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Hudson Valley Office
21 Fox St., Poughkeepsie, NY 12601
P: (845) 454-3980 F: (845) 454-4026
www.chazencompanies.com

Capital District Office (518) 273-0055
North Country Office (518) 812-0513

August 3, 2015

Ms. Kiera Thompson
Engineering Geologist
NYSDEC-Division of Environmental Remediation
625 Broadway - 11th Floor
Albany, NY 12233-7014

Re: Supplemental GW Monitoring-RCRA Closure-Work Plan
Danskammer, LLC, Newburgh, NY

Chazen Job # 41440

Dear Ms. Thompson:

Chazen Engineering, Land Survey & Landscape Architecture Co. D.P.C., (Chazen) has prepared this work plan for the completion of one synoptic round of water levels and groundwater samples from the existing monitoring well network at the Danskammer Point Generating Station, Hazardous Waste Treatment and Storage Facility, (the "Site") located in Town of Newburgh, Orange County, New York. A Site Location Map is included as **Figure 1**.

Periodic groundwater sampling and analysis at this Site is currently performed on three sets of groundwater monitoring wells, around the Solid Waste Management Facility (SWMF), the Historical Ash Cell (HAC) area, and the RCRA Solid Waste Management Unit (SMU). Because the associated wells are monitored for different parameters on different sampling frequencies, NYSDEC has requested that one synoptic round of sampling from among these wells be completed to collect data required for NYSDEC to complete a RCRA Environmental Indicator Conditions Report needed to secure final closure of the RCRA SMU. Consequently, Chazen proposes to collect one round of groundwater samples on or around August 5, 2015 from among these separate well networks.

The selected wells will be gauged to establish the water level elevations need to demonstrate flow directions and gradients, and groundwater samples and quality control samples will be collected for laboratory analysis. The laboratory results will be validated by a third party independent chemist, tabulated, summarized, and submitted to NYSDEC along with Chazen's analysis of the data and the Data Usability Summary Reports. The relative elevations of all monitoring wells are already known so no datum survey is needed at this time.

The sample quality and groundwater gradient results will be compared to readily available historic data and any trends in chemistry data will be reviewed to assess changing groundwater quality. Based on recently-collected data from the SMU monitoring network and the closed condition of the SWMF and HAC areas, it is assumed but not guaranteed that the comprehensive data review will demonstrate that water

quality near the SMU and across the site in general is either stable or improving demonstrating that no significant migration of impacts is evident that could represent an increasing threat to human health or the environment.

Existing Well Networks.

There are 18 wells in the SWMF monitoring well network. Fifteen are proposed for sampling.

- Three of the wells (DW-3P, DW-4P, and DW-7P) are shallow wells in a highly transient perched water table located at the toe of the three SWMF cells. These wells are most frequently dry and when they can be sampled, contain dissolved compounds of concern that exceed standards but demonstrate no consistency in concentrations or discernible pattern. These wells are ignored wells for this sampling event as the associated chemistry at these locations are better reflected by collocated water table wells.

- The remaining 15 wells in the network consist of 6 collocated well pairs (12 wells total) with one overburden and one bedrock well at each location, and three additional bedrock wells. Several of the overburden wells and one of the bedrock wells are periodically dry.

There are 4 wells in the HAC monitoring well network. Three of these are overburden and one is a bedrock well. The HAC wells are located south of the SWMF Cell 3 between the SWMF and the SMU.

There are 13 wells in the SMU well network; however, based on an evaluation completed in 2014 only 4 of these wells were determined to be suitable for sampling to complete the EIC for the SMU. The remainder were damaged, not locatable, or silted-in above the top of the screen interval.

The twenty-three potentially serviceable wells out of the 35 known to be on-site are summarized in the table below. The locations of these wells are included on the Site Layout Map included as **Figure 2**.

Overburden			**Bedrock**		
SWMF	**HAC**	**SMU**	**SWMF**	**HAC**	**SMU**
DW-2D	HAC-1	MW-2	**DW-1R**	W-3R	
DW-3D	HAC-2	MW-4S	**DW-2R**		
DW-4D	NW-1	MW-4D	**DW-3R**		
DW-5D		MW-6	**DW-4R**		
DW-6D			**DW-5R**		
DW-7D			**DW-6R**		
			DW-7R		
			DW-8R		
			DW-9R		
6	**3**	**4**	**9**	**1**	**0**
Yellow shading indicates well is frequently dry					

A maximum of 23 wells could therefore be sampled, although it is anticipated that one or more of these wells may be dry during the upcoming proposed sampling event.

Sampling Plan

Each of the wells identified in the preceding table will be located in the field and the condition of the well visually assessed. Since all of these wells have been recently sampled it is assumed that all of these wells will be serviceable.

The depth to water and depth to bottom in each well will be gauged with an electronic interface probe. The wells will then be sampled using low-flow sampling techniques. Based on the depth to water, a peristaltic or downhole submersible pump will be used to collect the samples. Water quality parameters (pH, temperature, conductivity, and turbidity) will be measured periodically with a multi-parameter water quality meter and the results recorded on the field sampling logs.

Once the water quality parameters stabilize, a sample from that location will be collected directly from downhole tubing and placed in properly labeled laboratory supplied containers with the appropriate preservatives and couriered in ice filled coolers directly to the laboratory under standard chain-of-custody procedures.

Samples will be submitted for laboratory analysis of the RCRA-8 list of pollutant metals plus Vanadium and for Sodium, Chloride, Fluoride, Sulfate, Total Suspended Solids, and pH.

Quality Control/Quality Assurance samples will be collected in accordance with the Project QAPP:

- One field duplicate, one MS/MSD, and one equipment blank (for each pump used) will be collected and submitted for analysis for each sample deliver group submitted for metals analysis.

- One field duplicate and an equipment blank will also be submitted for analysis of Sodium, Chloride, Fluoride, Sulfate, Total Suspended Solids, and pH; and,

- No trip blanks are required for this sampling event.

Reporting

Upon receipt of the laboratory data, the data will be summarized and submitted to NYSDEC. The raw data will also be submitted to a third party chemist for data validation and preparation of the DUSR(s).

The raw data summary will be compared to applicable groundwater standards and the available historical data at each location. Graphical analysis will be performed to identify trends in the data that would indicate that the water quality is either improving, the same as, or degrading over time.

Once the DUSRs are received and reviewed, the final report will be prepared and submitted. The report will include a groundwater contour map of the study area based on the new data from the available wells, evaluation of vertical gradients where collocated water level data is available, Chazen's data summary and analysis, and our conclusions and recommendations for the site.

IDW:

Investigation derived waste (IDW) includes groundwater and spent sampling supplies. Spent sampling supplies will be treated as solid waste and managed accordingly. Excess extracted groundwater will be discharged directly to the ground near the point of generation.

QAPP:

A site-specific Quality Assurance Project Plan prepared in general accordance with DER-10 will be submitted under separate cover. The generic QAPP included in DER-10 will be used for the outline and the only those sections relevant to the work included. No intrusive work is anticipated and no community air monitoring is required for this effort.

HASP:

The nature of the work and potential exposures do not require a HASP. A safe work plan will be prepared for the field team including hazard assessment, mitigation, and emergency procedures only.

Schedule:

Chazen and Danskammer recognize that NYSDEC would like to receive information as soon as practical so that the RCRA-EIC can be completed and submitted before September 30, 2015. Accordingly, we will appreciate your review of this work plan and notice to proceed as soon as possible.

As noted earlier, Chazen is currently arranging to mobilize on Wednesday August 5, 2015. The sampling can be completed in one extended field day. Pre-arranged accelerated turnaround from the lab raw allows the preliminary data to be available in five business days. Our initial summary report of the preliminary data can be submitted to NYSDEC on or about August 17th. The validation packages will be available for submission to the chemist on or about August 24th. Through pre-arrangement with the data validator, the DUSRs will be available on or about September 14th.

Chazen proposed to prepare and submitted the draft preliminary report to NYSDEC in advance of validation for preliminary review and comment. This will facilitate the rapid completion and submission of the final report if the data validation detects no significant issues. Assuming there are no significant field delays or issues with the data quality, working closely with NYSDEC, we should be able to achieve the September 30, 2015 timeframe for Department use.

We understand that NYSDEC may visit the site during Wednesday's sampling event. Please contact my field team leader directly when you arrive and he will come to the security gate to take you to the then current work area. You will need photo-identification to enter the secure portion of the site. Chazen's field team leader is Will Olson. His cell phone is 1-845-532-0602.

Please review and comment as necessary as soon as practical. If you have any questions or require additional information, please contact me directly at (518) 266-7370 or by e-mail at kmcgrath@chazencompanies.com.

I will be away from August 5th through August 12th inclusive, returning on August 13th. In my absence, please contact Russell Urban-Mead if any project related situation arises that requires immediate attention.

As always, formal project correspondence should be directed to Mr. Edward Smith at Danskammer Energy, LLC with copies to Chazen and Ms. Sue May at Danskammer Energy, LLC.

Thank you.

Sincerely,

Kevin P. McGrath, PG, CPG

Digitally signed by Kevin P. McGrath, PG, CPG
DN: cn=Kevin P. McGrath, PG, CPG, o=The Chazen Companies, ou, email=kmcgrath@chazencompanies.com, c=US
Date: 2015.08.03 14:25:35 -04'00'

Kevin McGrath
Senior Scientist

Initials/encl. etc.

cc:

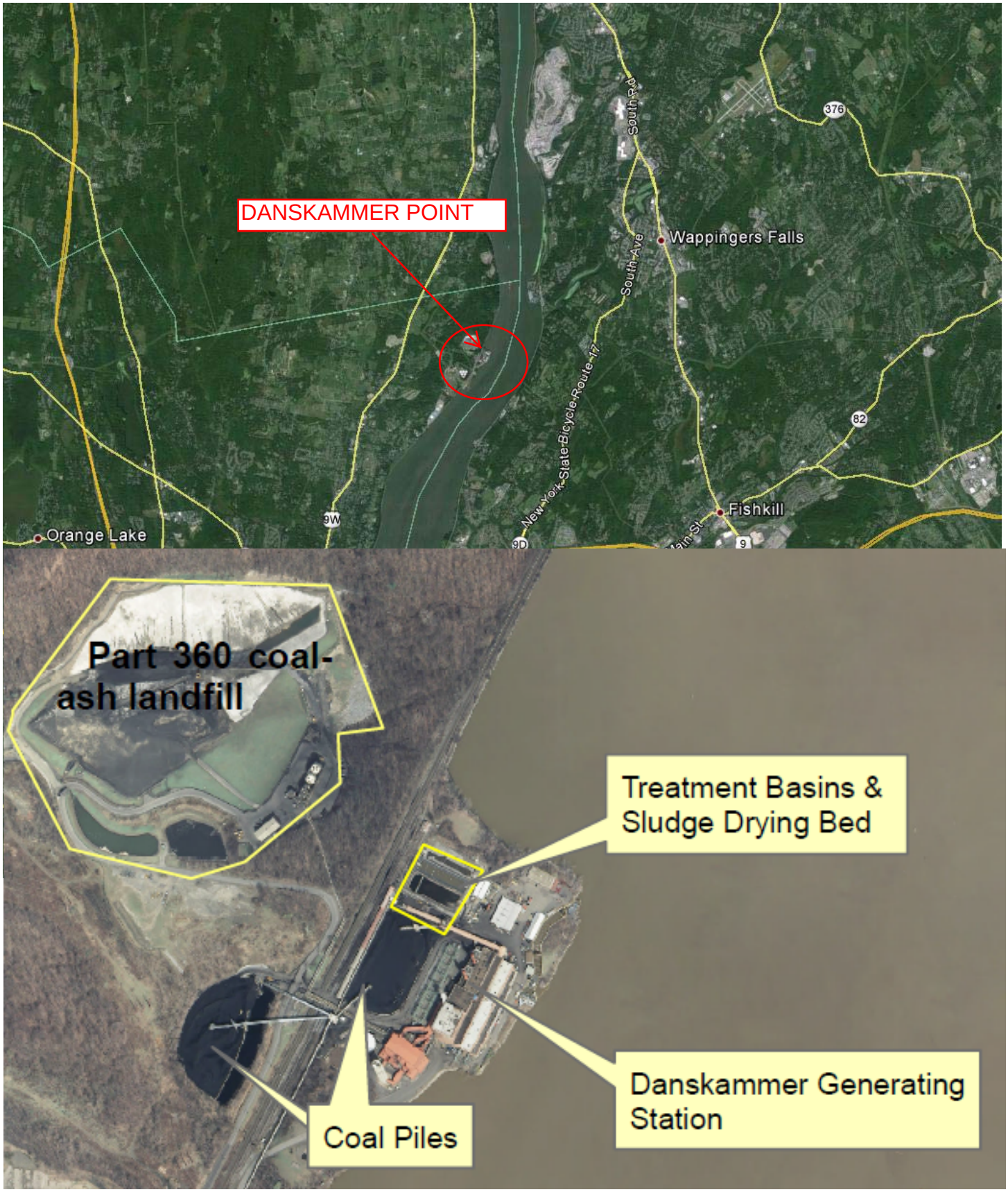
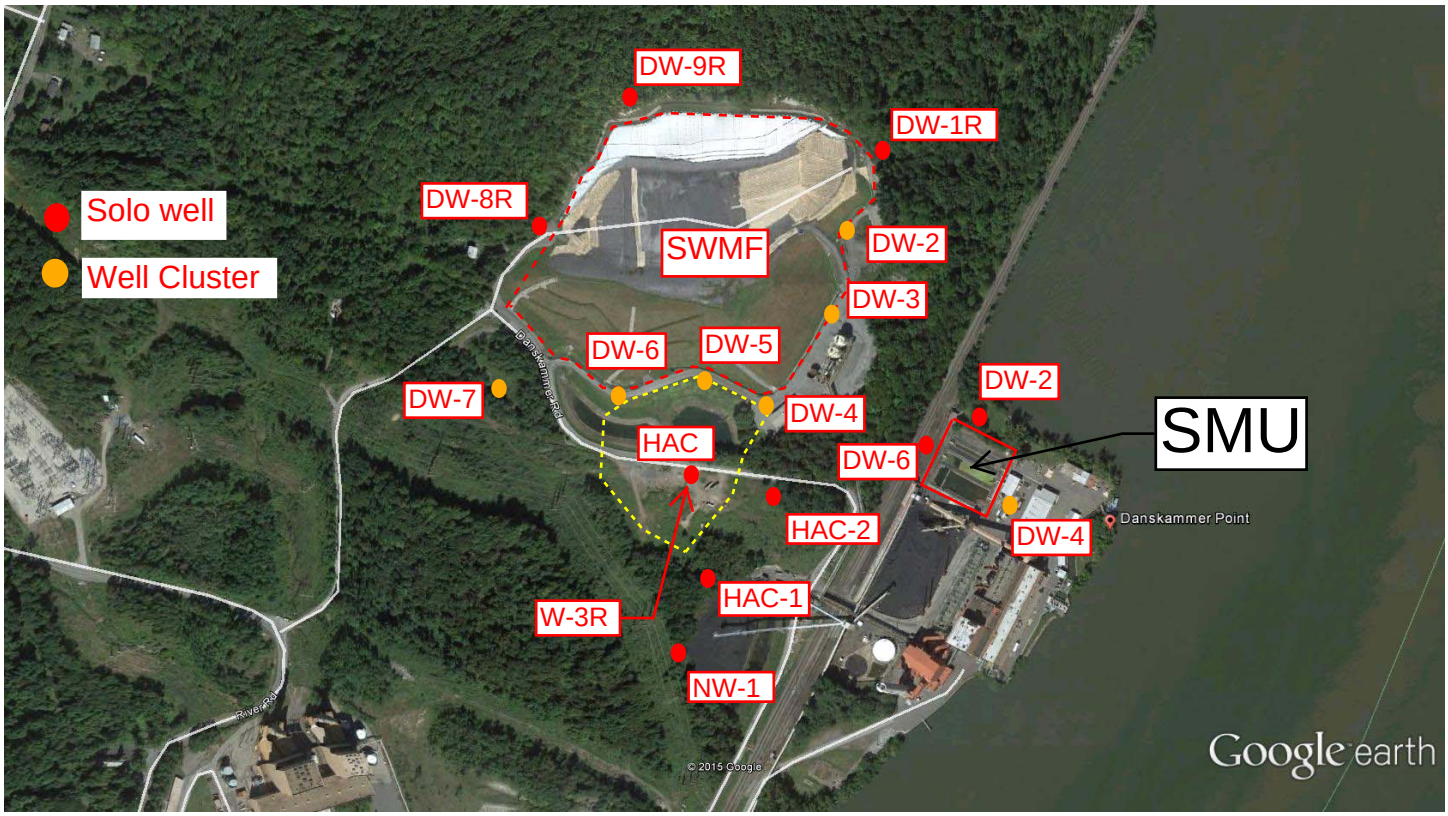


FIGURE 1
SITE LOCATION MAP



Google earth

feet 2000

meters 800

DANSKAMMER ENERGY, LLC
SUPPLEMENTAL GROUNDWATER INVESTIGATION

FIGURE 2
SITE LAYOUT MAP