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BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Transmitted via FedEx

NO00475

May 25, 2001

Maria Jon
U.S. Environmental Protection Agency
Region II
New York Remediation Branch
290 Broadway, 20th Floor
New York, NY 10007-1866

Re: Niagara Mohawk Power Corporation
Former Manufactured Gas Plant Site
Saratoga Springs, New York
BBL Project #: 366.16

Dear Ms. Jon:

On behalf of Niagara Mohawk Power Corporation (NMPC), attached are responses to the U.S. Environmental Protection Agency's (USEPA's) comments dated May 3, 2001 along with three copies of the revised versions of the following:

- *Quality Assurance Project Plan* (QAPP)
- *Sampling and Analysis Monitoring Plan* (SAMP)
- *Remedial Action Work Plan* (RAWP)

If you have any questions, please feel free to call me or William Jones of NMPC.

Sincerely,

BLASLAND, BOUCK & LEE, INC.

David W. Hale, P.E.
Project Manager

DWH/lar
Encls.

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cc: William R. Jones, P.E. (NMPC) — w/encl.
Jeff McCollough (NYSDEC) – w/encl.
James VanHoesen (NYSDEC) – w/encl.
Todd Daniels (USACE – Kansas City) – w/o encl.
William Weiss, Esq. (NMPC) – w/o encl.
Cynthia Psoras, Esq. (USEPA) – w/o encl.
Chief, Environmental Enforcement Section (USDOJ) (DOJ #90-11-3-1570) – w/o encl.
Paul Male (Saratoga Springs Engineering Dept.) – w/o encl.

Niagara Mohawk Power Corporation
Former Manufactured Gas Plant Site
Saratoga Springs, New York

Response to U.S. Environmental Protection Agency's (USEPA's) Comments dated May 3, 2001 on the *Remedial Action Work Plan* (February 2001), *Quality Assurance Project Plan* (February 2001), and *Sampling, Analysis, and Monitoring Plan* (February 2001).

General Comment:

Please update and revise the Construction Schedule to include the submission, review period and approval of the Remedial Action Work Plan, Sampling, Analysis, and Monitoring Plan, and the Quality Assurance Project Plan, the Construction Completion Report, Pre-certification Inspection and O&M Manual.

Response:

An updated construction schedule will be forwarded to the USEPA upon receipt by BBL from the contractor (Williams Environmental Services, Inc.).

Quality Assurance Project Plan Comments

USEPA Comment 1:

The QAPP refers to USEPA documents that have been superseded. Specifically the Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans *(QAMS-005/80) has been replaced by EPA QA/R-5,* EPA Requirements for Quality Assurance Project Plans *(EPA/240/B-01/003). As these requirements are more comprehensive than the superseded QAMS-005/80, the most current document must be used as a reference. In addition, the EPA* Guidance for Quality Assurance Project Plans *(EPA/600/R-98/018) is also available as a reference. These documents can be found at the following website: http://www.epa.gov/quality1/qa_docs.html.*

Response:

Comment incorporated. See Pages 1-1 and 1-2 of the revised document (attached).

USEPA Comment 2:

Page 1-5. Section 1.6 Data Quality Objectives – The paragraph that describes definitive and screening data refers to field parameters to be collected during groundwater investigation. The QAPP was prepared for the remedial action activities at the site. Clarification is required since site activities described in the QAPP did not include any groundwater investigation.

Response:

Comment incorporated. Groundwater monitoring is part of long-term monitoring. See Page 1-3 of the revised document (attached).

USEPA Comment 3:

Page 1-6, Section 1.6.1 Subsurface Soil Sampling – This section specifies the use of PAH immunoassay test kits (RaPID Assay) for the post excavation samples. A description of the PAH immunoassay test kits should be provided as part of the QAPP. The section also stated that confirmatory samples will be collected once the immunoassay test meets the groundwater protection criteria. The confirmatory samples will be analyzed by an on-site laboratory using Methods 8260 and 8270, both of which are GC/MS methods. The quality assurance plan for the on-site laboratory operation should be submitted for review. The quality assurance plan should include the standard operating procedures (SOPs) to be used. This will include but is not limited to the preparation of method blanks, matrix spikes, calibration standards; frequency of analysis of the control check standard; calculation of the sample concentrations and validation procedures.

Response:

Refer to Pages 1-6 to 1-7 of the revised document (attached) for the incorporation of the PAH immunoassay comment. Upon receipt of the chosen laboratory's Quality Assurance Project Plan (QAPP), it will be forwarded to the USEPA. The laboratory QAPP will include the appropriate standard operating procedures. Please note that the requirements for an on-site laboratory has been deleted. Samples will be transported to a certified commercial laboratory.

USEPA Comment 4:

Page 1-7, Section 1.6.2 Sediment Sampling – This section specifies the use of PAH EnviroGard immunoassay test kits following the excavation of contaminated sediments. Similar to Item #3, a description of the immunoassay test kit should be included with the QAPP.

Response:

Comment incorporated. See Page 1-8 of the revised document (attached).

USEPA Comment 5:

Page 1-9, Section 1.6.3 Groundwater Sampling – This section stated that the groundwater samples will be sent to a laboratory using the 1991 NYSDEC Analytical Services Protocol (ASP) for Methods 8260 and 8270. It should be verified that the laboratory will be using the most recent NYSDEC ASP. In addition, the selected laboratory should submit current copies (within the past six months) of laboratory certification provided from either a State or Federal Agency which conducts certification. The certification should be applicable to the matrix/analyses to be conducted. If the laboratory does not participate in the Contract Laboratory Program (CLP), they must submit results of the Performance Evaluation (PE) samples for the constituents of concern from within the past six months. The CLP laboratories provide these results to the EPA on a regular basis.

EPA Region 2 has adopted the use of the low flow method for monitoring well samples. A guidance document entitled EPA Region 2 Low Stress (Low-Stress) Purging Procedure for Collecting Ground Water Samples from Monitoring Wells *(1998) is available at* http://www.epa.gov/region2/smb/sops.htm.

Response:

Refer to Page 1-10 of the revised document (attached). The required laboratory submittals will be submitted to the USEPA upon receipt of these items by BBL from the selected laboratory.

USEPA Comment 6:

Page 1-10, Section 1.6.4 Temporary and Permanent Water Treatment System Sampling – Once the discharge requirements have been established by Saratoga County Sewer District No. 1, the QAPP should be amended to reflect the final discharge requirements. In addition, it should be verified that the reporting limits of the selected analytical methods are less than the final discharge requirement concentrations.

Response:

The discharge requirements established by the Saratoga County Sewer District No. 1 will be forwarded to the USEPA upon receipt by BBL. The final requirements will be in accordance with the applicable permit.

USEPA Comment 7:

Page 1-12, Section 1.6.5 Waste Characterization Sampling – The analytical method for characterizing the soil and sediment piles, DNAPL extracted and waste derived from the 36-inch sewer cleaning was not identified.

Response:

The final waste characterization sampling requirements for the material to be disposed of off site (water, soil, DNAPL) will be determined, in part, by the chosen disposal facilities.

USEPA Comment 8:

Page 1-16, Section 1.6.7 Miscellaneous Sampling – The methodology for selecting the backfill sample locations and the criteria for certifying the backfill were not provided.

Response:

Comment incorporated. Refer to Page 1-17 of the revised document (attached). It should be noted that the sampling requirements for excavated soil as well as requirements related to materials handling procedures and backfill are detailed in the *Contract Specifications*, approved by the USEPA in a letter dated September 29, 2000.

USEPA Comment 9:

Page 2-1, Section 2.1.2 Analytical Laboratory Services – This section stated that the sample analyses will be performed in accordance with CLP Statement of Work (SOW). However, Section 1 has identified that USEPA SW-846 methods will be used to analyze the samples collected. Section 2 should be changed to reflect the analytical methods selected.

Response:

Comment incorporated. Refer to Page 2-2 of the revised document (attached).

USEPA Comment 10:

Section 4 Sampling Procedures – The use of a temperature blank in coolers should be specified. EPA Region 2 requires use of temperature blanks in coolers to verify that the samples have been maintained at 4°C. The temperature blank should consist of a sample container filled with nonpreserved water (potable or distilled) and included in each cooler containing samples (soil and aqueous) being sent for analysis. The container should be labeled "USEPA COOLER TEMPERATURE INDICATOR" and dated. Temperature of the blank should be taken and recorded on the chain of custody record immediately upon receipt at the laboratory, prior to inventory and refrigeration.

Response:

Comment incorporated. Refer to Page 4-2 of the revised document (attached).

USEPA Comment 11:

Page 8-3, Section 8.3 Data Validation/Data Usability – Full analytical data validation should employ the most current versions of the U.S. EPA Region II Data Validation SOPs: HW-24, Revision 1, June 1999: Validating Organic Compounds by SW-846 Method 8260B *and HW-22, Revision 1, April 1995:* Validating Semivolatile Organic Compounds by SW-846 Method 8270B. *These and other data validation SOPs can be found at the following website: http://www.epa.gov/region2/smb/sops.htm.*

Response:

Comment incorporated. Refer to Page 8-4 of the revised document (attached).

USEPA Comment 12:

The statement "Rinse blanks will be prepared and submitted for analysis at the frequency of one per day (when sample equipment cleaning occurs)..." implies that the sampling equipment will only be cleaned once per day, not after every sample. The rinse blank is intended to eliminate cross sample transfer as a source contamination, this is only possible if the sample is taken after a typical clean up between samples. Cleaning procedures between samplings need to be more clearly laid out, and rinse sampling needs to take place after one of these standard cleanings.

Response:

Comment incorporated. Refer to Page 4-1 of the revised document (attached).

Sampling, Analysis, and Monitoring Plan Comments

USEPA Comment 1:

Page 2-6, Section 2.4.2 Start-up Sampling Analytical Laboratory Testing – See comment #5 above regarding the use of the most recent NYSDEC-ASP.

Response:

Comment incorporated. Refer to Page 2-6 of revised document (attached).

USEPA Comment 2:

Page 2-8, Section 2.7.1 Subsurface Soils Sampling Protocols and Laboratory Analytical Testing – The analytical method and the criteria for the excavated soil characterization were not provided. In addition, it was stated that characterization sampling will be performed on each soil staging pile prior to off-site disposal or in the event that the soils may be used for on-site backfill. A clarification is requested on the use of the excavated soil for backfill. The remedial action requires the excavation of contaminated soil with confirmatory samples collected at specified depths. Any excavated soil should be treated as exceeding the cleanup criteria and therefore not to be used as backfill.

This section references Section 2.2.1 for the sampling protocol to characterize the excavated soil. However, Section 2.2.1 was specific for the subsurface soil sampling within the excavation. A sampling protocol specific to the excavated soil pile should be provided.

This section also states that the contractor will mix additional surface or subsurface soil excavated from above the water table with the mixed subsurface soil to render the material nonhazardous and/or satisfy pretreatment requirements. An elaboration of the statement is requested. The mixing of hazardous soil with non-hazardous soil in order to dilute contaminants to the point where the hazardous soil can be classified as non-hazardous is contrary to normal environmental cleanup practices. Consideration should be made of other clean-up/disposal alternatives.

Response:

It should be noted that the sampling requirements for excavated soil as well as requirements related to materials handling procedures and backfill detailed in the *Contract Specifications*, approved by the USEPA in a letter dated September 29, 2000.

It should also be noted that excavation and backfill procedures at the Former Skating Rink Area will involve excavation of various soil horizons for the sole purpose of getting to and removing the soil horizons that do not meet the site cleanup criteria. Only the "clean" soil that is removed will be used as backfill, as stated in the *Contract Specifications* approved by the USEPA in a letter dated September 29, 2000.

USEPA Comment 3:

Page 2-9, Section 2.7.3 36-Inch Diameter Storm Sewer Cleaning Sampling – The sampling protocol described collecting grab samples from sampling point. However, these sampling points were not specified in the SAMP.

Response:

Comment incorporated. Refer to Page 2-9 of the revised document (attached).

USEPA Comment 4:

Page 2-10, Section 2.7.4.1 Sampling Protocols – It was stated that the sampling protocol for DNAPL waste characterization will be in accordance with NYSDEC requirements. The specific NYSDEC requirements should be specified in the SAMP.

Response:

Refer to response to USEPA Comment 7 above for the QAPP.

USEPA Comment 5:

Page 3-1, Section 3.1 Sample Containers and Preservation – Sample bottle containers should meet all guidelines specified in Specification and Guidance for Obtaining Contaminant-Free Sample Containers, *EPA 540/R-93/051 and OSWER Directive 9240.0-05A (EPA, 1992b).*

Response:

Comment incorporated. Refer to Page 3-1 of the revised document (attached).

Remedial Action Work Plan

Remedial Action Implementation for the Former Manufactured Gas Plant Site Saratoga Springs, New York

Niagara Mohawk Power Corporation
Syracuse, New York

May 2001

BBL®
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

TECHNICAL REPORT

Remedial Action Work Plan

Remedial Action Implementation for the Former Manufactured Gas Plant Site Saratoga Springs, New York

Niagara Mohawk Power Corporation
Syracuse, New York

May 2001

BBL
BLASLAND, BOUCK & LEE, INC.
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Table of Contents

1. Introduction

1.1 Purpose

This *Remedial Action Work Plan* (RAWP) specifies activities and documentation requirements for the implementation of the Remedial Action (RA) for Niagara Mohawk Power Corporation's (NMPC's) Former Manufactured Gas Plant Site (the Site) in Saratoga Springs, New York. This RAWP has been prepared by Blasland, Bouck & Lee, Inc. (BBL), at the request of NMPC, in accordance with the requirements of a U.S. Environmental Protection Agency (USEPA) Consent Decree (No. 92 CV-0136).

The final remedial design for the Site was approved by the USEPA on September 29, 2000. The RAWP presents the methods, procedures, and documentation to be used to implement the final remedial design, which consists of the following previously submitted documents:

- *Final Basis of Design Report* (BODR);
- *Contract Specifications;*
- *Contract Drawings;*
- *Health and Safety Plan* (HASP);
- *Construction Quality Assurance Plan* (CQAPP);
- *Confirmatory Sampling Plan* (CSP);
- *Long-Term Monitoring Plan* (LTMP); and
- *Wetlands Mitigation Plan.*

The combination of these documents makes up the *Final Design Submittal* (BBL, 2000). The RAWP references, as appropriate, these aforementioned documents.

1.2 Site Location and Physical Setting

The Site is located in the City of Saratoga Springs (the City), Saratoga County, New York. The Site consists of an approximately 7-acre parcel owned by NMPC (referred to as the NMPC Property), a property formerly owned by the City (referred to as the Former Skating Rink Area) located immediately southeast of the NMPC Property, and an approximate 1-mile stretch of Spring Run Creek. The NMPC Property is surrounded by chain-

link fencing and is bounded on the north by New York State Route 50, to the south by Excelsior Avenue, to the east by East Avenue, and to the west by the Spa Steel Corporation.

The NMPC Property has a relatively flat topography and is trapezoidal in shape. There are several buildings located on the NMPC Property, including a cylindrical-shaped brick storage building, a two-story brick storage building, a service center building (recently demolished), and an aboveground electric substation. Adjacent to the NMPC Property are several properties zoned for residential, light industrial, or planned business use.

The Former Skating Rink Area is located on the southeast corner of Excelsior Avenue and East Avenue. This property was formerly owned by the City and was used for the storage of City-owned equipment. (NMPC recently entered into an agreement to purchase the Former Skating Rink Area property from the City.) The facility is no longer used as a skating rink since the City has recently constructed a new skating facility at another location.

To the east of both these areas are Spring Run Creek and wetland areas. Spring Run Creek flows in an easterly direction from the NMPC Property toward Interstate 87.

1.3 Site Background

Site background information is discussed within the *Remedial Investigation Report* (RI) (Atlantic Environmental Services, Inc. [Atlantic], 1992), the *Feasibility Study* (FS) (RETEC/Atlantic Environmental Services, 1995), and the *Final Design Submittal* (BBL, 2000).

The final remedial design was approved by the USEPA in a letter to NMPC dated September 29, 2000. The construction efforts associated with the RA were awarded after a formal bidding process (October 23 to December 8, 2000) to Williams Environmental Services, Inc. (Williams).

1.4 Remedial Action Overview

The following are the major RA activities associated with the remediation of the Site in accordance with the final remedial design:

- Source Area Soil Removal (NMPC Property);

- Surface Soil Removal (NMPC Property);
- Surface and Subsurface Soil Removal (Former Skating Rink Area);
- Sediment Removal (Spring Run Creek);
- Installation and Operation of a Temporary Water Treatment Facility;
- Installation and Initial Operation of a Permanent Groundwater Treatment Facility;
- Installation of Steel Sheeting Barriers;
- 36-Inch-Diameter Storm Sewer Cleaning and Rehabilitation;
- Installation of an Asphaltic Cap Over the NMPC Property;
- Construction of a Pre-Engineered Metal Building;
- Construction and Relocation of a Temporary Enclosure Over Select Source Area Soil Removal Areas;
- Perimeter Air Monitoring Program for the NMPC Property and Skating Rink Area During Intrusive Activities;
- Storm Water Diversion and Management;
- Construction and Removal of Temporary Haul Roads to Access Sediment Excavation Areas and the 36-Inch-Diameter Brick Storm Sewer;
- 36-Inch-Diameter Brick Storm Sewer Abandonment (Spring Run Creek Area);
- DNAPL Collection System (NMPC Property);
- Utility Relocation and Removal;
- Relocation of the Brick Roundhouse (NMPC Property); and
- Installation and monitoring of long-term monitoring wells (NMPC Property and Former Skating Rink Area).

1.5 RAWP Organization

The RAWP is organized as follows:

Section 1 – Identifies the purpose of this plan, describes Site location and physical setting, provides a brief Site background, presents an overview of RA activities, and presents the plan organization.

Section 2 – Discusses the Site Management Plan.

Section 3 – Identifies construction quality control activities and procedures.

Section 4 – Describes a request for proposed modification to the final remedial design.

2. Site Management Plan

This section presents the methods and approaches for implementing the work tasks outlined in the final remedial design approved by the USEPA. A description of the RA project team, construction schedule, Site maintenance and operation, and permitting requirements are presented below.

2.1 RA Project Team

This subsection identifies the members of the RA project team and describes each member's minimum responsibilities. For the purposes of this RAWP, the RA project team is made up of the following:

Engineer: Blasland, Bouck & Lee, Inc. (BBL) will serve as the Engineer to observe the implementation of the RA activities and to document that the activities are conducted as required by this RAWP and in accordance with the final remedial design.

Contractor: Williams will serve as the Contractor to implement the RA activities.

USEPA: U.S. Environmental Protection Agency, which has authority over the RA activities in accordance with Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended under Title 42 Section 9606(a) of the United States Code (42 USC 9606[a]).

2.1.1 Engineers

BBL is licensed to practice engineering in New York and will have two on-site engineers, one on-site support person, and one construction engineer during implementation of the RA activities. The construction engineer will provide office support to the on-site engineers. When used throughout this document, the titles "Engineer" or "Engineers" are inclusive of BBL's on-site engineers, on-site support, and construction engineer. BBL will be responsible for providing, at a minimum, the following services associated with implementing the RA activities:

On-Site Engineers

- Providing full-time, on-site engineering observation services for the duration of the project to document that the RA activities are conducted in accordance with this RAWP and the final remedial design. The on-site engineering observation services are to include, at a minimum, maintaining a daily construction reports of the Contractor's activities, monitoring data, weather conditions, Site visitors, and construction problems encountered and associated solutions;

- Reviewing the RA activities implemented by the Contractor for conformance with the RAWP, final remedial design, and any RA modifications proposed by BBL and approved by the USEPA;

- Maintaining a photographic record of the progress of the RA activities;

- Overseeing quality assurance/quality control (QA/QC) testing performed by the Contractor to document compliance with the final remedial design;

- Collecting waste characterization samples of soil and sediment within staging piles generated during the RA construction activities for laboratory analysis prior to off-site disposal by the Contractor;

- Keeping daily detailed written records of daily field activities; quantities of materials removed, generated, used, and disposed of; and documenting manpower, materials, and equipment used and any unusual circumstances encountered;

- Documenting the materials and equipment delivered to the Site;

- Notifying the USEPA or the USEPA's on-site representative following confirmation that a deviation has occurred from this RAWP;

- Develop field drawings as appropriate to document the construction activities;

- Signing manifests for off-site shipments on behalf of NMPC upon an agreement between BBL and NMPC of waste material generated during the RA activities. A listing of persons authorized to sign manifesting paperwork will be submitted by BBL to the USEPA before the RA activities are implemented;

- Maintaining an on-site project log containing hazardous and nonhazardous waste manifests, and certificates of disposal for wastes generated during the RA activities; and

- Preparing a Construction Completion Report.

Construction Engineer

- Coordinate with the on-site engineers to document that the work activities are being conducted in general conformance with the final remedial design;

- Coordinating with NMPC's Project Manager and preparing monthly progress reports for the regulatory agencies;

- Issuing modifications (change orders) and renewing Contractor's change orders to the Contract Documents, as appropriate, as a result of in-field conditions being different from those identified in the final remedial design. This will include, but not be limited to, reissuing the Contract Documents, providing documentation to the Contractor to solicit change order quotations, reviewing the provided change order quotations by the Contractor, and developing an engineering cost estimate to support or deny the Contractor's claims; and

- Attending routine Site meetings during key milestones of the construction effort. In addition, BBL will also attend meetings with the regulatory agencies to keep them advised of the progress of the construction effort.

2.1.2 Contractor

The Contractor shall be responsible for providing, at a minimum, the following services associated with implementing the RA activities and the services identified in the *Contract Specifications* and *Contract Drawings*:

- Providing all equipment, materials, labor, services, and incidentals necessary to implement the RA activities;

- Confirming that on-site personnel involved in the RA activities have Occupational Safety and Health Administration (OSHA) 40-hour training (in accordance with Part 1910.120 of Title 29 of the Code of

Federal Regulations [29 CFR Part 1910.120]) and corresponding 8-hour refresher course updates. The Contractor shall provide to the Engineer evidence of 40-hour training and corresponding 8-hour refresher course updates (i.e., certificates of training completion for on-site personnel) prior to the Contractor's mobilization to the Site. Personnel who are not required to have OSHA 40-hour training will be escorted at the Site by trained personnel.

- Implementing the RA activities as described in this RAWP, the final remedial design, and the Contractor's reviewed submittals;

- Conducting RA activities in a safe manner in accordance with all applicable federal, state, and local regulations;

- Attending project meetings, weekly progress meetings, and precertification inspection.

- Notifying the Engineer immediately when conflict between this RAWP, the final remedial design (or other Contract Documents), and actual conditions are discovered;

- Coordinating all construction activities with the Engineer before commencing on-site activities and as necessary to complete the RA activities;

- Complying with local noise ordinances and the noise limits presented in the remedial final during the RA activities;

- Conducting RA activities in a manner that minimizes, as reasonably practicable, the generation and migration of dust particulates and vapors;

- Conducting air monitoring in accordance with the HASP and the *Contract Specifications;*

- Conducting RA activities and implementing dust and vapor control measures, as necessary, to minimize, as reasonably practicable, the generation and migration of dust and vapors beyond work areas at concentrations exceeding Site action levels, as presented in the *Contract Specifications*;

- Preparing, submitting, and revising (as necessary) all plans and information required in the final remedial design;

- Arranging, applying for, securing, abiding by, and paying for all required permit approvals, inspections, and notification fees covering the RA activities;

- Preparing hazardous waste manifests and nonhazardous waste manifests;

- Coordinating with the Engineer, the City of Saratoga Springs, appropriate utility companies, and other involved parties during implementation of the RA activities; and

- Completing the RA activities in a timely fashion, as specified in the project schedule as identified in Appendix A.

2.2 Construction Schedule

In accordance with Williams's proposal dated December 8, 2000, Williams has identified an approximately one-year construction duration to complete the RA activities. Williams's Site mobilization will begin in spring 2001 and continue to April 2002. A winter shutdown during the period from mid-January 2002 through mid-March 2002 is included in Williams's construction schedule. Refer to Appendix A for Williams's draft construction schedule.

2.3 Site Maintenance and Operation

In accordance with Appendix B of the Consent Decree, the following discussion is provided. Williams is responsible for Site maintenance and operation to ensure the RA activities are completed according to the final remedial design and to ensure safety. BBL will observe the Site maintenance and operation by Williams in accordance with Section 3.2. The following is a brief description of the maintenance and operations for the Site in accordance with the final remedial design and Williams's proposal dated December 8, 2000.

Site Preparation and Mobilization

Site preparation and mobilization will consist of establishing Site access restrictions, erecting erosion and sedimentation control structures, constructing temporary access roads, constructing facility set-up, installing utilities, and installing decontamination stations.

Site Security

Site access will be restricted by installing temporary fencing, keeping the existing fencing in good condition, or other temporary barriers to minimize unauthorized or unknowing access to the Site.

Site Operation

The construction trailer (Contractor's and Engineer's trailer) will be located on Site as indicated on the *Contract Drawings*. The area available for equipment storage is limited. It is anticipated that, at a minimum, the areas identified on the *Contract Drawings* for equipment storage will be used.

Decontamination

All working personnel, vehicles, and equipment will undergo decontamination before leaving the work area. The personnel decontamination area will consist of the following:

- Personnel leaving the work area will remove the gross contamination from their outer clothing and boots;
- Personnel will remove any contaminated outer garment and gloves, and deposit them in lined waste receptacles; and
- Personnel will then decontaminate their hard hats and boots with an aqueous solution of detergent or other appropriate cleaning solution, as necessary.

All vehicles and equipment that have entered the work area will be decontaminated before leaving the work area. Vehicles or equipment decontamination will consist of the rinsing of tires and wheel wells with water. If the equipment is significantly contaminated, it will undergo steam cleaning or pressure washing. Wash water will be collected, and properly transported and disposed or treated properly.

2.4 Permitting Requirements and Approvals

This section presents the permitting requirements and approvals that have been identified in the *Permit Application Report* (BBL, 2001) as potentially applicable to the implementation of the RA activities at the Site. The Contractor shall be responsible for conducting the RA activities in accordance with all applicable federal, state, and local rules, regulations, and permitting and approval requirements, whether or not presented herein.

The following permits and approvals have been identified as potentially applicable to the RA activities:

Minimum Permit and Approval Requirements

Application	Responsible Agency	Description/Supporting Documentation (Minimum Requirements)	Responsible Party
Joint Application for Permit (Sect. 404 Clean Water Act) x – Freshwater Wetlands x – Disturbance of Bedding Form 95-19-3 (6/95) -7e	U.S. Army Corps of Engineers (USACE) & NYSDEC	• Notice of Intent • Remediation Project Scope of Work narrative • Indicates an NPL/CERCLA Site • Location map (USGS Quad) • Site/Remediation/Grading Plan • Details (e.g., sediment and erosion controls, cross-sections, treatment options) • Photographs of the project area • Statement of the status of endangered/threatened species resources & archaeological resources • Vegetative Community Species List • Wetlands Delineation Report • Wetlands Restoration Program/Plan	Not required
Letter of Intent requesting identification of potential endangered or threatened species or critical habitat	U.S. Fish and Wildlife Service (USFWS)	• Letter requesting USFWS to identify any potential endangered or threatened species or critical habitats in the project area • Scope of Work- brief narrative of remedy • Location Map (USGS Quad)	Niagara Mohawk Power Corporation
Letter of Intent requesting identification of potential endangered or threatened species or critical habitat	National Marine Fisheries Service (NMFS)	• Letter requesting NMFS to identify any potential endangered or threatened species or critical habitats in the project area • Scope of Work- brief narrative of remedy • Location Map (USGS Quad)	Niagara Mohawk Power Corporation
Application for Stormwater Management & Erosion Control Plan General Permit (Stormwater Pollution Prevention)	NYSDEC Division of Water	• Notice of Intent to Discharge • Stormwater management scope of work narrative • Indicate it is an NPL/CERCLA Site • Sediment and Erosion Control Plan • Storm Water Pollution Prevention Plan	Contractor
Letter of Intent requesting identification of potential endangered or threatened species or critical habitat	NY Natural Heritage Program (NYNHP), NYSDEC Wildlife Resources Center (WRC)	• Letter Requesting NYNHP to identify any potential endangered or threatened species or critical habitats in the project area • Scope of Work- brief narrative of remedy • Location Map (USGS Quad)	Niagara Mohawk Power Corporation

Application	Responsible Agency	Description/Supporting Documentation (Minimum Requirements)	Responsible Party
Letter of Intent requesting identification of prehistoric properties or historic structures	NYS Office of Parks, Recreation, & Historic Preservation (OPRHP)	• Letter requesting OPRHP to identify any potential resource in the project area • Scope of Work- brief remedy narrative • Location Map (USGS Quad) • Cultural Resource Survey	Niagara Mohawk Power Corporation
New Discharge Permit	Saratoga County Sewer District No. 1	• Notice of Intent to Discharge • Wastewater management scope of work narrative • Details and tech info including: 1)Wastewater constituents and characteristics 2) Time and duration of contribution 3) Treatment system description 4) Discharge rate and duration 5) Wastewater monitoring data (e.g., if system is new, then provide soil/sediment, groundwater, and surface water sampling data as representative of projected influent constituents) • Sampling & Analysis Plan	Niagara Mohawk Power Corporation
Application for Street Opening Permit	City of Saratoga Springs Department of Public Works	• Scope of Work • Hold Harmless Agreement • Statement that Saratoga County Sewer District No. 1 has approved of sewer connection • Description of the flow monitoring system	Contractor
Application for Local Building Permit (Bldg. Permit Applic./Form)	City of Saratoga Springs	• Notice of Intent to construct a building for the groundwater treatment system and to install a sheet piling wall as part of the long term operation at the Site • Location of Site (USGS Quad and Local) • Drawings of the structure (plan & profile)	Contractor
Application for Tap Permit	City of Saratoga Springs	• Identification of water/sewer main to be tapped • Identification of licensed plumber performing work • Completion of Hold Harmless Agreement	Contractor

3. Construction Quality Control

This section presents the construction quality controls that will be implemented by the Engineer during the RA activities at the Site. The *Construction Quality Assurance Project Plan* (CQAPP) (BBL, 2000) presented the equipment, materials, and procedures necessary for evaluation and documentation of the RA. This section of the RAWP summarizes the construction quality controls to be implemented and is intended to supplement the CQAPP.

Construction quality controls to be performed by the Engineer at the Site during the RA include the following items:

- Review of Contractor's submittals;
- Construction observation; and
- Reporting.

Each of the above-listed construction quality controls is described in the following subsections.

3.1 Review of Contractor's Submittals

For several elements of construction, the final remedial design requires that the Contractor prepares technical data (e.g., material test results, certifications, layout drawings, equipment specifications) and submits this information to the Engineer for review. General submittals required as part of the RA activities include the following:

- Implementation related plans and procedures; proposed methods/techniques to meet final remedial design requirements;
- Performance data;
- Engineering drawings;
- Installation drawings;
- Operating descriptions;
- Layout drawings;
- Detail drawings;
- Manufactured specifications, instructions, test results, and certificates;

- Results of materials testing;
- Design calculations; and
- Various plans.

The Contractor's submittal requirements to conduct the RA activities are included in the *Contract Specifications*. During RA implementation, additional Contractor submittals may be required for equipment or materials. All submittals shall be submitted to the Engineer for review in accordance with the *Contract Specifications* Special Condition 01721 - Submittals. The Engineer will mark the submittals to indicate the following:

- "Reviewed," if no objections are observed or comments made.

- "Reviewed and Noted," if minor objections, comments, or additions are made but resubmittal is not considered necessary.

- "Resubmit," if the objections, comments, or additions are extensive, or if retransmittal to another Contractor is required. In this case, the Contractor shall resubmit the items after correction, and the same number of copies shall be included in the resubmittal as in the first submittal. The Contractor will not be permitted to perform any activity that directly or indirectly involves the item covered by the submittal until a "Reviewed" or "Reviewed and Noted" stamp is provided.

- "Rejected," if the submittal under consideration is not, even within reasonable revision, acceptable, or when the data submitted are not sufficiently complete to establish compliance with the final remedial design. In this case, the Contractor shall resubmit a new or modified submittal that meets the scope and intent of the work specified in the Contract. The Contractor will not be permitted to perform any activity that directly or indirectly involves the item covered by the submittal until a "Reviewed" or "Reviewed and Noted" stamp is provided.

Copies of the additional, reviewed Contractor submittals will be provided to USEPA before the implementation of the submittal.

3.2 Construction Observation

Construction observation will be conducted by the on-site engineer during RA activities.

Daily Site reviews will be conducted by the Engineer during the RA to observe day-to-day operations, document that the RA activities are conducted in conformance with the final remedial design and this RAWP, conduct monitoring activities (as further discussed in Section 3 and below), and to review site-related health and safety issues. The components of the daily site review activities are presented in the CQAPP and are not reiterated in this RAWP.

The Engineer, Contractor, and USEPA will conduct a precertification inspection within 90 days after the completion of the RA activities. The precertification inspection will consist of a Site walkthrough to evaluate the completeness of the construction and its consistency with the final remedial design and applicable/ relevant federal, state, and/or municipal laws, rules, and regulations.

3.3 Reporting

This section presents the type of reports and the reporting requirements to be generated by the Engineer during and following the RA activities.

3.3.1 Daily Construction Reports

The Engineer will be responsible for maintaining daily construction reports documenting work performed and completed by the Contractor as previously discussed in Section 3.2.1 of the *CQAPP* (BBL, 2000). The report may include, but may not be limited to, the following information:

- The date, project name, location, weather conditions, and other pertinent Site information;
- A summary of the work activities conducted on that day in chronological order, time work starts and ends, in addition to the time of work stoppages;
- A summary of relevant communications (written and oral);
- A record of the workers, material and equipment deployed each work day;
- Equipment brought to the Site;

- A summary of samples collected;
- A record of calibrations or standards performed on field testing equipment;
- A record of visitors to the Site; and
- A record of unusual events/activities.

The daily log will be submitted daily by the Engineer. A sample form of the daily log is included in Appendix B.

3.3.2 Monthly Progress Reports

The Engineer will issue to the USEPA a written monthly progress report summarizing activities associated with the RA. The progress reports will include, at a minimum, visual observations, test results, problems encountered, and solutions achieved.

3.3.3 Construction Completion Report

At the completion of the RA activity, within 30 days of the precertification inspection, the Engineer will prepare a Construction Completion Report as previously discussed in Section 3.2.4 of the *CQAPP* (BBL, 2000) requesting the USEPA's approval of the RA and to document that the work has been performed in general conformance with the *Contract Specifications* and *Contract Drawings* presented in the final remedial design and this RAWP, as appropriate. The report must be submitted within 30 days of precertification inspection. The report will provide a summary of the work performed during the RA activities and will be submitted to the USEPA for review. The report will include the following information:

- Summary of construction/remediation activities;
- Summary of observations and testing data, including sample collection locations and results;
- Summary of construction problems and solutions;
- Documentation that acceptance criteria were met;
- Summary of changes from the final remedial design and RAWP, as appropriate;
- As-built drawings sealed and signed by a licensed Professional Engineer registered in the State of New York showing the installation of each construction material as it relates to the plan views and individual details;

- A statement by a licensed Professional Engineer and NMPC's project coordinator stating that the RA has met the requirements of the Consent Decree;
- Written correspondence with USEPA and other authorities;
- A letter must accompany the report containing the statement of certification as written in the Consent Decree; and
- Project photographs.

3.4 Operation and Maintenance Manual Implementation

In accordance with the Consent Decree, the Operations and Maintenance Manual (O&M Manual) will be developed by the Contractor and submitted to the USEPA 90 days before the scheduled completion date of the construction activities associated with the RA. BBL will provide observation during the implementation of the O&M Manual activities.

4. Proposed Modification to the Final Design

The USEPA has requested one modification to the approved *Final Design Submittal* resulting in additional sediment excavation from an area immediately downstream of the original limits of Sediment Excavation Area 1.

Four surface sediment samples were collected downstream of the original limits of Sediment Excavation Area 1 on September 29, 2000. The samples were collected in accordance with a Work Plan dated September 27, 2000 (Hale to Jon). The results of the sampling indicated that Sediment Excavation Area 1 required additional excavation to achieve the cleanup criterion of 22 parts per million (ppm) total polynuclear aromatic hydrocarbons (PAHs). The proposed modification extended Sediment Excavation Area 1 from the area originally identified in the *Contract Drawings* (BBL, 2000).

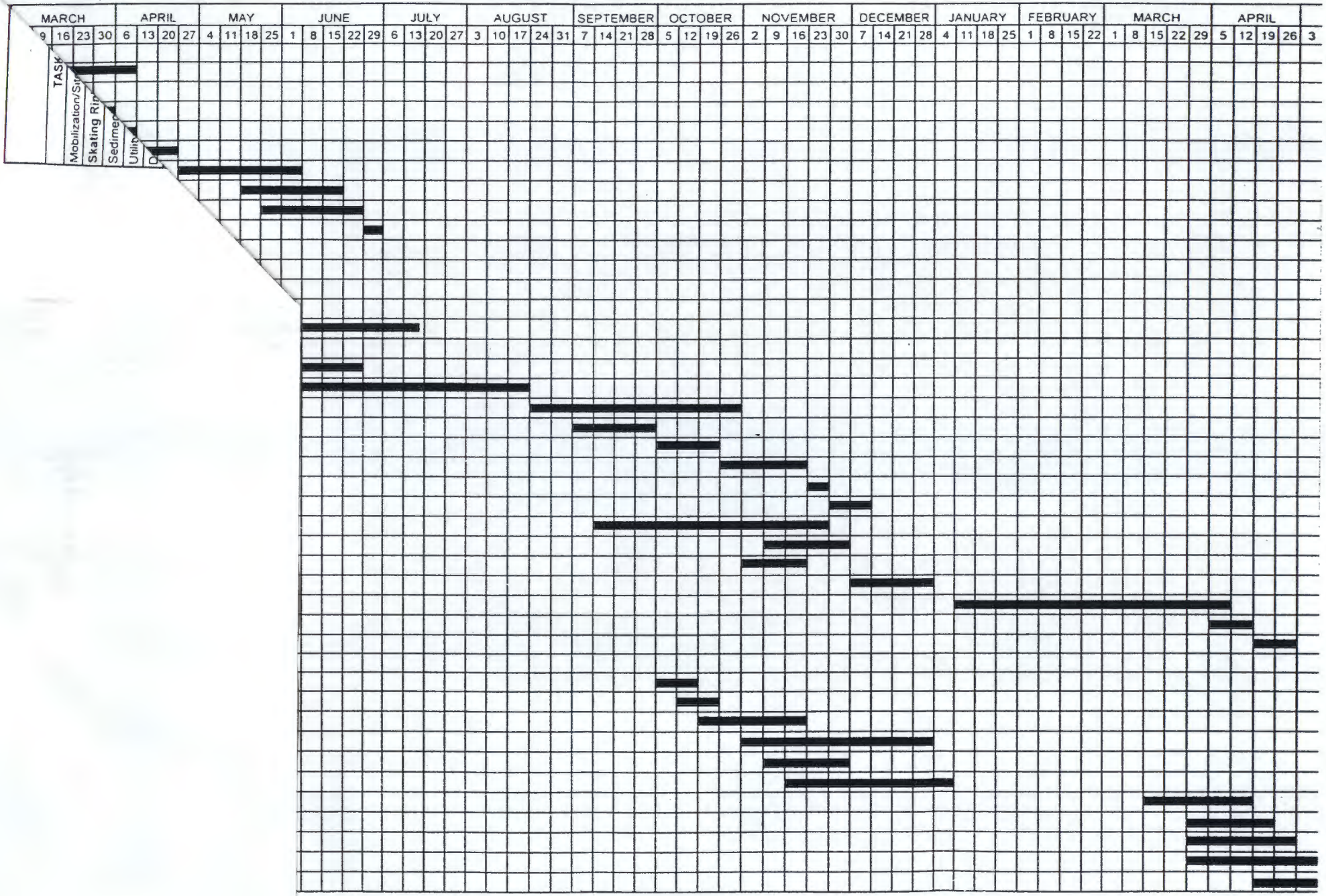
In accordance with the letter dated November 27, 2000 (Hale to Jon), Sediment Excavation Area 1 will be extended 210 feet downstream from the original limits. The excavation will be to a depth of 3 feet and will include the removal of approximately 350 cubic yards (cy) of sediments in addition to the amount specified in the final remedial design. The total sediment excavation for Sediment Excavation Area 1 will be approximately 750 cy with the incorporation of this modification.

Appendix A

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Construction Schedule

CONSTRUCTION SCHEDULE



Former Manufactured Gas Plant Site-Saratoga Springs, New York

Appendix B

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Daily On-Site Construction Report

Niagara Mohawk Power Corporation
Former Manufactured Gas Plant
Saratoga Springs, New York

Daily On-Site Construction Report

Date: _____ Weather: _____

BBL/Personnel On-Site:

_____

_____

Hours On-Site: _____

Contractor Personnel On-Site: _____

Hours On-Site: _____

Subcontractor Personnel On-Site: _____

Hours On-Site: _____

USEPA/NYSDEC Personnel On-Site: _____

Hours On-Site: _____

Daily Work Activities:

_____

_____

_____

_____

_____

_____

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_____

By: _____ Signed: _____

Niagara Mohawk Power Corporation
Former Manufactured Gas Plant
Saratoga Springs, New York

Daily On-Site Construction Report – Continuation Sheet

Date: _____

Daily Work Activities (Cont'd):

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_____

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By: _____ Signed: _____