

Central Hudson Gas & Electric Corporation - Eltings Corners Maintenance Facility  
24 South Street Clintondale, NY 12515  
NYSDEC Permit ID# 3-5132-00032/00002 RCRA ID# NYD000705905

**Area of Concern (AOC) Summary of historical environmental assessments and investigations performed at the Eltings Corners Maintenance Facility 2009 -present.**

**2009**

**April 15<sup>th</sup>, 2009 - Eltings Corners Resource Conservation and Recovery Act (RCRA) Facility Investigation**

The samples collected between November 2008 and January 2009 for this investigation consisted of two soil samples from AOC 1 and 2, six sediment samples from the storm water outfall, one surface water sample and one sediment sample from the catch basin.

**AOC 1: Steel Garage on the eastern side of the site – floor drain area – four soil borings converted to monitoring wells (CH – MW6- CH – MW9)**

- AOC 1 Monitoring Wells:
  - No VOCs, SVOCs, TPH-DRO or PCBs (except for two isolated estimated concentrations) were detected.
  - Two isolated estimated concentrations of PCB-1248 and PCB-1260 were found at CH-MW7.
  - Eight metal concentrations were all below TOGS 1.1.1 standard except iron and manganese, which both exceeded the standard. Iron and manganese were found in each well.

All sample results were compared to New York State Department of Environmental Conservation (NYSDEC) Technical Guidance Series (TOGS) 1.1.1 groundwater quality standards. The presence of iron and manganese in each monitoring well suggests the results may be linked to the regional groundwater quality.

- AOC 1 Soil borings: Compared to Title 6 New York Code of Rules and Regulations (NYCRR) Part 375-6, Remedial Program Soil Cleanup Objectives for Unrestricted Use.
  - Soil sample CH-SB52/MW6 yielded no detectable constituents of concern.
  - Soil sample CH-SB53 had no observable impacts, therefore no sample was taken.
- The soil samples taken at AOC 1 had no exceedances reported and thus no further action was required. [See attached NYSDEC Letter Dated May 19, 2009]

**AOC 2: Maintenance Garage – Hydraulic spill area – two soil borings (CH – SB36 and CH – SB51)**

- AOC 2 Soil Borings:
  - Results indicated a residual concentration of 21 parts per million (ppm) of TPH-DRO at sample location CH-SB51
- There is no NYSDEC cleanup objective for TPH-DRO and the concentration is minimal. A staining and oily odor were observed but there were no SVOC or PCB exceedances.

identified, therefore no further action was required at AOC2. [See attached NYSDEC Letter Dated May 19, 2009]

### **Storm Sewer System - AOC**

#### **Catch Basin**

- Surface water samples:
  - No detection of VOCs, SVOCs, or PCBs. All metal concentrations were below the TOGS 1.1.1 standards for human and wildlife protection.
- Sediment samples:
  - Yielded results exceeding the NYSDEC sediment screening criteria in PCBs, calcium, magnesium, and zinc.

The calcium and magnesium present in the sediment may be present due to deicing agents used at subject site. The SVOCs found were polycyclic aromatic hydrocarbons (PAHs), which could possibly be present from the two offsite water bodies contributing to the Eltings Corners Maintenance Facility stormwater management system and to the sample location as well.

- Based on the resulting data of the RFI, there was no apparent human health or environmental risks associated with the isolated subsurface contamination. The environmental risks identified were determined to be related to the outfall location. Additional sampling was required in the surrounding wetland area to measure the potential risk. There were no human health risks associated with the contamination, but wildlife species could potentially be affected.

### **December 22, 2009- Interim Supplemental RFI Report: Wetland Investigation Central Hudson Gas and Electric Eltings Corners Facility**

#### **Storm Sewer System AOC Supplemental Investigation: Outfall to the west of South Street – three shallow soil borings 10 feet, 20 feet, and 30 feet from the outfall**

Transects were established on a grid system in the wetland area at 3 depth intervals. Samples SP-1 through SP-2 were collected during the first phase of sampling on October 6<sup>th</sup>, 2009. The second sets of samples, SP-13 through SP-20, were collected on November 6<sup>th</sup>, 2009. Using the NYSDEC Technical Guidance for Screening Contaminated Sediments, TOC concentrations from each sample were measured for PCB SSSC for Wildlife Bioaccumulation

- **October 6, 2009 Samples**
  - Sample locations collected from SP-1 through SP-12 ranged from an estimated concentration of 4.3 µg/kg (SP-6C) to 8,600 µg/kg (SP-4A) of PCBs.
  - SP-6C, SP-7C, and SP-9C were the only samples below the PCB SSSC for Wildlife Bioaccumulation of out 36 total samples.
  - Out of the 36 samples, 17 exceeded the NYSDEC proposed screening criteria for Total PAHs.
  - Both PCB and PAH concentrations were highest and deepest in the center channel sampling locations.

- **November 6, 2009 Samples**

- 13 of the 51 samples had concentrations of PCBs lower than the SSSC, and 19 samples exceeded the PCB SSSC for Wildlife Bioaccumulation.
- There was a range of PAH concentrations in the samples from non-detect to exceeding the 10,000 µg/kg criteria. PCBs and PAHs were highest and deepest in the center channel. There was no pattern of increasing or decreasing concentrations of PCBs from distance of the outfall.

## **2010**

- **November 2010 Wetland Investigation Initial Results**

- After observing sample locations with PCB concentrations, the horizontal extent of contamination was defined in the center channel. No PCBs were detected north of Route 299, indicating PCB impacts had not extended across Route 299.
  - New sampling locations along the south side of the established transects delineated the area of contaminants further. Results from sampling location SP-30 showed no PCBs were present and therefore would serve as the horizontal extent of PCB impacts.
  - The 25ft transect (SP-2) and the 500ft transect (SP-28) at 2.0-2.5ft and 2.5-3ft depths have defined the vertical delineation of contamination, although further testing was needed based on PCB impacts observed at the center channel sampling locations at the 300ft and 100ft transects.
  - The horizontal PAH impacts were defined between the 500ft and 800ft transect. The vertical impacts observed to extend about 2ft below sediment surface.
- Following the 2010 sampling events, additional sampling was determined to be necessary at the 600ft and 700ft transects from the outfall location.

## **2012**

- **2012 Groundwater Investigation Summary Report**

- Samples from the four monitoring wells were sampled on July 12 2012, and November 16, 2012. The results were compared to the NYSDEC Class GA (Drinking Water) Ambient Water Quality Guidance and Standards.
- There were no PCBs detected in the groundwater results, both in filtered and unfiltered samples from the July and November sampling events.
- July 12, 2012: There were no exceedances found based on the NYSDEC Class GA (Drinking Water) Ambient Water Quality Guidance and Standards for SVOCs. There were two SVOCs detected, acenaphthylene and caprolactam. Acenaphthylene was detected at a concentration of 6.9 µg/l, and caprolactam at an estimated 29 µg/l. Both of these

SVOCs have no NYSDEC Class GA (Drinking Water) Ambient Water Quality Guidance or Standard.

- November 16, 2012: There were no exceedances found based on the NYSDEC Class GA (Drinking Water) Ambient Water Quality Guidance and Standards for SCVOCs. There were two SVOCs detected, Caprolactam and Diethyl phthalate. Caprolactam was found in all monitoring well samples ranging from 19 to 58 µg/l. Diethyl phthalate was found in three samples MW-6, MW-7, and mw-8) at estimated concentrations of 2.2-2.6 µg/l.
- Overall, there were no exceedances in the groundwater samples. The three SVOCs found on site were determined not to be associated with past or present operations conducted on-site. Based on those results NYSDEC issued Documentation of Environmental Indicator Determination dated March 28, 2013 verifying that the migration of contaminated groundwater is "Under Control".  
[See attached excerpts]

### **2012 Wetland Investigation Summary Report**

Results from sampling events on July 24 and August 1, 2012 were compared to the NYSDEC Draft Screening Assessment of Contaminated Sediment using the Draft Freshwater Sediment Guidance Values. The new guidance values are split into three categories, Class A, Class B, and Class C. Each transect sampling locations were categorized into each class based on the level of contamination.

#### **PCB Results**

- "South of Rte. 299" Transect: All soil samples returned below the Class A threshold, both horizontal and vertical delineation is considered complete.
- 800ft transect: PCB concentrations at SB-58 were below the Class A threshold. SB-57 location at the 0-0.5ft depth was within the Class B sediment threshold. Vertical delineation was determined, but additional sampling further south is required to complete horizontal delineation.
- 700ft transect: All sample locations came back within or below the Class A threshold. Both horizontal and vertical delineation has been established.
- 600ft transect: Two samples located at SB-47 and SB-51 were within the Class B threshold, the rest were below the Class A threshold. Vertical delineation can now be considered complete, but additional sampling is required north and south of the channel to complete horizontal delineation.
- 500ft transect: Sample location SB-46 had a PCB concentration of 26 ppb, which is below the Class A threshold. No other PCBs were detected deeper at SB-46. Sample location SB-28 was sampled at deeper intervals had a PCB detection above the Class C threshold. Sampling at the 3-3.5ft intervals had either no detected PCB concentrations or were below the Class A threshold. Vertical and Horizontal delineation has been completed.
- 400ft transect: SB-25 had Class C exceedances at 2-2.5ft. and had Class B contamination levels at 2.5-3ft. Horizontal delineation is complete, but additional testing may be necessary for vertical delineation.

- 300ft transect: SB-44 had Class B contamination levels at 2.5ft, but under Class A levels at the 2.5-3ft intervals. Vertical delineation is considered complete and additional sampling may be required for horizontal delineation.
- 200ft transect: The deepest interval, 4ft below grade, had concentrations above the Class A threshold. Horizontal delineation was completed, but additional sampling may be necessary for vertical delineation.
- 100ft transect: PCBs detected at SB-8 were below the Class A threshold at sampling intervals 2-4.5ft. There was a spike in PCB detection at the 4.5-5ft interval, which could indicate some cross contamination. Horizontal delineation has been defined but additional sampling may be required to complete vertical delineation.
- 50ft Transect: SB-5 location had PCB detections that exceeded the Class A threshold within the 2-4.5ft interval. Total PCBs detected at the 4.5-5ft interval were below the Class A threshold. Horizontal and vertical is considered complete.

#### **PAH Results**

- No additional sampling occurred on the "North of Rte. 299" transect, "South of Rte. 299" transect, and the 800ft transect.
  - 700ft transect: All PAH concentrations were below the Class A threshold, vertical and horizontal delineation has been defined.
  - 600ft transect: The 0-0.5ft interval had PAH concentrations within the Class B threshold, deeper samples were collected at SB-48 and all concentrations were below the Class A threshold. Vertical and Horizontal delineation is complete.
  - 500ft transect: No additional sampling was performed during the 2012 investigation.
  - 400ft transect: A PAH concentration slightly above the Class A threshold was detected at 2.5-3ft interval. Additional samples at deeper locations could not be collected due to refusal at 3ft below grade; additional sampling is required for further vertical delineation. Horizontal is considered complete.
  - 300ft transect: No additional sampling was performed during the 2012 investigation.
  - 200ft transect: PAH concentrations were below the Class A threshold, therefore vertical and horizontal delineation is considered complete.
  - 100ft transect: No additional sampling was performed during the 2012 investigation.
  - 50ft transect: PAH concentration exceeded the Class A threshold at only one location, and SB-5 location exceeded the Class B threshold at 2-2.5ft interval. Deeper samples did not have concentrations exceeding the Class A threshold; therefore vertical and horizontal delineation is considered complete.
- PCB and PAH impacts are concentrated along the center of the stream bed and within 600ft of the outfall.

**New York State Department of Environmental Conservation**

**Division of Solid and Hazardous Materials**

**Bureau of Hazardous Waste and Radiation Management, 9<sup>th</sup> Floor**

625 Broadway, Albany, New York 12233-7258

**Phone:** (518) 402-8594 • **FAX:** (518) 402-8646

**Website:** [www.dec.ny.gov](http://www.dec.ny.gov)



Alexander B. Grannis  
Commissioner

May 19, 2009

Mr. Chris DeRoberts, Environmental Coordinator  
Division of Environmental Affairs  
Central Hudson Gas and Electric Corporation  
284 South Ave  
Poughkeepsie, NY 12601

Re: RCRA Facility Investigation dated 4/15/2009  
Central Hudson Gas and Electric NYD 000705905  
Eltings Corners, Town of Lloyd, New York

Dear Mr. DeRoberts

The Department has reviewed the RFI investigation report. The Department agrees that, based on the sampling results in the vicinity of AOC-1 and AOC-2, these AOCs require no further action at this time.

The Department concurs that additional investigation should be conducted in the vicinity of the outfall, but does not agree that this effort should occur after off-site sources of contamination are investigated, as stated in Section 8.3. Additional investigation to determine the horizontal and vertical extent of the PCB and PAH contamination in the vicinity of the outfall should occur in parallel with off-site water body investigation. Please submit a workplan for the next phase of investigative work for Department approval within forty five (45) days.

If you have any questions, please contact me at (518) 402-8594.

Sincerely,

Ruth Curley  
Environmental Engineer  
Hazardous Waste Engineering Eastern Section

## **DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION**

### **RCRA Corrective Action Environmental Indicator (EI) RCRAInfo code (CA750) Migration of Contaminated Groundwater Under Control**

**Facility Name:** Central Hudson Gas & Electric – Eltings Corners Facility  
**Facility Address:** 24 South Street, Town of Lloyd, Ulster County, New York  
**Facility EPA ID #:** NYD000705905

#### **Definition of Environmental Indicators (for the RCRA Corrective Action)**

Environmental Indicators (EI) are measures being used by the Resource Conservation and Recovery Act (RCRA) Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. A EI was previously developed to indicate the quality of the environment in relation to current human exposures to contamination. An EI for non-human (ecological) receptors is intended to be developed in the future.

#### **Definition of “Migration of Contaminated Groundwater Under Control” EI**

A positive “Migration of Contaminated Groundwater Under Control” EI determination (“YE” status code) indicates that the migration of groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original “area of contaminated groundwater” (for all groundwater “contaminated” subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

#### **Relationship of EI to Final Remedies**

While final remedies remain the long-term objective of the RCRA Corrective Action program, the EIs are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, (GPRA). The “Migration of Contaminated Groundwater Under Control” EI pertains ONLY to the physical migration (i.e., further spread) of contaminated groundwater and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

#### **Duration / Applicability of EI Determinations**

EI Determinations status codes should remain in RCRAInfo national database ONLY as long as they remain true (i.e., RCRAInfo status codes must be changed when the regulatory authorities become aware of contrary information).

**Migration of Contamination Groundwater Under Control**  
**Environmental Indicator (EI) RCRAInfo code (CA750)**  
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**References:**

N/A

7. Will groundwater **monitoring** / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"
- \_\_\_\_\_ If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."
- \_\_\_\_\_ If no - enter "NO" status code in #8.
- \_\_\_\_\_ If unknown - enter "IN" status code in #8.

**Rationale:**

N/A

8. Check the appropriate RCRAInfo status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).
- X   YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the **Central Hudson Gas & Electric – Eltings Corners Facility, EPA ID # NYD000705905, located at 24 South Street, Town of Lloyd, Ulster County, New York.** Specifically, this determination indicates that the migration of known or reasonably suspected to be "contaminated" groundwater is under control, and that monitoring will be conducted, as necessary, to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater". This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.
- \_\_\_\_\_ NO - Unacceptable migration of contaminated groundwater is observed or expected.
- \_\_\_\_\_ IN - More information is needed to make a determination.

Migration of Contamination Groundwater Under Control  
Environmental Indicator (EI) RCRAInfo code (CA750)  
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Completed by: Kiera A. Thompson Date: March 28, 2013  
Kiera Thompson, Project Manager, Section B, Bureau C, DER

Supervisor: Kiera A. Thompson For Date: March 28, 2013  
David Crosby, P.E., Chief, Section B, Bureau C, DER

Director: George Heitzman Date: March 28, 2013  
George Heitzman, P.E., Director, Bureau C, DER

Locations where References may be found:

New York State Department of Environmental Conservation  
Division of Environmental Remediation  
Remedial Bureau C  
625 Broadway 11<sup>th</sup> Floor  
Albany, New York 12233-7014

Contact, telephone number and e-mail:

Kiera Thompson  
(518) 402-9662  
kathomps@gw.dec.state.ny.us