the location of pipelines along the western property boundary of the North Property was provided in Appendix L of the February 2010 report, the report did not provide any discussion or evaluation of the information presented in the drawing as required by Condition 14 of Illinois EPA's May 12, 2009 letter which approved a workplan for conducting the investigation efforts documented in the subject submittal. This additional information must be submitted along with the report required by Condition 4 above.

6. The Illinois EPA concurs, in part, with the facility interpretation of the dissolved plume boundaries. The following conditions and modifications apply:
 - a. The levels of contamination and dimensions of the plume depicted on Figure 13 warrant further investigation to define the extent of the plume:
 - (1) The Illinois EPA concurs that MW-6 was free of detections during the June 16, 2008 sampling event. However, the Illinois EPA does not concur that monitoring well MW-6 is adequate to define the southeastern boundary of the benzene plume. This decision is based on the fact that the screened intervals for wells within the benzene plume are screened at depths ranging from approximately 30 feet bgs to over 70 feet bgs. Well MW-6 is screened from approximately 32 to 47 feet bgs. Therefore, nested wells at P-93A through P-93D must be sampled to determine the vertical extent of contamination. Investigation results from 2006 and 2008 indicate the benzene levels were 5 orders of magnitude greater than the Class I GQS for benzene at P-93A and P-93B. The facility must demonstrate the adequacy of MW-6, or any other well proposed to define the boundary of the groundwater contaminant plumes, to monitor the vertical and horizontal extent of contamination. If the facility cannot demonstrate the extent of the plume with existing wells, then additional data points must be proposed.
 - (2) Additional groundwater data must be collected beyond locations COP B-1, GP-4, COP B-3, and COP B-5, where benzene was detected at 1.04 mg/L, 0.0669 mg/L, 65.3 mg/L, and 27.3 mg/L, respectively. At a minimum the following locations must be sampled to delineate the extent of contamination:
 - (a) The facility must collect at least one (1) sample northwest of COP B-1; and one (1) sample south of each of the following wells: COP B-3, P-66, and P-75.
 - (b) The additional samples required by Condition 1.a.ii.1 above may be collected from new or existing locations if the facility can demonstrate they are sampling from wells installed at an appropriate distance and depth.
 - (3) If samples at GP-3 and GP-5 have any exceedance of Class I GQSs, the facility must collect a minimum of one (1) additional sample beyond GP-3 and GP-5 to further delineate the plume.

7. The Illinois EPA cannot approve the proposal to simply gauge the monitoring wells within the Village of Roxana. In order to monitor the groundwater quality of the uppermost aquifer within the Village of Roxana, the following monitoring wells will constitute an interim monitoring well network to be sampled on a quarterly basis and reported as described below. Those wells without exceedances of Class I GQSs are necessary to define the extent of contamination. Those wells within the plumes will serve to monitor the plume conditions.
- a. Existing monitoring wells MW-1 through MW-8, P-54, and nested wells P-93-A through D;
 - b. The Illinois EPA can approve the request to install monitoring wells at the four (4) locations proposed in the September 16, 2008 document. See Attachment A to this letter for a figure depicting the approximate locations of the proposed wells. See Attachment B to the letter for the location of wells MW-1 through MW-8, P-54, and P-93A through P-93D.
 - c. The facility must install the four (4) proposed wells, required by Condition 7.b above, within 45 days of the date of this letter, in accordance with well installation requirements listed in the RCRA Part B Permit. The screened interval for these wells must be installed at a depth capable of monitoring the plumes identified in the groundwater profiling investigation. Screens must be limited to a maximum of 10 feet.
 - d. The Illinois EPA can approve the request to conduct gauging events in conjunction with the Groundwater Corrective Action Monitoring Program. The facility must initiate quarterly sampling and gauging at all wells required by Condition 7.a and 7.b, during the quarterly event the letter is issued. The quarterly monitoring and reporting schedule is listed below:

<u>Sampling Event of Calendar Year</u>	<u>Samples to be Collected During the Months of</u>	<u>Results Submitted to the Agency by the Following</u>
First Quarter	January – February	April 15
Second Quarter	April – May	July 15
Third Quarter	July – August	October 15
Fourth Quarter	October – November	January 15

- e. Based on the constituents detected in groundwater, all wells must be analyzed for VOCs and SVOCs.
 - f. If groundwater is detected during the installation of any future borings, including a shallow groundwater, the facility must sample groundwater at that location to determine groundwater quality.
8. Quarterly groundwater monitoring reports for information obtained during each sampling event must be submitted quarterly to the Illinois EPA in accordance with the schedule listed in Condition 7.d above. The reports must discuss the effectiveness of the groundwater corrective action program. At a minimum, the report must include, but not be restricted to, the following:
- a. The sampling and analytical data collected at each well, as required by Condition 7 above.
 - b. Evaluate the effectiveness of the hydraulic control and contaminant removal, including the P-60 and P-60-11 skimmer pumps.
 - c. Provide a discussion of any change in the quality of groundwater within the Village of Roxana which has resulted from the corrective action.
 - d. Provide adequate figures to demonstrate the FPH, and the dissolved groundwater contaminant plumes are stable and/or decreasing.
 - e. Figure(s) must be submitted which combine the analytical results and FPH plume.
 - f. Potentiometric map(s) must also depicts the water production wells and their influence.
 - g. A discussion of any seasonal influence on the FPH plume or groundwater contamination must be discussed.
9. If the facility determines that groundwater flow is not being adequately controlled, the facility shall:
- a. Notify the Agency in writing within seven (7) days of the date that this determination is made;

- b. Take actions as necessary to regain the control of the horizontal and vertical flow in the vertical column of water present in the uppermost aquifer beneath the North Property and monitor the position and rate of migration of the contaminant plumes; and
 - c. Submit a written report to the Illinois EPA within thirty (30) days describing the actions taken to regain control of groundwater flow. In addition, the report must contain information which demonstrates that groundwater flow is being adequately controlled.
10. If the facility determines a shallow groundwater is present and contaminated, additional corrective measures must be proposed to address the contamination in a timely manner.
 - a. The facility must conduct a round of shallow groundwater sampling in the vicinity of ROST-5, ROST-10, and ROST-21 to investigate a potential shallow groundwater zone associated with silty/sandy clay layers.
 - b. Further delineation must be proposed if a shallow groundwater is encountered. Additional monitoring wells and corrective measures may also be necessary if the facility identifies a shallow groundwater.
 - c. If the facility determines that a shallow groundwater zone is not present, the facility will continue to address groundwater of the uppermost aquifer.
11. Field Activities for groundwater must be performed in accordance with the proposed methods and Standard Operating Procedures (SOPs) located in Attachment C of the report entitled, "Dissolved Phase Groundwater Investigation Workplan (September 5, 2008)", dated January 21, 2009, and approved in the Illinois EPA letter dated May 21, 2009 (Log No. B-43-CA-12).
12. The Illinois EPA acknowledges that the Village of Roxanna Groundwater Ordinance No. 867, which was adopted June 2, 2008, prohibits the installation and use of private potable water supply wells. The Ordinance applies to a portion of the Village which does not have private wells and this also includes the investigation area.
13. The Illinois EPA concurs with the proposals for monitoring LNAPL at the piezometers within the Village of Roxana, with the following conditions and modifications:
 - a. The existing piezometers within the Village of Roxana consist of ROST-3-PZ (at ROST-3), ROST-4-PZ (at ROST-4), and ROST-7-PZ (at ROST-7), installed at depths of 50 feet, 48 feet, and 30 feet, respectively, and must be gauged quarterly,

and information reported in accordance with the schedule identified in Condition 7.d above.

- b. Figure 12 (Product Gauging Results) is not fully representative of product gauged at the WRR. Wells P-74, P-59 and P-56 have all had measurable amounts of free product, but they are depicted as being outside of the plume. All future maps depicting product must be revised to include all wells that have had measurable amounts of free product.
 - c. Groundwater samples collected from P-57 and P-93 have indicated that benzene levels are nearing the solubility limits. Based on product detected and high levels of benzene contamination, free product is present along most of the fenceline from south of Second Street to north of Eight Street.
 - d. Any existing well that has contained free product, measured during any sampling or investigation event, must be depicted on the figures provided by the facility to demonstrate the extent of free product for that quarterly event.
14. The facility must establish a GMZ within ninety (90) days of the Illinois EPA approval that the source and extent of contamination along the west fenceline and the within the Village of Roxana has been defined. Based on the requirement for additional investigation, establishment of the GMZ is not yet required. In order to establish a GMZ, the facility must obtain written permission from off-site property owners to have a GMZ on their property. Pursuant to 35 Ill. Adm. Code 724.201(c), the facility is not relieved from addressing impacted groundwater beyond the facility boundary where off-site access is denied.
 15. The close proximity of FPH to residential properties within the Village of Roxana warrants more aggressive measures along the west fenceline. Therefore, the facility must provide a Conceptual Design Report for additional corrective measures to address FPH being detected along the western fenceline of the North Property. The Conceptual Design Report must be developed in accordance with the guidance document provided as Attachment C to this letter and be submitted to the Illinois EPA within 90 days.
 16. Regarding the current removal of LNAPL, the Illinois EPA can approve the installation of a four-inch diameter well for product removal, to be installed at the location of piezometer P-60-11. The details of the product removal system to be installed at P-60-11, plus the removal system at well P-60, and the production wells at the WRR must be detailed in a Construction Completion Report developed in accordance with the guidance document provided as Attachment D to this letter and submitted to Illinois EPA within 90 days of the date of this letter.

17. The facility must report the results of the evaluations conducted and measures taken regarding maintenance needs for the WRR groundwater production wells within the report required in Condition 16 above.

18. Submit all information required by this letter to the address specified below:

Illinois Environmental Protection Agency
Bureau of Land #33
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

19. The contamination present in the southern portion of the Village of Roxana must be properly remediated in accordance with the Illinois Environmental Protection Act and the associated regulations. Plans to carry out this required remediation must be submitted to Illinois EPA for review and approval once the contamination has been adequately contaminated. Failure to properly remediate this contamination may result in Illinois EPA initiating enforcement against Shell Oil Products U.S. and WRB Refining.

20. All work required by this letter must be directed and supervised by, as appropriate, a licensed professional engineer or a licensed professional geologist. These professionals must certify that the efforts documented in any report were carried out in accordance with Illinois EPA's approval letters.

21. A completed RCRA Corrective Action Certification Form must accompany all submittals made to Illinois EPA regarding this project. To allow for the proper review of a submittal, two copies of each document should be submitted to Illinois EPA as well as the original.

Work required by this letter, your submittal or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Mr. Kevin Dyer and Mr. David Dunn
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If you have any questions regarding the groundwater aspects of this letter, please contact Amy Boley at 217/558-4716; questions regarding other aspects of this letter should be directed to James K. Moore, P.E. at 217/524-3295.

Sincerely,



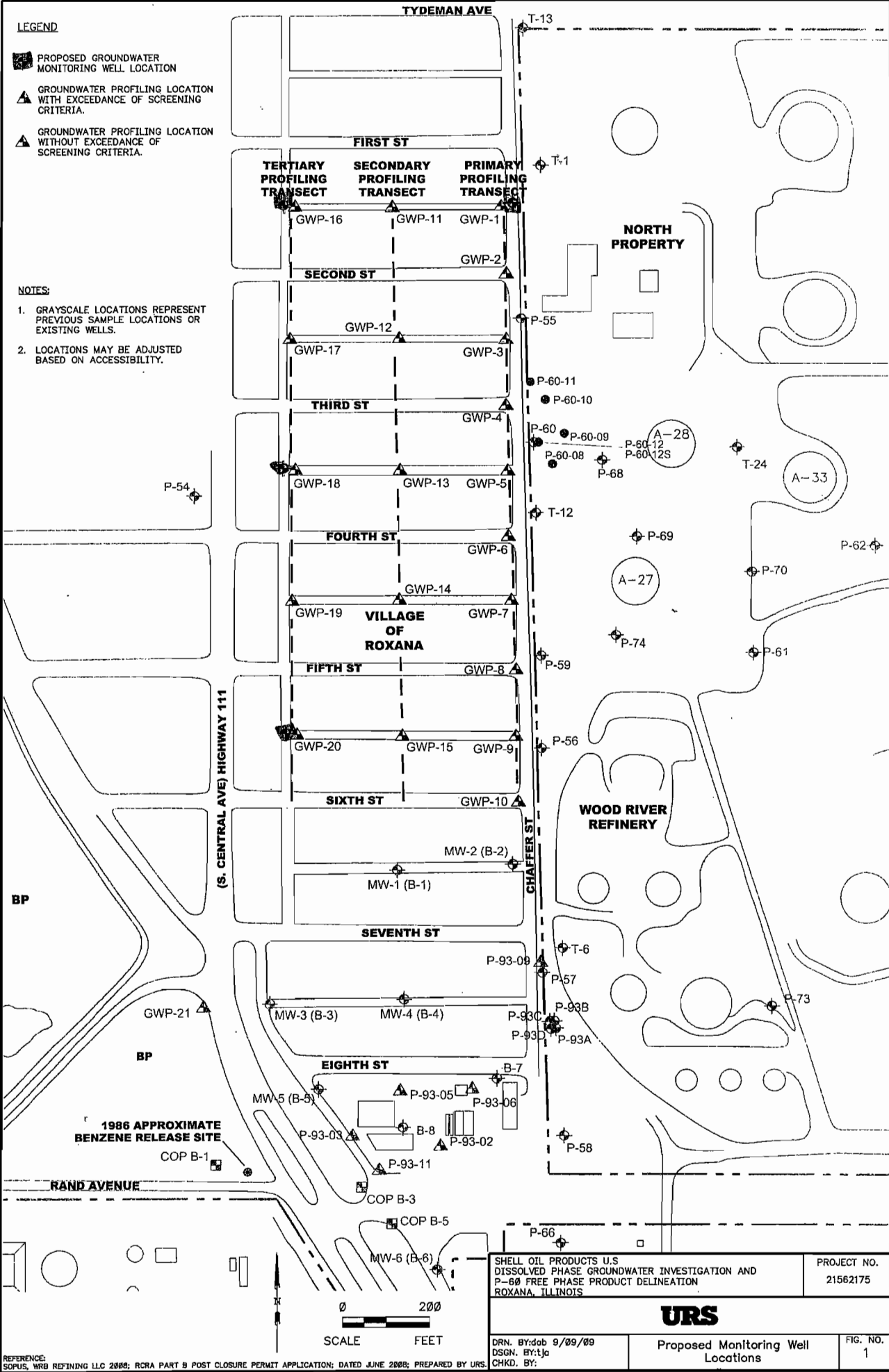
Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

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JKM AMP TBM

Attachments: A – General Site Layout and Location of Four Proposed Groundwater Monitoring Wells
B – Location of Interim Groundwater Monitoring Network Wells
C – Conceptual Design Report
D – Required Contents of a Construction Completion Report, LNAPL Removal System at P-60 and P-60-11 and the Production Wells

cc: David R. Webb, Illinois Department of Public Health
Dr. Michelle Watters, ASTDR
Ken Runkle, Illinois Department of Public Health

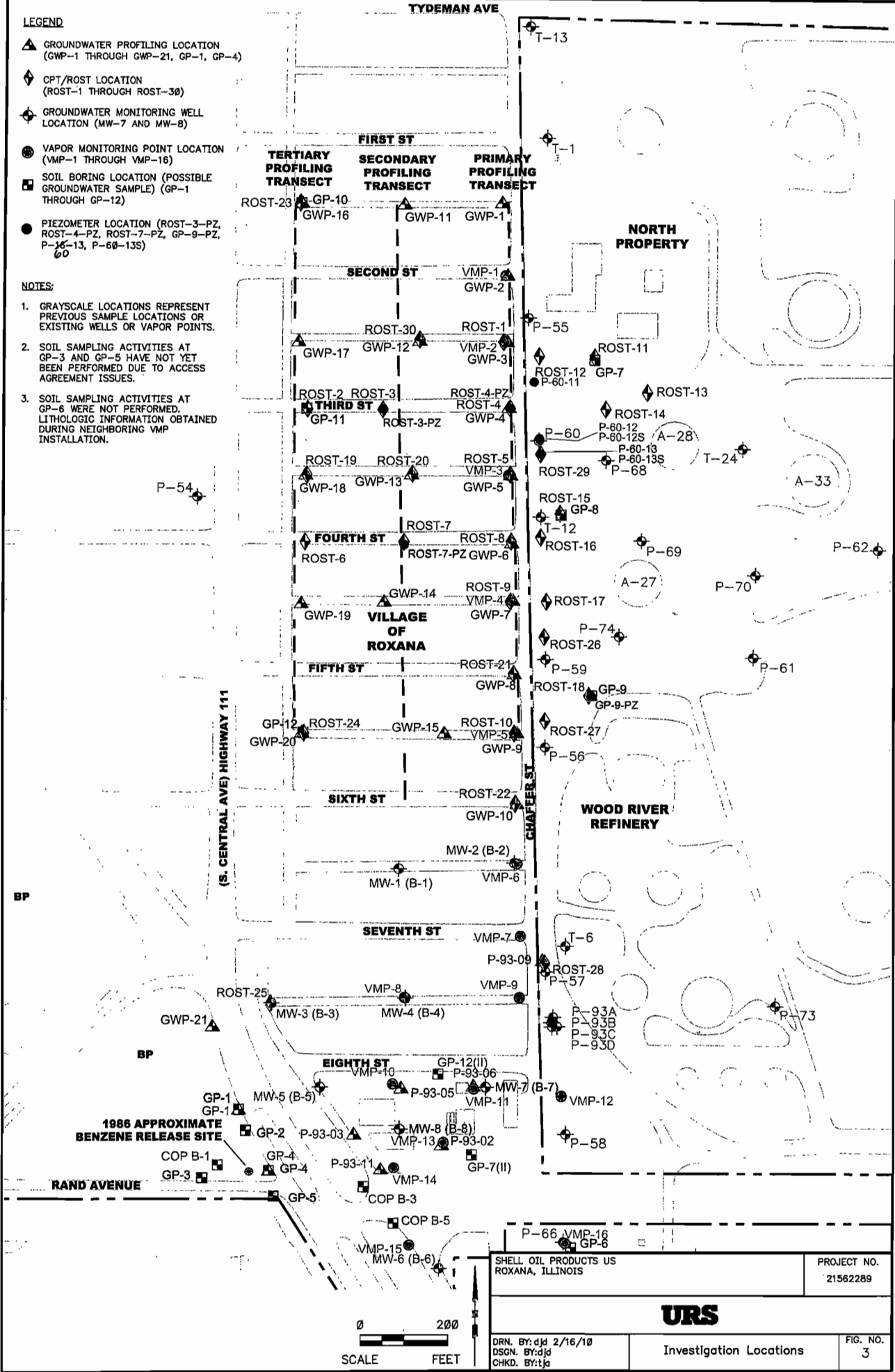


Four (4)
Proposed
Wells
(will be
added to
monitoring
network)

B-43-ct-16+18
Attachment A

image reduced
from original
size

SHELL OIL PRODUCTS U.S. DISSOLVED PHASE GROUNDWATER INVESTIGATION AND P-60 FREE PHASE PRODUCT DELINEATION ROXANA, ILLINOIS		PROJECT NO. 21562175
URS		
DRN. BY: dob 9/09/09 DSGN. BY: tjc CHKD. BY:	Proposed Monitoring Well Locations	FIG. NO. 1



Interim
Groundwater
Monitoring
Network
Wells

MW-1 to MW-8,
P-54, and
P-93A to P-93D

B43-CA16+18
Attachment B

image reduced
from original
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**B-43-CA-16 and 18
Attachment C**

**Required Contents of a Conceptual Design Report
Corrective Measures to Address FPH Along the Western Fenceline of the North Property.**

A conceptual design report must be developed describing the corrective measure which will be carried out to address the free phase hydrocarbon present along the western fenceline of the North Property of the WRB Refining LLC Wood River Refinery. This report must contain the following information:

1. Introduction/Purpose. This section shall contain: (1) general background information regarding the project; (2) the purpose and goals of the submittal; and (3) the scope of the project.
2. Existing Site Conditions. This section shall contain a summary of the investigative activities conducted for each of the areas of concern. Investigation analytical results shall be provided in tabular form. Maps depicting both the horizontal and vertical extent of contamination at the Facility shall be provided.
3. Evaluation for Potential Future Migration. The conceptual site model shall be used to evaluate the potential for future migration of contamination for each of the areas of concern, especially those areas that have been determined to have released constituents to the groundwater. Of special concern in this evaluation are (1) the physical properties of the contaminants (solubility, volatility, mobility, etc.); and (2) existing site conditions (types of soil present, location of contamination, hydrology, geology, etc.).
4. Corrective Measures Objectives. This section shall discuss the general objectives of the proposed corrective measure to be constructed/installed and the ability of the proposed corrective measure to achieve the established remediation objectives.
5. Identification of Options Available. This section shall contain a brief discussion of the various options available to achieve the corrective measures objectives for the Facility. This discussion shall identify: (1) a general overview of each option available, including how the option shall achieve the stated objective; (2) the advantages associated with each option; (3) the disadvantages associated with each option and (4) an estimate of the cost associated with choosing each remedial option.
6. Description of Selected Corrective Measure. This section shall contain a qualitative discussion of the corrective measure chosen, along with the rationale used to select this measure from all those identified initially. This discussion shall include documentation that the selected corrective measure shall be effective.
7. Identification of Design Criteria. This section shall identify what information shall be available to design the selected corrective measure.
8. Review of Available Information. This section shall contain an evaluation of the existing information to ensure it is sufficient to complete the design of the selected corrective measure. If insufficient information is available, then the report shall contain procedures for collecting the required additional information.

9. Procedures for Completing the Design. This section shall contain a description of the procedures that shall be followed to complete the design of the corrective measure. This shall include, as appropriate:
- a. Identification of the references and established guidance that shall be used in designing the selected corrective measure. Justification for the selection of this procedure shall also be provided.
 - b. A description of the procedures that shall be used to complete the design of the corrective measure.
 - c. Identification of assumptions to be used in the design and the impact these assumptions have on the overall corrective measure;
 - d. Significant data to be used in the design effort;
 - e. Identification and discussion of the major equations to be used in the design effort (including a reference to the source of the equations);
 - f. Sample calculations to be used in the design effort;
 - g. Conceptual process/schematic diagrams;
 - h. A site plan showing a preliminary layout of the selected corrective measure;
 - i. Tables giving preliminary mass balances;
 - j. Site safety and security provisions.

This information shall form the technical basis for the detailed design of the remedial measure and the preparation of construction plans/specifications.

10. Identification of Required Permits. This section shall identify and describe any necessary permits associated with the selected corrective measure, as well as the procedures that shall be used to obtain these permits.
11. Long-lead Procurement Considerations. This section shall identify any elements/components of the selected corrective measure that shall require a large amount of time to obtain/install. The following issues shall also be discussed: (1) the reason why it shall take a large amount of time to obtain/ install the item; (2) length of time necessary for procurement; and (3) recognized sources of such items.
12. Project Management. This section shall contain information regarding the procedures and personnel that shall be involved in completing the design of the selected corrective measure. A schedule for completing the design shall also be provided.

B-43-CA-16 and 18
Attachment D

Required Contents of a Construction Completion Report
LNAPL Removal System at P-60 and P-60-11 and the Production Wells

Introduction/Purpose

A Construction Completion Report must be developed containing the details of the product removal system to be installed at P-60-11 along with the existing product removal systems at Well P-60 and the production wells. For each system, this report shall contain: (1) the final design documentation and construction workplan; and (2) the operation and maintenance plan. The required contents of each of these plans is described below

Contents of the Final Design Documentation and Construction Workplan.

This portion of the final report will contain the detailed plans, specifications and drawings needed to construct the selected system. In addition, the following will also be provided: (1) calculations, data etc. in support of the final design and (2) a description of the construction quality assurance procedures and schedule for constructing the selected system. The information that will be provided in this portion of the report includes:

1. Introduction/Purpose. This portion of the document will (1) provide background information regarding the project, (2) describe the purpose and goals of the project, and (3) describe the scope of the project.
2. Detailed Plans of the Design System, including the following:
 - a. Plan views;
 - b. Section and supplementary views which, together with the specifications and general layouts, facilitate construction of the designed system;
 - c. Dimensions and relative elevations of structures;
 - d. Location and outline form of the equipment;
 - e. Ground elevations; and
 - f. Descriptive notations, as necessary, for clarity.

3. Complete technical specifications for the construction of the system. The specifications shall either be included on the drawings or accompany the construction drawings. The specifications will include, but are not limited to, the following:
 - a. All construction information that is necessary to inform the contractor in detail as to the required quality of materials, workmanship, and fabrication of the project;
 - b. The type, size, strength, operating characteristics and rating of the equipment;
 - c. The complete requirements for all mechanical and electrical equipment, including machinery, valves, piping and jointing of pipe;
 - d. Electrical apparatus, wiring and meters;
 - e. Construction materials; and,\
 - f. Miscellaneous appurtenances.
4. Deviations from Work plan. A discussion of any deviations from the approved plan will be provided, as well as justification for these deviations.
5. Construction Quality Assurance/Quality Control. The work plan will contain a construction quality assurance/quality control plan describing the procedures that will be followed to ensure the selected system is constructed/installed in accordance with the approved plans and specifications.
6. Schedule. The work plan will contain a schedule for completion of all major activities associated with construction/installation of the selected system. All major points of the construction/installation will be highlighted, with a graphical representation of the project schedule included.
7. Waste Management Practices. This portion of the document will identify the wastes anticipated to be generated during the construction/installation of the selected system, and provide a description of the procedures for appropriate characterization and management of these wastes.
8. Required Permits. This portion of the work plan will provide a list of the permits which will be required to be obtained prior to construction/installation and implementation of the selected system.

Contents of the Operation and Maintenance Plan.

This plan will outline the procedures for operating/maintaining and monitoring the free product recovery system. It will contain the following:

1. Introduction and Purpose. This portion of this plan will provide a brief description of the facility operations, scope of the free product recovery project, and summary of the project objectives.
2. System Description. This portion of this plan will describe the free product recovery system and significant equipment, including manufacturer's specifications.
3. Operation and Maintenance Procedures. This portion of this plan will describe the normal operation and maintenance procedures for the free product recovery system, including:
 - a. Description of tasks for operation;
 - b. Description of tasks for maintenance;
 - c. Description of prescribed treatment or operation conditions; and
 - d. Schedule showing the frequency of each operation and maintenance task.
4. Waste Management Practices. This portion of this plan will describe the wastes generated by operation of the system and the procedures for their proper management.
5. Contingency Procedures. This portion of this plan will describe the following:
 - a. System breakdown and operational problems, which may occur.
 - b. A contingency plan to continue to remove free product when seasonal fluctuations increases or decrease the water table. If the current system cannot accommodate seasonal fluctuations, then additional work must be proposed.
 - c. Alternative procedures that are to be implemented in the event that the free product recovery system suffers complete failure.