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15 July 2019

Mr. John Nordine
U.S. EPA Region 5
RCRA Enforcement and Compliance Assurance Branch (LU-16)
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois RCRA CMI Monthly Progress Report, June 2019,
EPA ID: ILD005178975

Dear Mr. Nordine:

Enclosed please find the RCRA CMI Monthly Progress Report for the Central Wire, Inc. (CWI) facility located in Union, Illinois for June 2019.

This report includes the eDMR for the groundwater pump & treat facility, the NPDES laboratory analytical report, which includes the effluent data used in the eDMR and the Ex. 6 Personal Privacy (PP) y well no. 1 (irrigation well) and well no. 2 (restroom) analytical data for Volatile Organic Compounds. This analytical data is included in the *6-2019 NPDES Analytical Report* file.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

Autumnwood ESH Consultants, LLC

John W. Thorsen, P.E.
JWT: jt
Encl

cc:	Joyce Munie	IEPA	Robert Kay	USGS
	Gerald W. Ruopp	CWI	Robert Johnson	CWI

MONTHLY PROGRESS REPORT

Central Wire Union, Illinois Site

June 2019

1 Progress Made This Reporting Period

Groundwater Pump & Treat System

In this reporting period Central Wire Inc. (CWI) continued the operation and maintenance of the groundwater extraction and treatment (P&T) system. Table 1, attached, lists the average daily P&T volumes by month since January 2015. The average for June was 640,000 gallons per day (GPD). The maximum daily flow was 659,000 GPD.

The laboratory analytical report for the pump and treat effluent sample is attached. Samples were collected on June 19, 2019 and arrived at the Test America Laboratory on June 20, 2019 at 2.0 ° C.

The monthly NPDES sample met effluent limitations for pH, 1,1, t-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE).

Ex. 6 Personal Privacy (PP) Well Samples and Well Usage

The Ex. 6 Personal Privacy (PP) well samples [well no. Ex. 6 Personal Privacy (PP) were collected on the same day as the pump and treat effluent samples and sent to the analytical laboratory in the same batch as the NPDES sample. There were no detections in these samples.

The analytical data is in the same analytical report as the pump and treat samples *(6-2019 NPDES Analytical Report)*. Ex. 6 Personal Privacy (PP) sample locations are provided in Figure 1.

2018 RCRA CMI Field Investigation

EPA requested CWI to collect groundwater samples at an additional three Geoprobe locations downgradient from GP-38 where samples were collected in the 2018 RCRA CMI Field Investigation.

The GP-43 – GP-45 2019 RCRA CMI Field Investigation was conducted on May 28 and 29, 2019 to determine if the chlorinated plume had moved downgradient from GP-38. Analytical results were received in June 2019. A draft report is currently being reviewed by CWI management, but it concluded that there was no movement of the chlorinated plume beyond GP-38.

Ex. 6 Personal Privacy (PP) Replacement Irrigation and CWI Pump & Discharge Wells at South Branch Nursery

CWI may never have to install the Ex. 6 Personal Privacy (PP) replacement irrigation well. In the recent CWI 2018 RCRA CMI Field investigation, CWI evaluated the groundwater between the 2016 location of the leading edge of the chlorinated plume and the Ex. 6 Personal Privacy (PP) Ex. 6 Personal Privacy (PP) well. The analytical data indicate that the plume has not significantly moved into that space, i.e., no MCLs were exceeded in any of the 27 samples. It is CWI's intent to install the pump and discharge well as soon as permits are obtained and lease agreements are signed.

Distance drawdown calculations have shown that, at 800 gallons per minute, the drawdown will encapsulate the Ex. 6 Personal Privacy (PP) well and draw down the water level at the irrigation well by 2.68 feet after one year and 4.3 feet after 30 years. There is still 1.27 feet of drawdown at a 3,000 foot distance after 12 months of pumping at 800 gpm.

In June, IEPA reissued the CWI NPDES pump and treat permit which includes outfall no. 2 for the discharge from the pump and discharge well to be located at the Ex. 6 Personal Privacy (PP) Ex. 6 Personal Privacy (PP) This permit provides for pumping up to 800 GPM from both the pump & treat extraction wells (outfall 1) and the pump & discharge well (outfall 2). Both discharges have effluent limitation of 20 μg/L each for TCA, TCE and PCE.

CWI Quarterly Extraction Well Samples

These samples are generally collected quarterly in the third month of the calendar quarter. The results are provided in Table 2, attached, which shows the quarterly data back to the first quarter of 2014. The analytical report is attached (6-*2019 NPDES Analytical Report).* There was no significant increase or decrease in the concentrations.

Ex. 6 Personal Privacy (PP) rigation Well Pumpage

Over the month Central Wire personnel read the hour meter on the Ex. 6 Personal Privacy (PP) rrigation well pump engines for the Ex. 6 Personal Privacy (PP) wells on a weekly basis. Table 3 provides the data collected from the hour meters on the pump engines. This data is used in Table 4, attached, which plots the groundwater elevations against the daily precipitation and weekly irrigation well pumpage at Ex. 6 Personal Privacy (PP) The precipitation data is from the National Weather Service's Harvard station because there was no precipitation data from the Marengo station.

Table 3

Summary of 2019 Irrigation Pumping Hours per Week at Ex. 6 Personal Privacy (PP)

Date of Hour Meter Reading	Ex. 6 Personal Privacy (PP)				Hours of Irrigation Well Pumping/Week
	Hour Meter Reading	Hours Pumped	Hour Meter Reading	Hours Pumped	
5/31/2019	7332	0	5177	0	0
6/3/2019	7332	0	5183	6	6
6/10/2019	7332	0	5194	11	11
6/17/2019	7337	5	5206	12	17
6/24/2019	7337	0	5208	2	2
7/1/2019	7337	0	5210	2	2

The groundwater elevation during this period reached its highest level on June 7 at 817.713 feet above mean sea level. The groundwater elevation reached its low on June 24 at 815.741 feet above mean sea level. The variance during June was 1.972 feet in monitoring well DGW-2I.

Response to EPA Comments on the CWI April RCRA CMI Monthly Progress Report

EPA requested that CWI provide a figure showing the "locations of the various wells/ piezometers sampled [in April] as well as EW-2." Figure 2 shows the locations of the three piezometers and the two Extraction Wells.

Regarding the potential Ex. 6 Personal Privacy (PP) Well replacement, CWI has the McHenry County well permit (S20186747). A copy of this was sent to EPA on March 26, 2019 by email. This permit is active for two years from date of issuance (10/2/2018).

The lease agreement is still in process. Arcelor has reviewed and made changes to the draft lease agreement which have been approved by Central Wire. It will now be returned to Ex. 6 Personal Privacy (PP) for their approval.

CWI is planning to put a transformer near the current Ex. 6 Personal Privacy (PP) well when they install the pump & discharge well, so power will be available if a replacement irrigation well is necessary.

The cost of the replacement irrigation well construction was estimated at about $100,000. The most recent (2016) RCRA Financial Assurance Letter of Credit was for $323,750, well above the replacement irrigation well construction cost estimate. In addition, contractually, Arcelor is responsible for this cost.

2 Summary of Validated Data and Results

Pump & Treat System Monthly NPDES Samples

The permit limitations and analytical results are shown in Table 5, below. There were no effluent limitation exceedances.

Table 5

Central Wire Union Illinois Pump & Treat Effluent Analytical Results

Parameter	Effluent Limitation (Daily Maximum), µg/L	Effluent Analytical Results, µg/L
1,1,1-Trichloroethane	20	2.0
Tetrachloroethene	20	2.4
Trichloroethene	20	1.7

Table 6 tabulates and plots the trends in the effluent limited parameters of TCA, PCE and TCE. Also detected were cis-1,2-Dichloroethene at 10 µg/L (EPA MCL of 70 µg/L), DCE was found at an estimated value of 0.24 µg/L (MCL is 7 µg/L) and 1,1-Dichloroethane at 1.8 µg/L (no MCL).

This NPDES analytical report also has environmental analytical results for CWI's North and South Seepage Ponds. These ponds are Illinois EPA-regulated seepage ponds for CWI's rinse waters from the annealing process, non-contact cooling water, boiler blowdown and for storm water collection.

3 Upcoming Events/Activities Planned

CWI will continue to operate the existing remediation systems. Effluent samples will be collected, analyzed and reported as required in CWI's NPDES permit.
CWI has completed the 1,000 hour pump test and is evaluating those results.

CWI has received the EPA comment email on the 1,000 minute pump test dated June 4, 2019 and is working on responses to those comments.

CWI has received a draft lease agreement from Ex. 6 Personal Privacy (PP) for the land needed to construct and operate the pump and discharge well and Arcelor, the former owner who has retained responsibility for environmental liabilities at the site, has reviewed and edited the proposed lease agreement which will now be returned to Ex. 6 Personal Privacy (PP) for review and approval. Ex. 6 Personal Privacy (PP)

Samples will continue to be collected at the Ex. 6 Personal Privacy (PP) wells [well no. Ex. 6 Personal Privacy (PP) every month when the irrigation pump is operating, usually between May and November of each year.

4 **Anticipated Problem Areas and Recommended Solutions** – None.

5 **Key Personnel Changes** – None.

6 **Target and Actual Completion Dates** – This project has not deviated from the project schedule.