



Department of
Environmental
Conservation

FINAL STATEMENT OF BASIS CORRECTIVE MEASURES SELECTION

Central Hudson Gas and Electric,
Elting's Corners Facility
Site No. 356045

EPA ID No. NYD000705905

Highland, Town of Lloyd, Ulster County

March 2015

PREPARED BY
DIVISION OF ENVIRONMENTAL REMEDIATION

FINAL CORRECTIVE MEASURES AND RESPONSE TO COMMENTS ON THE STATEMENT OF BASIS

Central Hudson Gas and Electric,
Elting's Corners Facility
Highland, Town of Lloyd, Ulster County
EPA No. NYD000705905, Site No. 356045
March 2015

INTRODUCTION

This document presents the final corrective measures for the Central Hudson Gas and Electric, Elting's Corners Facility. The final corrective measures were selected in accordance with 6 NYCRR 373. This decision is based on the Administrative Record for the New York State Department of Environmental Conservation (the Department) for the Central Hudson Gas and Electric, Elting's Corners Facility (see Attachment A) and the public's input to the proposed corrective measures presented in the Statement of Basis (SB).

PUBLIC PARTICIPATION AND RESPONSE TO COMMENTS

The public comment period for the SB started on February 18, 2015 and ended on March 20, 2015. All comments and/or requests for public hearing were required to be submitted no later than March 20, 2015.

Comments received from the public on the corrective measures proposed in the SB together with the Department's responses are provided in Attachment A.

FINAL CORRECTIVE MEASURES

The elements of the final corrective measure are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;

- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Sediment Removal and Wetland Restoration

Removal and off-site disposal of contaminated sediment and wetland soil to unrestricted and pre-release conditions. Sediment and soil with PCB concentrations exceeding 0.1 ppm (exceeding Class A sediment criteria for PCBs and Part 375 unrestricted soil cleanup objectives) and sediments with Total PAH concentrations exceeding 4 ppm will be excavated and treated and/or disposed in accordance with applicable requirements. The sediment will be replaced with backfill which meets the chemical and gradation requirements of the Department. The wetland and any adjacent area disturbed during remediation will be restored, to the extent feasible, to pre-release conditions using a Department-approved Wetland Restoration Plan.

3. Restoration Monitoring Plan

A Department-approved Restoration Monitoring Plan will monitor wetland and adjacent area restoration and remediation success. An annual report will be produced for Department review and approval. The effectiveness of the remedy and the performance of the restoration will be evaluated at the end of the 5 year period with provisions to evaluate and implement contingency remedial action should the remedy prove ineffective.

Declaration

The final corrective measures are protective of human health and the environment, comply with State and Federal requirements that are legally applicable or relevant, appropriate to the remedial action to the extent practicable, and are cost effective. This remedy utilizes permanent solutions and alternative treatment, or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 30, 2015

Date



Robert W. Schick, P.E., Director
Division of Environmental Remediation

FINAL STATEMENT OF BASIS

Central Hudson Gas and Electric Elting's Corners Facility
Route 299 & South Street
Highland, Ulster County
EPA ID No. NYD000705905
Site No. 356045

March 2015

SECTION 1: INTRODUCTION

The New York State Department of Environmental Conservation (Department) has selected the final corrective measures for the Central Hudson Gas & Electric Elting's Corners Facility in Highland, Ulster County (site).

The corrective measures are intended to attain the cleanup objectives identified for this facility for the protection of public health and the environment. This final Statement of Basis (SB) identifies the final corrective measures and explains the reasons for selecting the final remedy.

Based on the results of the investigations at the site, the Department has selected excavation and off-site disposal of contaminated sediments from a wetland to unrestricted conditions as the remedy to address environmental contamination associated with the Resource Conservation and Recovery Act (RCRA) corrective action at the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation action objectives described in Section 8.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held from February 18, 2015 to March 20, 2015 during which the public was encouraged to submit comments on the proposed remedy. All comments on the remedy received during the public comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Highland Public Library
30 Church Street
Highland, NY 12528
(845)-691-2275

NYSDEC Region 3 Office
21 South Putt Corners Road
New Paltz, NY 12561
Phone: (845) 256-3154 (please call for an appointment)

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary (Appendix A).

SECTION 3: FACILITY BACKGROUND

Location: The Elting's Corners Facility is located on the corner of Rte. 299 and South Street in Highland, Town of Lloyd, Ulster County.

Site Features: The facility is the location of an active, fenced Central Hudson Gas & Electric (CHG&E) Maintenance and Warehouse Center and is approximately 23.3 acres in size. There are twelve structures on the facility, four main buildings and the rest are garage/storage buildings, storage sheds, and a guard shack. About 30% of the site is covered by a structure or is paved. The remaining 70% of the facility is soil or stone/gravel at the surface. Just west of the facility across South Street, there is a 10.6 acre CHG&E owned wetland property and a dirt parking area for CHG&E employees which is not part of the permitted facility.

Current Zoning and Land Use: The facility and the parcel immediately to the west, including the wetland, is currently zoned Light Industrial. Parcels to the north of the site across Route 299 are zoned DB "Designed Business" and are currently used as retail, office, and motel businesses. Parcels immediately south of the site are undeveloped and zoned A-1.5 "Agriculture."

Past Use of the Site: The facility, which is active, has operated as a vehicle and equipment storage and repair facility for CHG&E since the 1950s. Current site activities include storage of electrical equipment, transformer storage and repair, vehicle maintenance and storage, the company's main materials supply warehouse, and administrative offices. The facility operates a permitted hazardous waste storage area which is used primarily for polychlorinated biphenyls (PCBs) containing waste from electrical equipment. In the late 1990s a RCRA Facility Assessment (RFA) was performed as part of the corrective action requirements of the hazardous waste management permit. Based on the RFA an environmental site assessment (Phase 1 and Phase 2) was conducted in 2007. Starting in 2008, a RCRA Facility Investigation (RFI) was conducted. The RFI investigated several Areas of Concern (AOCs) as described below:

AOC 1 was identified during the 2008 Supplemental Phase II investigation as an area of historic release from three now sealed floor drains inside the garage building. Soil analyses performed during the RFI reported no contaminants exceeded unrestricted use Soil Cleanup Objectives (SCOs). Initial groundwater analyses indicated two detections of PCBs, and two volatile organic compounds (VOCs) exceeding NYS ambient water quality standards. Two subsequent rounds of groundwater analyses from four monitoring wells performed in 2012 reported no exceedances of ambient water quality standards.

AOC 2 was identified as a historic petroleum release in the vicinity of the vehicle fueling station. Investigation, remediation, and monitoring of this release (DEC Spill ID#0707602) were handled by the DEC Spill Response program under a stipulation agreement prior to the RFI. Response actions for the spill included excavation and removal of contaminated soils (1,250 tons), collection and treatment of groundwater (70,000 gallons), and follow-up monitoring. The spill was closed in 2010 after four rounds of acceptable groundwater monitoring results.

The results of the RFI indicated that AOCs 1 and 2 require no further action, and this was incorporated in the Part 373 Permit (RCRA Permit) issued in 2010.

Storm Sewer AOC: The RFI indicated that PCB sediment contamination is present in the wetland downstream of the facility. Polycyclic aromatic hydrocarbons (PAHs) were also identified in the wetland sediments. The Storm Sewer AOC is the subject of this document.

Site Geology and Hydrogeology: The site is underlain by alternating layers of gravel, clay, and silt lacustrine and/or glacial outwash deposits. Depth to bedrock at site is unknown and not encountered at 25' below grade.

The general flow pattern of the shallow groundwater on the facility, which is present on-site from 6 to 8 feet below grade, is from east to west across the site.

SECTION 4: ENFORCEMENT STATUS

The facility holds a 6 NYCRR Part 373 Hazardous Waste Management Permit which includes provisions for RCRA Corrective Action. The corrective action requires owners and/or operators of hazardous waste treatment, storage, and disposal facilities to investigate and, when appropriate, remediate releases of hazardous wastes and/or constituents to the environment. The Department last issued a Part 373 Hazardous Waste Permit (#3-5132-00032/00002) in June 2010. Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers. The PRPs for the site, documented to date, include:

Central Hudson Gas & Electric

SECTION 5: ENVIRONMENTAL ASSESSMENT

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Nature and Extent of Contamination: Based on the results from the RCRA Facility Investigation (RFI), areas of concern (AOCs) 1 and 2 require no further action.

The Storm Sewer AOC consists of the facility storm sewer system that discharges into the Swarte Kill tributary and associated wetlands as it flows from east to west across the site. Site contaminants, which at one time entered the storm water system via surface discharge, are believed

to have been flushed out of storm sewer system and deposited in the sediments of the Swarte Kill tributary and wetland complex west of the facility via a permitted outfall. West of the outfall adjacent to South Street, the Swarte Kill continues to flow west and becomes a meandering stream within a wetland/upland complex. Based on the results of investigations conducted to date, the primary contaminants of concern (COCs), identified in off-site sediment within the Swarte Kill tributary and wetland complex are polychlorinated biphenyls (PCBs) and polyaromatic hydrocarbons (PAHs).

The investigation of the storm sewer system AOC determined that no PCB sediment contamination was present in the on-site storm sewers or catch basin. PCB contamination was detected in the wetland west of the site, which receives storm water from the facility storm water system, via a SPDES-permitted outfall. A maximum total PCB concentration of over 12 parts per million (ppm) was detected in the stream sediments about 50 feet from the outfall in the center stream channel. The majority of PCB impacts greater 0.1 ppm did not extend deeper than 3.5 feet below the sediment surface. Laterally, adjacent wetland sediments also showed PCB contamination above 1 ppm. Beyond 500 feet from the outfall, with the exception of some isolated areas where PCBs approached 1 ppm, the PCB concentration in the remaining sediments demonstrate concentrations of 0.1 ppm or below. PAH impacts are associated with and do not extend beyond PCB impacts in the wetland sediments. The maximum total PAH concentration noted in stream sediments was 202 ppm. The wetland investigation indicated that most PAH impacts were observed between the outfall and 600 feet downstream, and extended to 2 feet below the sediment surface along the center stream channel.

SECTION 6: HEALTH ASSESSMENT

There are no on-site associated exposure concerns; however, people may come into contact with contaminated sediments present in the off-site, adjacent wetland.

SECTION 7: SUMMARY OF ALTERNATIVES & SCOPE AND EVALUATION OF CORRECTIVE MEASURE(S)

The remedy for this site is a presumptive remedy which is defined by “DER-10: Technical Guidance for Site Investigation and Remediation,” May 2010, as an approach based on historical patterns of remedy selection that can be used to accelerate the remedy selection process. Therefore, no remedial alternatives were developed. The proposed remedy meets all of the remedial objectives presented below.

SECTION 8: REMEDIAION OBJECTIVES

The remedial objectives and actions to attain them are found in the following table:

Remedial Objectives	Remedial Action
1. Prevent direct contact with contaminated sediments.	Class B and Class C ¹ PCB- and PAH-contaminated sediment ² will be removed from the site, eliminating future human exposure and biological impact by direct contact. A site-specific Health and Safety Plan will be implemented to minimize workers' direct contact with contaminated sediments. Additionally, engineering controls will be implemented during construction to minimize disruption to the wetland and reduce and protect downstream receptors from any potential sediment transport.
2. Prevent surface water contamination which may result in fish advisories.	Removal of Class B and Class C PCB- and PAH-contaminated sediments will prevent bioaccumulation that could result in fish advisories.
3. Prevent releases of contaminant(s) from sediments that would result in surface water levels in excess of ambient water quality criteria.	Removal of Class B and Class C PCB- and PAH-contaminated sediments which could result in exceedances of water quality criteria.
4. Prevent impacts to biota from ingestion/direct contact with sediments causing toxicity or impacts from bioaccumulation through the aquatic food chain.	Removal of Class B and Class C PCB- and PAH-contaminated sediment will be implemented eliminating potential future impacts to biota from ingestion/direct contact with contaminated sediments.
5. Restore sediments to pre-release/background conditions to the extent feasible.	Class B and Class C PCB- and PAH-contaminated sediment will be excavated and removed from the site. Following confirmatory sampling, the wetland will be restored in-kind as an emergent wetland marsh under a Department approved Wetland Restoration Plan. Therefore, the wetland and its sediments will be restored to the extent feasible and practicable to pre-release (Class A) conditions.

¹ Sediment Class designations are described in "Screening and Assessment of Contaminated Sediment," June 2014, New York State Department of Environmental Conservation, Division of Fish, Wildlife, and Marine Resources, Bureau of Habitat.

² Class A sediments contain less than a 0.1 ppm PCB concentration and less than a 4 ppm total PAH concentration.

SECTION 9: SELECTED REMEDY

This Statement of Basis (SB) selects the following remedy to address remaining environmental contamination present at the Elting's Corners Facility. The elements of the remedy address PCB- and PAH-contaminated sediments in the wetland adjacent to the facility. Provisions for wetland restoration monitoring are also included.

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Sediment Removal and Wetland Restoration

Removal and off-site disposal of contaminated sediment and wetland soil to unrestricted and pre-release conditions. Sediment and soil with PCB concentrations exceeding 0.1 ppm (exceeding Class A sediment criteria for PCBs and Part 375 unrestricted soil cleanup objectives) and sediments with Total PAH concentrations exceeding 4 ppm will be excavated and treated and/or disposed in accordance with applicable requirements. The sediment will be replaced with backfill which meets the chemical and gradation requirements of the Department. The wetland and any adjacent area disturbed during remediation will be restored, to the extent feasible, to pre-release conditions using a Department-approved Wetland Restoration Plan.

3. Restoration Monitoring Plan

A Department-approved Restoration Monitoring Plan will monitor wetland and adjacent area restoration and remediation success. An annual report will be produced for Department review and approval. The effectiveness of the remedy and the performance of the restoration will be evaluated at the end of the 5 year period with provisions to evaluate and implement contingency remedial action should the remedy prove ineffective.

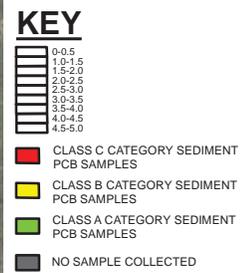
Figure 1: Central Hudson Gas & Electric Elting's Corners Facility
24 South Street
Lloyd, NY



Central Hudson parcel,
a portion of which includes
the outfall and wetland area

Facility

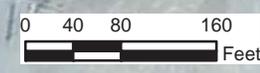
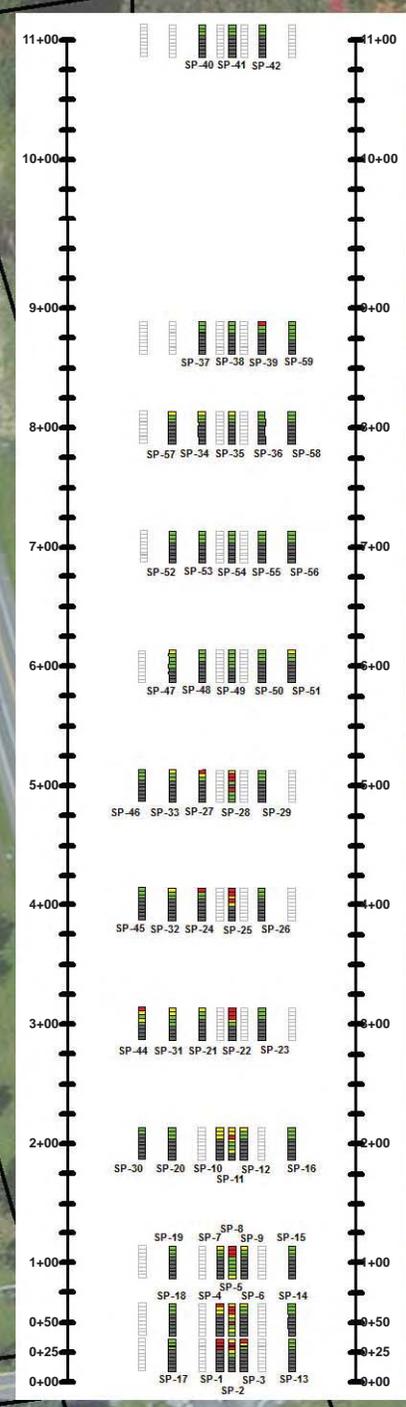
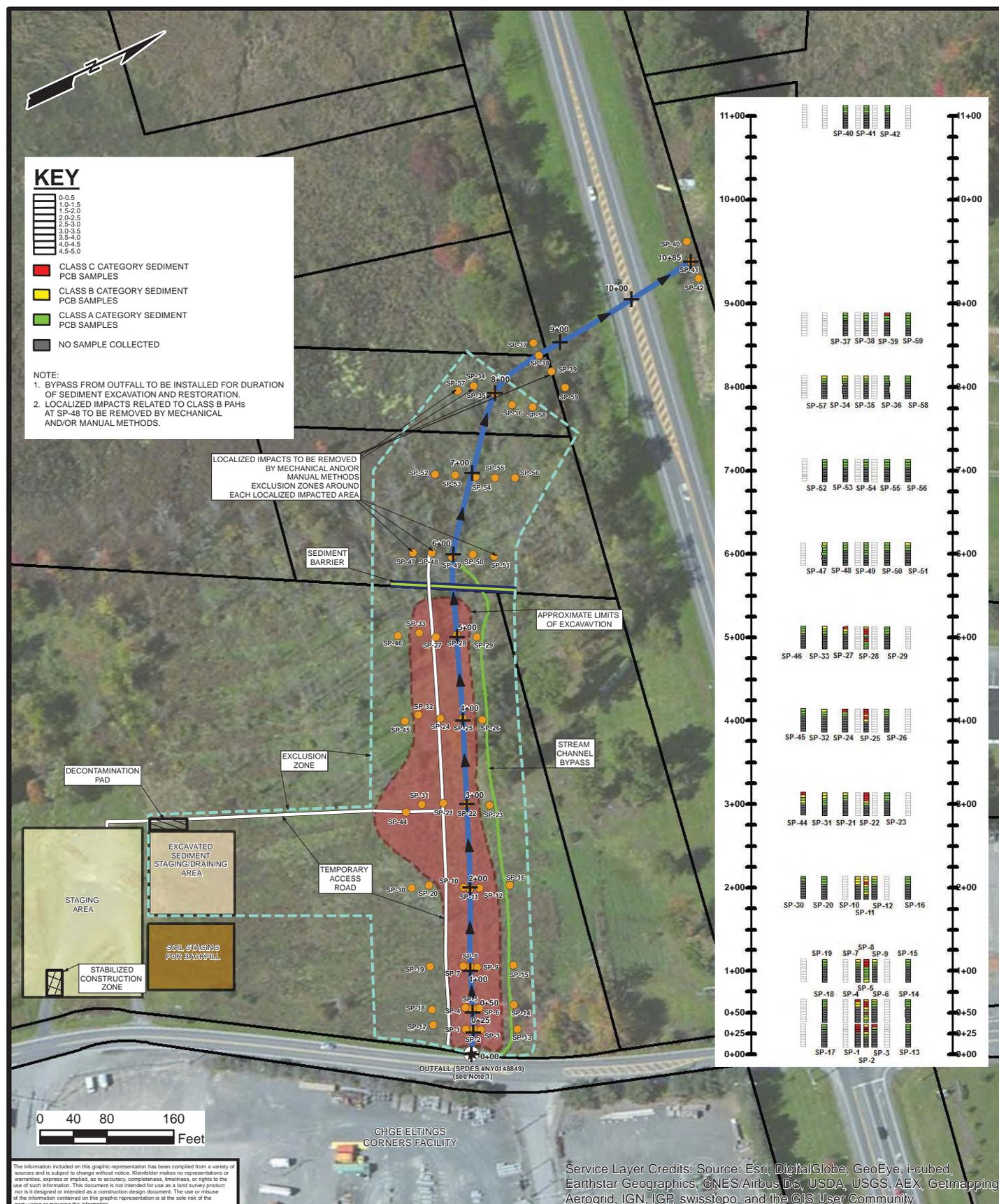




NOTE:

1. BYPASS FROM OUTFALL TO BE INSTALLED FOR DURATION OF SEDIMENT EXCAVATION AND RESTORATION.
2. LOCALIZED IMPACTS RELATED TO CLASS B PAHS AT SP-48 TO BE REMOVED BY MECHANICAL AND/OR MANUAL METHODS.

LOCALIZED IMPACTS TO BE REMOVED BY MECHANICAL AND/OR MANUAL METHODS
EXCLUSION ZONES AROUND EACH LOCALIZED IMPACTED AREA



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<p>KLEINFELDER Bright People. Right Solutions. www.kleinfelder.com</p>	<h2>CORRECTIVE MEASURES PLAN</h2>		<p>Figure 2</p>
	<p>C.H.G.E CORP. ELTINGS CORNERS PROPERTY SOUTH STREET TOWN OF LLOYD, ULSTER COUNTY, NEW YORK</p>		
Cartography By: J. Rockwood	12/04/14	Project Number: 20143521	Checked By: J. Moses

Appendix A

Responsiveness Summary

Appendix A

Responsiveness Summary

**Central Hudson Gas and Electric,
Elting's Corners Facility
Highland, Town of Lloyd, Ulster County
EPA No. NYD000705905
Site No. 356045**

The Statement of Basis (SB) for the Central Hudson Gas and Electric Elting's Corners Facility was prepared by the New York State Department of Environmental Conservation (the Department) and was issued to the document repositories on February 18, 2015. The SB outlined the remedial measure proposed for the contaminated sediments present in the Swarte Kill tributary and associated wetlands just west of the Elting's Corners Facility.

The release of the SB was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy. The public comment period for the SB ended on March 20, 2015.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: Ron Crovisier submitted an email dated March 3, 2015 which included the following comment: "I reside ... less than 1/2 mile south from the Central Hudson site slated for remediation due to PCB contamination. Given my proximity to the site, I am concerned about the condition of my well water. Is the DEC planning on doing any testing of residents' water?"

RESPONSE 1: The Department has determined the limits of site-related contamination in soils and groundwater both on and off the site. Data indicates that polychlorinated biphenyls (PCBs) were not detected in either soil or groundwater at the site, and were only detected in the wetland sediments to the immediate west of the site. PCBs strongly bind to soils and sediments and are insoluble in groundwater, so significant leaching of PCBs into groundwater is unlikely. Groundwater at the site flows from east to west, therefore groundwater flowing under the site and the wetland would not reach residential wells located that distance to the south. For these reasons, residential wells will not be sampled by the Department at this time.

COMMENT 2: Diana Staats submitted an email dated March 10, 2015 which included the following comment: "I also live [to the south of the Central Hudson site]. I am concerned about our well and the effect that the Central Hudson contamination problem will have on the value of our property. [We are] planning on selling our house in the near future. I am afraid the Central Hudson problem will make it impossible to sell our house."

RESPONSE 2: The Department has determined that site related contamination has only been

detected in the sediments in the Swarte Kill tributary/wetland complex located immediately west of the site. Properties to the south of the site are outside of the known limits of contamination originating from the Central Hudson site.

Appendix B

Administrative Record

Appendix B

Administrative Record

**Central Hudson Gas and Electric,
Elting's Corners Facility
Highland, Town of Lloyd, Ulster County
EPA No. NYD000705905
Site No. 356045**

1. *Statement of Basis*, February 2015, prepared by the Department.
2. 6 NYCRR Part 373 Hazardous Waste Permit: 3-5132-00032-2, EPA ID No. NYD000705905, June 2010, prepared by the Department.
3. *RCRA Facility Investigation*, April 2009, prepared by Kleinfelder for Central Hudson Gas and Electric.
4. *Groundwater Investigation Summary Report*, February 2013, prepared by Kleinfelder for Central Hudson Gas and Electric.
5. *RCRA Corrective Action Environmental Indicator RCRAInfo Code (CA750): Migration of Contaminated Groundwater Under Control*, March 2013, prepared by the Department.
6. *2012 Wetland Investigation Summary Report*, June 2012, prepared by Kleinfelder for Central Hudson Gas and Electric.
7. *Wetland Investigation Summary Report*, March 2011, prepared by Kleinfelder for Central Hudson Gas and Electric.
8. *Interim Supplemental RFI Report: Wetland Investigation*, April 2010, prepared by Kleinfelder for Central Hudson Gas and Electric.
9. Email from Mr. Ron Crovisier, March 3, 2015, commenting on the Statement of Basis.
10. Email from Ms. Diana Staats, March 10, 2015, commenting on the Statement of Basis.