

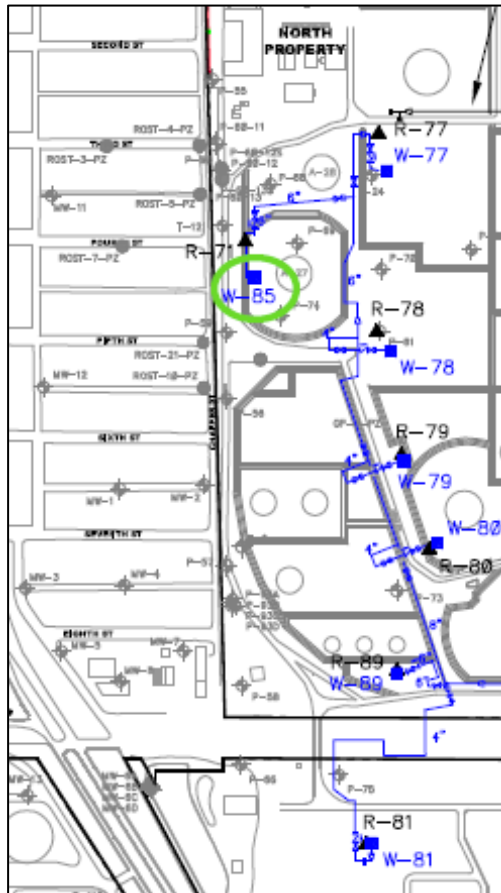
July 6, 2023

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

Notice of Water Production Well W-85 Damage
Equilon Enterprises LLC d/b/a Shell Oil Products US
WRB Refining LP Wood River Refinery
Roxana, Illinois
1191150002 - Madison County (ILD080012305)
Log No. B-43R

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 notification of water production well outage in accordance with Condition IV(D)(4) of SOPUS' RCRA Post-Closure Permit (Permit), most recently modified October 31, 2022. As described more fully below, water production well W-85 is no longer able to serve its intended purpose as a water production well. This well is designated in the Permit for gradient control. The image below shows the location of W-85.



W-85 Outage Information

Phillips 66 Company (Phillips 66) notified Shell on Thursday March 9, 2023, of an issue discovered when water production well W-85 was taken offline for routine cleaning and maintenance. During the precleaning inspection of W-85, sand was discovered within the well up to about 73 feet below top of casing (total well depth is about 104 feet below top of casing). The initial plan was to remove the sand and complete a camera inspection of the well.

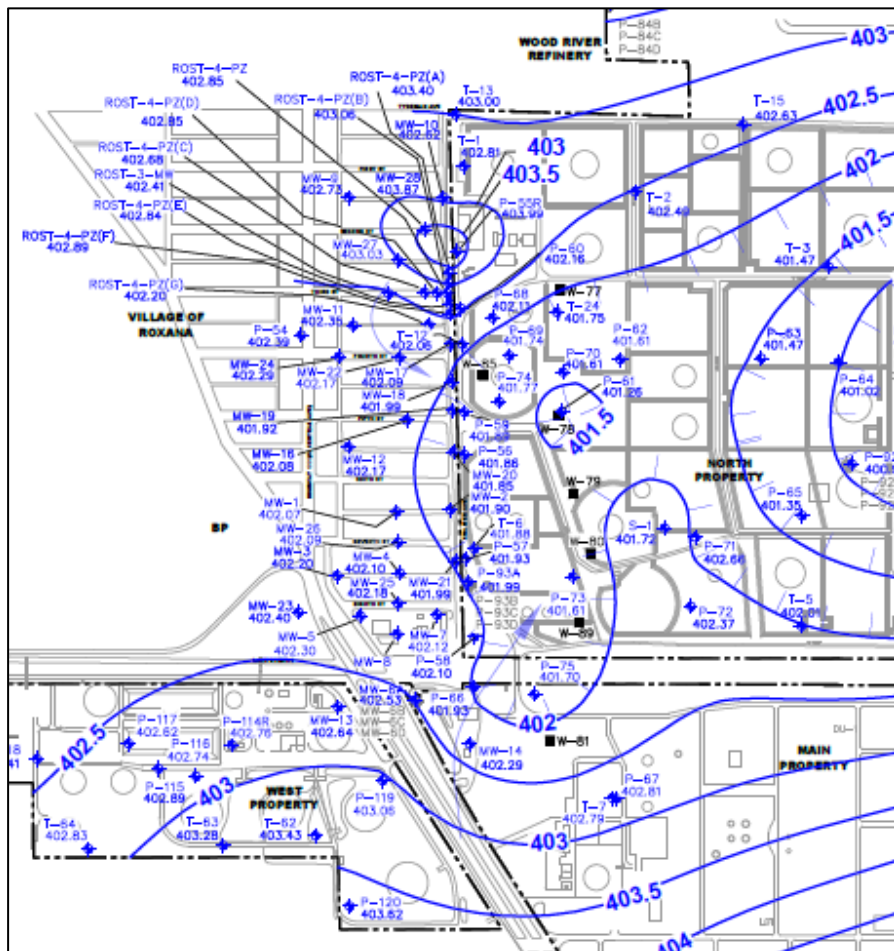
On Monday March 20, 2023, Phillips 66 notified Shell of a further issue related to the work at W-85. The fill material that had collected within W-85 was removed on March 15, 2023. During the subsequent camera inspection, the ground next to the well casing collapsed and a worker fell into the sink hole. It was thought at this point that W-85 would be able to be cased and repaired, but ground stabilization needed to be performed first.

On Thursday June 1, 2023, Phillips 66 notified Shell that the ground around W-85 had been stabilized and the casing sleeve for the well was being fabricated for installation. On Thursday June 8, 2023, Phillips 66 notified Shell that the casing sleeve had been installed and set in place with concrete, and that all the sand within the well had been removed. The downhole camera inspection of W-85 was performed on June 12, 2023.

During a meeting between Phillips 66, Shell and AECOM on Monday June 19, 2023, Phillips 66 notified Shell that the screen for W-85 was found to be out of round and cracked in multiple places. It was determined at this meeting that water production well W-85 was compromised and a repair is not likely to be sufficiently effective.

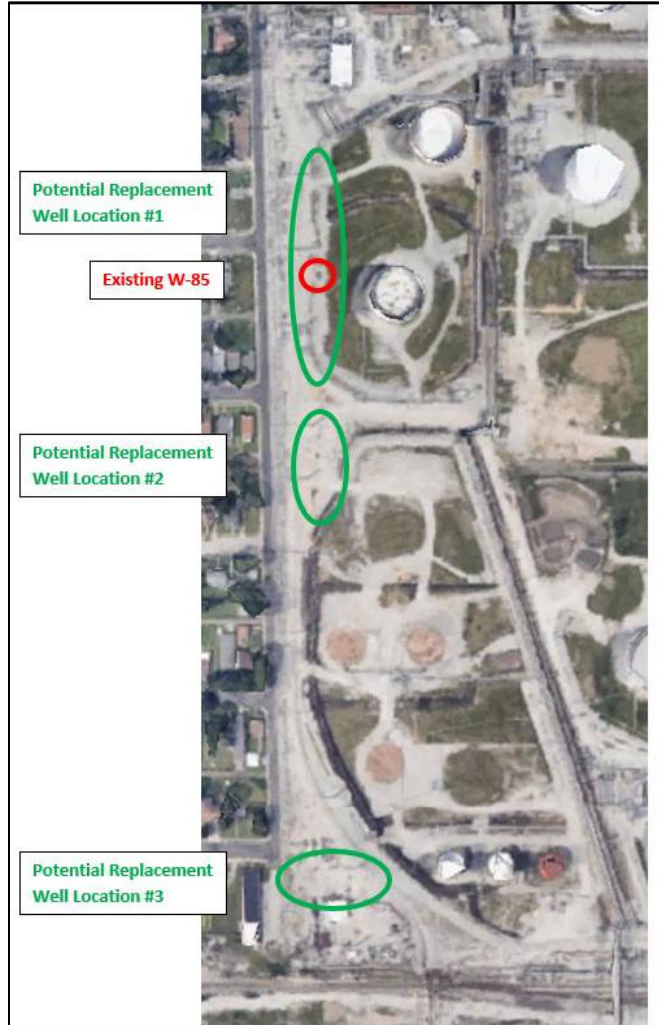
General Groundwater Control Information

A comprehensive groundwater gauging event was performed April 3-5, 2023, as part of the 2nd Quarter 2023 groundwater event. The groundwater contours generated from that comprehensive gauging event showed that groundwater capture has continued to be maintained as required by Condition IV(A)(1) of the Permit. Below is a preliminary view of the groundwater contours from that comprehensive gauging event.



Replacement Well Proposal

A location for installation of a replacement water production well is currently being evaluated. The locations being considered are along the West Fenceline of the North Property. Once the location is selected, the drilling subcontractor will be coordinated, and the replacement water production well will be installed in general accordance with the requirements of the Permit and similar to existing water production wells already listed in the Permit. Below shows the proposed replacement locations currently being evaluated.



Water production well W-85 will be plugged and abandoned as soon as can be scheduled with the contractor because the well is extremely damaged [Condition IV(D)(4)].

In accordance with Condition IV(D)(6) of the Permit, the boring log and water well construction report for the replacement water production well will be submitted as a Class 1* Permit Modification Request once installation is completed.

The cost estimate for a replacement water production well is summarized below:

Layne Water Well Installation	\$370,000
Well Pump, Motor, etc. Supplies	\$35,000
Surveying Well Location	\$2,000
Labor and Part B Permit Support	\$1,500

Grand Total = \$408,500



If you have any questions concerning this submittal, please contact Leroy Bealer, SOPUS Principal Program Manager, at 484-632-7955 or leroy.bealer@shell.com, or Wendy Pennington (AECOM) at 314-452-8929 or wendy.pennington@aecom.com.

Sincerely,

A handwritten signature in blue ink that reads "Wendy Pennington".

Wendy Pennington, PE
Project Manager
AECOM

Enclosures: *none*

cc: Leroy Bealer, SOPUS
Thomas Morgan, Phillips 66
Amy Butler, IEPA, Springfield
Ali Al-Janabi, IEPA Collinsville
Repository (Roxana Public Library)
Project File