MAXYMILLIAN Technologies
1601 EAST STREET
PITTSFIELD, MA 01201
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Fax 413 443-0511

LETTER OF TRANSMITTAL

Submittal No.:016B

TO: **Marlene Gaeta,** Senior Engineer Construction Management
Consolidated Edison Company of New York, Inc.
31-01 20th Avenue, Building 136 2nd Floor
Astoria, New York 11105

(718) 204-4010 Office

(646) 210-4256 Cell Phone

GAETAM@coned.com

MT JOB NO. 13007 | **Date:** 10/21/13

RE: Former Kent Avenue Generating Station
Interim Remedial Measure
500 Kent Avenue
Brooklyn, New York

Purchase Order No. 4167052

WE ARE SENDING YOU ☒ **Attached** ☒ **Other: As Below**

COPIES		DESCRIPTION *REVISION 2*
	Spec:	02146 CONSTRUCTION WATER MANAGEMENT AND DISPOSAL
1	**Item:**	1.05 A Construction Water Management Plan – *Revision 2* *[Revised per DEC Comments]*
	Author:	Maxymillian Technologies, Inc.

THESE ARE TRANSMITTED as checked below:

☒ For approval ☒ For your use ☐ As requested ☐ Return **comments** for distribution

REMARKS:

TRANSMITTED ELECTRONICALLY

cc: *D.Rubin, M.Lombardi, T.O'Connell, F.Perez, C.Kraemer, S.Shatz, G.Houle, V.Palen, S.Kelley, C.Riccardi*

If enclosures are not as noted, please notify us at once.

SIGNED S Kelley

Sara Kelley, Project Engineer

Construction Water Management Plan

Kent Avenue Remediation Project
Former Kent Ave Generating Station
500 Kent Ave
Brooklyn, New York

Purchase Order No. 4167052

Prepared For:

conEdison
a conEdison, inc. company

Consolidated Edison Company of New York, Inc.
4 Irving Place
New York, New York 10003

Prepared By

MAXYMILLIAN Technologies

1801 East Street
Pittsfield, MA 01201
MT Project No: 13007

October 2013

MAXYMILLIAN TECHNOLOGIES, INC.
Reviewed For Submission

Spec Sect # 02146 Trans # 016B
Date: 10/21/13 By: SJK

Table of Contents

1.0 INTRODUCTION

Consolidated Edison Company of New York, Inc. has contracted Maxymillian Technologies, Inc. (MT) to perform remedial construction activities at the Former Kent Ave Generating Station site located at 500 Kent Avenue, Brooklyn, New York. MT has prepared this site-specific Construction Water Management Plan in accordance with Purchase Order No. 4167052, and specification entitled *Bid Specification for Interim Remedial Measure Former Kent Avenue Generating Station,* dated December 14, 2012.

1.1 Summary of Work

Based on the bid documents, excavations are expected to be terminated at the top of the basement slab or the water table, whichever is encountered first. Therefore, impacted wastewater will primarily consist of decontamination wastewater and a minimal amount of impacted construction water.

Construction water generated on-site will be handled in the following manner:

1. Water collected as part of equipment, truck, or personnel decontamination will be considered impacted, and will be collected and handled as described in Section 1.3;
2. Water which decants from the soil storage area will be considered impacted, and will be collected and handled as described in Section 1.3;
3. Storm water that comes in contact with impacted soil or debris will be considered impacted, and will be collected and handled as described in Section 1.3;
4. Non-contact storm water which is not impacted by soil or debris will be directed to existing surface drainage features.

MT may mobilize a temporary water filtration/treatment system (Attachment A) to filter/treat decontamination wastewater and impacted construction water. In general, the system will include the following:

1. Submersible pumps;
2. Duplex multi-bag filter skid;
3. 18,000 gallon frac tank.

1.2 Storage

MT will have the following approximate water storage capacity on-site:

a. 18,000 gal with frac storage tank.

1.3 Collection, Sampling, Analysis & Discharge

MT will perform the following procedures, as shown in Figure 1, to assure that wastewater is appropriately handled:

1. Collect decon wastewater and impacted construction water using submersible pumps;
2. Pump wastewater into settling tank;
3. Dispose of wastewater off-site at approved facility or pump wastewater through the wastewater filter/treatment system, capable of up to 50 gpm (with typical operating range of 5 – 25 gpm), consisting of 5 micron multi-bag filter skid. If the construction water is turbid, varying levels of filters may be added, ending ultimately with a 5 micron filter;
4. If MT intends to discharge effluent to the Wallabout Channel or use to wet ACM containing soils, MT will collect effluent sample from filter/treatment system;
   *No water will be discharged to Wallabout Channel until the sample results are received and permit compliance is confirmed. MT will hold all water within a frac tank until compliance is confirmed.
5. Transport collected sample to laboratory. Analyze sample per the requirements of the SPDES Permit (Attachment B);
6. Upon receipt of acceptable sample results, discharge treated water to the Wallabout Channel in accordance with the existing SPDES Permit equivalent requirements, or use to wet asbestos containing soils, or dispose of at an approved off-site facility;
7. Upon receipt of unacceptable sample results, dispose of wastewater off-site at an approved facility in accordance with disposal facility requirements, or redesign the treatment system based on the laboratory test results and retreat wastewater and retest.

2.0 WATER HANDLING AND METHODS FOR CONTROLING SPILLAGE

2.1 Soil and Debris Removal

MT may temporarily stockpile excavated soil and debris within the Soil Storage Area. Excavated soil will be placed on 10-mil. poly. MT will place donnage or hay bales or wattle, or grade existing site materials to create a berm along the perimeter of the liner. Construction of the perimeter berm will prevent storm water from migrating into the Soil Storage Area, and also to prevent any storm water, dust, particulate, or decant water from migrating from the Soil Storage Area. After placing the soil within the bermed and lined storage area, MT will cover the soil stockpile with 6-mil. poly sheeting until the material is loaded for off-site disposal. Poly sheeting will be secured utilizing sand bags or sand bags with ropes to secure soil piles. A collection sump will be installed such that all decant water will migrate to the sump and be pumped to the treatment and storage area for handling and disposal as described in Section 1.3.

2.2 Decontamination Wastewater

MT will provide a water supply and a temporary decontamination pad. The decontamination pad will consist of a polyethylene liner, a layer of stone, and earthen berms around the perimeter. MT will set up a sump system to collect wastewater and pump to the treatment and storage area for handling and disposal as described in Section 1.3. The decontamination pad will be inspected once per day, and maintained as necessary. If the polyethylene layer has been breached, repairs will be made immediately and any necessary remediation performed.

MT will collect wastewater from the remote worker decontamination facility and pump to the treatment and storage area for handling and disposal as described in Section 1.3.

3.0 METHODS FOR MINIMIZING GENERATION OF CONSTRUCTION WATER

MT will employ the following methods to minimize the generation of construction water:

- Drainage – Proposed excavations and placement of Soil Storage Areas could affect existing drainage as a result of the modification to the existing surface conditions. MT will construct berms (as required by the variance) around the interior perimeter of the work areas to contain and facilitate collection and proper disposal of any runoff water. MT will construct the Soil Storage Areas such that storm water will not migrate to/from the Soil Storage Area. Soil storage areas will be constructed such that storm water is diverted around them to their existing paths of flow. Storm water which collects within impacted soil storage areas will be collected and handled as described in section 1.3;
- Stockpiled materials shall be protected by covering areas with erosion protection materials, as appropriate for prevailing conditions, to prevent generation of impacted construction water;
- MT will use the existing drainage patterns where feasible; install erosion controls to divert storm water around stockpiles and loading areas to minimize generation of impacted construction water;
- Storm water that comes in contact with impacted soil, or debris will be collected and handled as described in section 1.3;
- Runoff from impacted soil or debris stockpiles that are covered with plastic sheeting or other approved cover will not be collected assuming positive drainage occurs from the bottom of the covered stockpiles;
- Any runoff from the decon washing of construction equipment or trucks will not be directed to any on-site drainage system or resource area. Decontamination wash water will be collected within the decon pad and pumped to the settling tank to be handled as described in section 1.3;

- Store all impacted soil and debris within the lined and bermed Soil Storage Area or within roll-offs.

4.0 MEANS OF DEWATERING PORTIONS OF EXCAVATIONS WHERE NO BASEMENT SLAB EXISTS

Based on bid specifications, in the absence of a basement slab the excavation is to be terminated at the water table. MT intends to utilize submersible pumps to control perched groundwater and dewater excavations, as necessary. MT will pump impacted construction water to the treatment and storage area for handling and disposal as described in Section 1.3.

FIGURE 1
Wastewater Flow Diagram

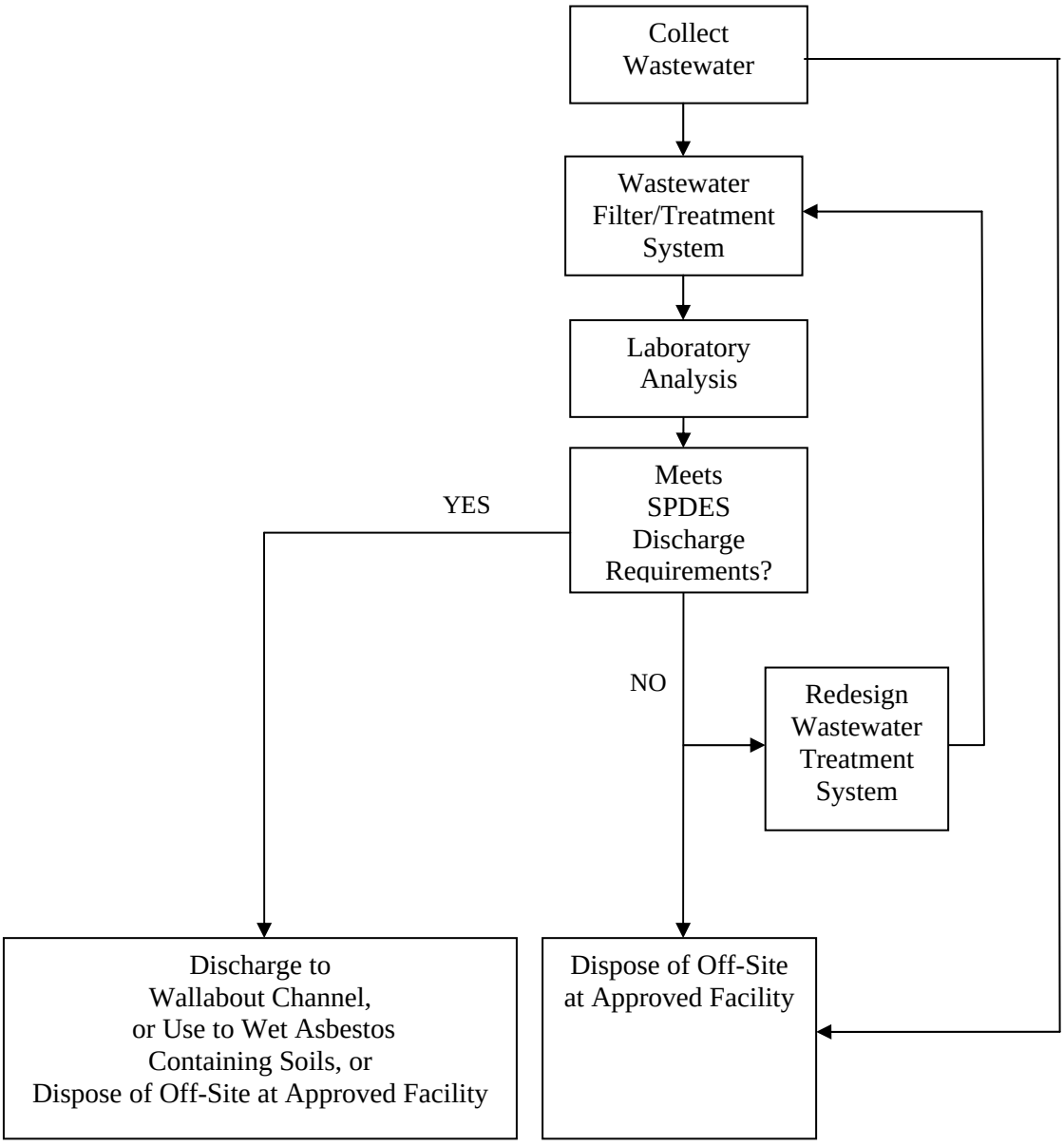
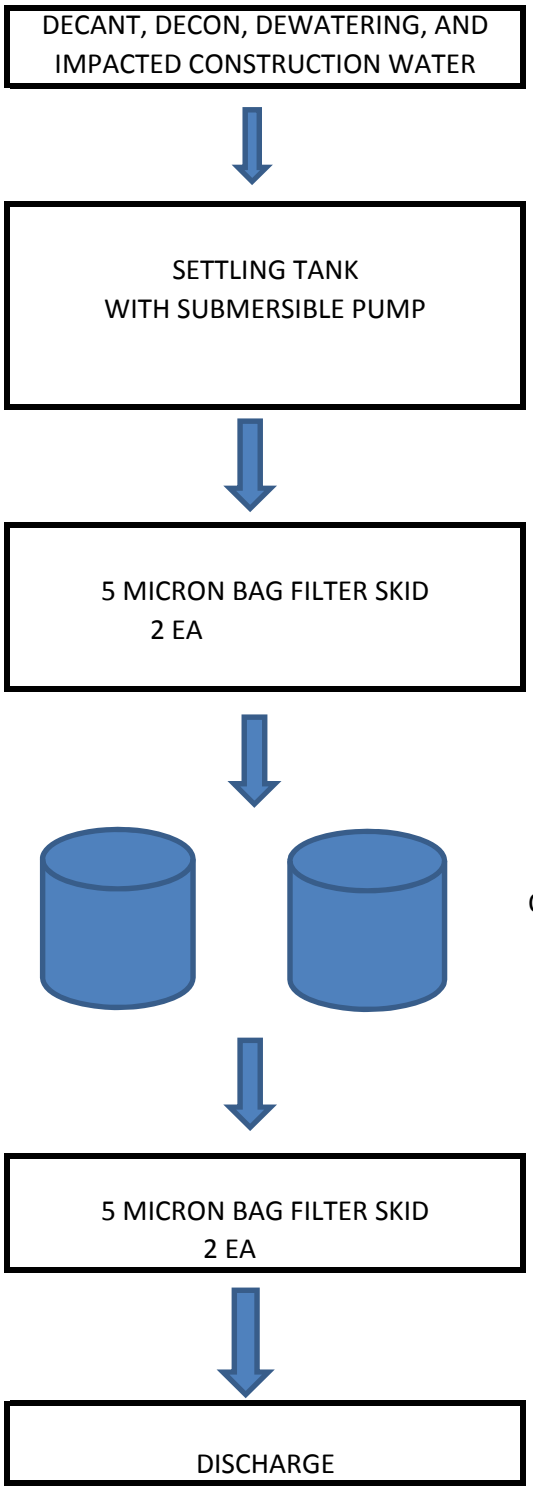


FIGURE 1: WASTEWATER FLOW DIAGRAM

ATTACHMENT A
Water Treatment System Process Diagram

WATER TREATMENT SYSTEM PROCESS DIAGRAM
MAXYMILLIAN TECHNOLOGIES, INC.
CON EDISON KENT AVENUE REMEDIATION PROJECT
8/23/2013



ATTACHMENT B
SPDES Permit, including sampling requirements

New York State Department of Environmental Conservation
Division of Water
Bureau of Water Permits, 4th Floor
625 Broadway, Albany, New York 12233-3505
Phone: (518) 402-8111 • **FAX:** (518) 402-9029
Website: www.dec.state.ny.us

Joe Martens
Commissioner

MEMORANDUM

TO: Douglas MacNeal, Remedial Section D, DER
FROM: Paul Kolakowski, BWP, DOW
SUBJECT: Kent Avenue/Consolidated Edison Site V-00732

DATE: April 19, 2011

DRAINAGE BASIN: East River/Wallabout Channel

In response to your request dated February 14, 2011 , attached please find effluent limitations and monitoring requirements for the above noted remediation discharge.

The DOW does not have any regulatory authority over a discharge from a State, PRP, or Federal Superfund Site. DER will be responsible for ensuring compliance with the attached effluent limitations and monitoring requirements, and approval of all engineering submissions. Footnote 1 identifies the appropriate DER Section Chief as the place to send all effluent results, engineering submissions, and modification requests. The Regional Water Engineer should be kept appraised of the status of this discharge and, in accordance with the attached criteria, receive a copy of the effluent results for informational purposes.

If you have any questions, please call me at (518)402-8104

Attachment (Effluent Limitations and Monitoring Requirements)

cc: Regional Water Engineer (w/attach)
BWP Section Chief, DOW (w/attach)
Ron Entringer, DOW (w/attach)

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning April 30, 2011

and lasting until April 1, 2016

the discharges from the treatment facility to water index number ER , Class I , East River shall be limited and monitored by the operator as specified below:

Outfall Number and Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Monthly Avg.	Daily Max		Measurement Frequency	Sample Type
Outfall 001 - Treated Groundwater Remediation Discharge:					
Flow	Monitor	Monitor	GPD	Continuous	Meter
pH (range)	6.5 to 8.5		SU	Monthly	Grab
Total Suspended Solids	Monitor	50	mg./l	Monthly	Grab
Oil & Grease	Monitor	15	mg./l	Monthly	Grab
Boron	Monitor	10	mg./l	Monthly	Grab
Iron	Monitor	Monitor	mg/l	Monthly	Grab
Lead	Monitor	0.08	mg/l	Monthly	Grab
Nickel	Monitor	0.08	mg/l	Monthly	Grab
Zinc	Monitor	0.70	mg/l	Monthly	Grab
Polychlorinated biphenyls (2)	Monitor	0.065	ug/l	Monthly	Grab

(W) Indicates Water Quality Based Limit

Footnotes:

(1) The discharge rate may not exceed the effective treatment system design capacity.

(2) PCB Aroclors monitored using EPA method 608

Additional Conditions:

(1) Discharge is not authorized until such time as an engineering submission showing the method of treatment is approved by the Department. The discharge rate may not exceed the effective or design treatment system capacity. All monitoring data, engineering submissions and modification requests must be submitted to:

Chief, Section D
Remedial Bureau B
Division of Environmental Remediation
NYSDEC, 625 Broadway, Albany, New York 12233-1705

With a copy sent to:

Bob Elburn, RWE, R-2
NYSDEC
47-40 21st Street
Long Island City, NY 11101

(2) Only site generated wastewater is authorized for treatment and discharge.

(3) Authorization to discharge is valid only for the period noted above but may be renewed if appropriate. A request for renewal must be received 6 months prior to the expiration date to allow for a review of monitoring data and reassessment of monitoring requirements.

(4) Both concentration (mg/l or µg/l) and mass loadings (lbs/day) must be reported to the Department for all parameters except flow and pH.

(5) Any use of corrosion/scale inhibitors, biocidal-type compounds, or other water treatment chemicals used in the treatment process must be approved by the department prior to use.

(6) This discharge and administration of this discharge must comply with the substantive requirements of 6NYCRR Part 750.