



# Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## ILLINOIS EPA RCRA CORRECTIVE ACTION CERTIFICATION

This certification must accompany any document submitted to Illinois EPA in accordance with the corrective action requirements set forth in a facility's RCRA permit. The original and two copies of all documents submitted must be provided.

### 1.0 Facility Identification

Name Equilon Enterprises LLC d/b/a/ SOPUS County Madison  
 Street Address 900 South Central Ave Site No. (IEPA) 1191150002  
 City Roxana Site No. (USEPA) ILD080012305

### 2.0 Owner Information

Name \_\_\_\_\_  
 Mail Address \_\_\_\_\_  
 City \_\_\_\_\_  
 State \_\_\_\_\_ Zip Code \_\_\_\_\_  
 Contact Name \_\_\_\_\_  
 Contact Title \_\_\_\_\_  
 Phone \_\_\_\_\_

### 3.0 Operator Information

Name Equilon Enterprises LLC d/b/a/ SOPUS  
 Mail Address 128 East Center Street  
 City Nazareth  
 State PA Zip Code 18064  
 Contact Name Leroy Bealer  
 Contact Title Senior Program Manager  
 Phone 484-632-7955

### 4.0 Type of Submission (check applicable item and provide requested information, as applicable)

RFI Phase I Workplan/Report IEPA Permit Log No. B-43R  
 RFI Phase II Workplan/Report Date of Last IEPA Letter on Project May 5, 2023  
 CMP Report; Log No. of Last IEPA Letter on Project B-43R-CA-109  
 Other (describe): Additional Information to the FPWY SEE FDRCPW - SEE System Startup Plan Does this submittal include groundwater information:  Yes  No  
 Date of Submittal November 29, 2023

### 5.0 Description of Submittal: (briefly describe what is being submitted and its purpose)

Additional information to the Roxana FPWY SEE FDRCPW related to the startup of the SEE System.

### 6.0 Documents Submitted (identify all documents in submittal, including cover letter; give dates of all documents)

Additional Information letter and RCRA Corrective Action Certification. Electronic copies of submittal also sent directly to Amy Butler, Visal Poornaka and Ali Al-Janabi of IEPA.

For: Additional Information to FPWY SEE FDR CWP - SEE System Startup Plan  
Date of Submission: November 29, 2023

**7.0 Certification Statement**

(This statement is part of the overall certification being provided by the owner/operator, professional and laboratory in Items 7.1, 7.2 and 7.3 below). The activities described in the subject submittals have been carried out in accordance with procedures approved by Illinois EPA. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**7.1 Owner/Operator Certification**

(Must be completed for all submittals. Certification and signature requirements are set forth in 35 IAC 702.126.) All submittals pertaining to the corrective action requirements set forth in a RCRA Permit must be signed by the person designated below (or by a duly authorized representative of that person):

1. For a Corporation, by a principal executive officer of at least the level of vice president.
2. For a Partnership or Sole Proprietorship, by a general partner or the proprietor, respectively.
3. For a Governmental Entity, by either a principal executive officer or a ranking elected official.

A person is a duly authorized representative only if:

1. the authorization is made in writing by a person described above; and
2. the written authorization is provided with this submittal (a copy of a previously submitted authorization can be used).

Owner Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Operator Signature: \_\_\_\_\_ Date: 11/29/2023  
 Title: Senior Program Manager

**7.2 Professional Certification (if necessary)**

Work carried out in this 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. No one is relieved 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.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44 (h))

Professional's Signature: Wendy Pennington Date: 11/29/2023  
 Professional's Name Wendy Pennington  
 Address 100 N. Broadway, 20th Floor  
 City St. Louis  
 State MO Zip Code 63102  
 Phone 314-452-8929



IEPA RCRA Corrective Action Certification

For: Additional Information to FPWY SEE FDRWCP - SEE System Startup Plan

Date of Submission: November 29, 2023

**7.3 Laboratory Certification (if necessary)**

The sample collection, handling, preservation, preparation and analysis efforts for which this laboratory was responsible were carried out in accordance with procedures approved by Illinois EPA.

Name of Laboratory NOT APPLICABLE

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Laboratory Responsible Officer

Mailing Address of Laboratory

Address \_\_\_\_\_

City \_\_\_\_\_

\_\_\_\_\_  
Name and Title of Laboratory Responsible Officer

State \_\_\_\_\_ Zip Code \_\_\_\_\_



AECOM  
100 N. Broadway,  
20<sup>th</sup> Floor  
St. Louis, MO 63102  
www.aecom.com

314 429 0100 tel  
314 429 0462 fax

November 29, 2023

Ms. Jacqueline M. Cooperider, PE  
Manager, Permit Section  
Illinois Environmental Protection Agency  
Division of Land Pollution Control  
Bureau of Land  
1021 North Grand Avenue East  
Springfield, Illinois 62702

**Additional Information to the FPWY SEE FDRCWP – SEE System Startup Plan  
Roxana, Illinois  
1191150002 – Madison County  
Equilon Enterprises LLC d/b/a Shell Oil Products US  
Log No. B-43R-CA-109**

Dear Ms. Cooperider:

AECOM Technical Services, Inc. (AECOM), on behalf of Equilon Enterprises LLC d/b/a Shell Oil Products US (Shell), is submitting this additional information to the Former Public Works Yard (FPWY) Steam Enhanced Extraction (SEE) Final Design Report and Construction Work Plan (FDRCWP) dated December 16, 2022, related to the startup of the Steam Enhanced Extraction System (SEE) System in Roxana, IL.

When construction of the SEE system at the Village of Roxana Former Public Works Yard (PWY) began in early 2023, the anticipated startup date was Summer 2023. Numerous delays were experienced during the construction of the SEE system, which are described below:

**Delays During SEE System Construction**

- HD Sonic (contractor selected to drill and install SEE wells) is based out of East Palestine, Ohio. A major train derailment occurred adjacent to their headquarters on 2/3/2023 just prior to mobilization to Roxana and delayed the start of drilling by two weeks.
- The IEPA letter dated May 5, 2023, required additional investigation between Areas A and B (Area C). Results of additional soil samples necessitated expansion of SEE system into Area C, which was not part of original scope or schedule. Time stemming from additional investigation and the addition of Area C included: contracting/scheduling with a new drilling company as HD Sonic was unavailable, design of system expansion, procurement of additional system materials, additional construction activities, and delayed assembly of Area A aboveground equipment because it would have blocked access to Area C.
- Delays in materials and equipment procurement caused by global supply chain issues.
- Delays in electrical utility connection to SEE system – Ameren's (local electric utility) designated contact for this project retired during SEE construction. Numerous attempts at communication were made but ultimately it was two months before Ameren responded. After re-establishing contact, Ameren informed AECOM that it required a minimum 3-week lead time. At the time of this submittal, completion of Ameren's portion of the electrical connection work is not anticipated until sometime during December 2023.
- Some weather delays were also experienced (thunderstorms, excessive heat warnings, etc).

## SEE System Winter Startup Concerns

- The SEE system was originally planned to start in Summer 2023. However, the cumulative effect of the unavoidable schedule delays (described above) has pushed construction completion into December 2023. Prior to beginning operation, startup/acceptance testing will be required, which typically takes two weeks. Taking that into account, the earliest potential startup date would be late-December 2023/early January 2024 during the holiday season due to Ameren's availability to complete electrical connections.
- However, the SEE system must be winterized in order to operate at this time of year. Procuring and installing the necessary materials to winterize the system will push the potential startup date back even further, most likely into February 2024, depending on availability and other factors.
- Potential equipment damage –
  - o Even if full winterization is completed, there are still risks of equipment damage due to freezing, as it is not possible to insulate 100% of the system. A multi-day hard freeze would likely cause freezing damage to the smallest of system components, especially narrow diameter lines running to well heads.
  - o Pumps that are anticipated to operate intermittently would also be prone to freezing damage. If an unanticipated shutdown were to occur during a hard freeze, many components would be at risk of damage, regardless of winterization measures.
  - o If SEE operation had been able to start prior to winter, some of the freezing hazards would have been reduced because many system components would have already reached operating temperature. However, delays outside the control of AECOM and Shell prevented a startup from occurring as planned and prior to winter. Given the long lead time for replacement equipment and parts, postponing system start up until after the winter has been recommended by the system designers to avoid these potential issues which could result in further operational delays.
- Safety concerns –
  - o The nature of the SEE system and the tight site layout are such that there are numerous lines and hoses running across the ground, and secondary containments around every process unit. During snowy/icy conditions, the risk of tripping and falling would increase significantly.
  - o There is the potential of a scenario where a system alarm may require the operator to travel to the site during off-business hours. If such an alarm occurred in the middle of the night during a winter storm, travel to/from the site would be dangerous, as would performing repairs and walking around the site in snow and ice.
  - o It is possible that a scenario could happen where if a power outage or system alarm occurs during dangerous winter conditions, a choice would need to be made between allowing the system to sit idle until site conditions improve and thereby allowing freezing damage to occur, or risking the safety of personnel to travel to the site to prevent freezing damage.

Considering the above information, it has been decided to push the SEE startup date to Spring 2024 to avoid the dangers of winter startup and operation. A realistic startup date of the SEE system after completing winterization would be February 2024; therefore, startup in Spring 2024 will only push back the startup date by approximately 4-6 weeks. This will promote the success of the SEE project and mitigate winter weather hazards.

A copy of this submittal is being sent separately directly to Visal Poornaka, Amy Butler, Rob Watson, and Ali Al-Janabi with the IEPA.

If you have any questions please contact Buddy Bealer, Shell Senior Program Manager, at [leroy.bealer@shell.com](mailto:leroy.bealer@shell.com) (484-632-7956), or Wendy Pennington at [wendy.pennington@aecom.com](mailto:wendy.pennington@aecom.com) (314-452-8929).

Sincerely,



Brett Howell, PG  
Geologist



Wendy Pennington, PE  
Project Manager



Samuel Fisher, CHMM  
Environmental Scientist

Enclosures: RCRA Corrective Action Certification Form (original)

cc: Buddy Bealer, Shell  
Amy Butler, IEPA, Springfield  
Visal Poornaka, IEPA, Springfield  
Ali Al-Janabi, IEPA, Collinsville  
Gregg Mollett, Greensfelder, Hemker & Gale P.C.  
Repositories – Roxana Public Library, website  
Project File