

SECTION 02010 - STORMWATER MANAGEMENT

PART 1 GENERAL

1.1 RELATED DOCUMENTS

1.1.1 Conform to requirements of NYC DEP as illustrated at the end of this section.

1.1.1 All applicable requirements of other portions of the Contract Documents apply to this section including but not limited to Construction General Conditions and Special Conditions.

1.2 SITE SURVEY AND BID

Before submitting bid, bidder shall carefully examine existing field conditions. Design and/or as-built drawings are not available covering all of the stormwater systems. Submission of bid will be construed as evidence that required examination has been made. Claims for extra labor, equipment and materials required due to existing conditions, which could have been foreseen, will not be recognized.

1.3 QUALIFICATIONS OF CONTRACTOR

As part of the Contractor Bid, submit information approval showing that the Contractor has successfully completed a Deconstruction project with storm water management of similar complexity and having such required experience. Contractor will be required to submit as a part of their work a Storm Water Management Plan in concert with their Site Utilization and Implementation Plan.

1.4 DESCRIPTION OF WORK

The Deconstruction Contract contains the following storm water control measures:

A. Deconstruction Areas

1. Deconstruction Contractor shall provide and maintain at all times during the deconstruction of the Building, a temporary roofing system, capable of preventing storm water from entering all portions of the Building which are remaining and are yet to be deconstructed and/ or cleaned. Should contractor elect to not utilize the existing storm leaders within the building, alternate methods or means must be provided in order to collect and direct the water away from the building and the site in accordance with all Legal Requirements.
2. All equipment or materials that could contaminate storm water, like grease on conveyer chains, gear boxes, etc., must be removed from the structure prior to the deconstruction of the building structure. All cleaning work being performed by the Environmental Contractor must be completed. All contaminated surfaces such as concrete and steel will have been cleaned prior to building deconstruction.
3. All “water” from natural or site generated sources must be contained within the footprint of the property and treated on-site. Further, waste water generated from off site sources such as a “Truck Wash” or other waste water sources will be not be discharged into the city storm water system. All wastewater utilized in the deconstruction of the building will be treated as onsite “storm water”.
4. Following the completion of concrete floor cleaning operations, restriction of storm water run-off by sandbags or other methods approved by LMDC. The storm water restriction control shall remain in place at the completion of the Deconstruction contract, or until approval by the owner is granted.
5. Pits and ramps may be used for retention during Deconstruction operations provided that they have been cleaned in accordance with the requirements of the LMDC and their Consultants.
6. Preventive measures shall be provided to minimize storm water run-off into basements and crawl spaces. Openings at ground floor grade shall be covered following the completion of basement cleaning operations.
7. All floor drains connected to the waste collection system must be plugged after the concrete floors have been cleaned. Refer to the Plumbing Specifications, Section 15400 for additional information.
8. All roof drain pipes and associated clean-outs are to be cut off at the first floor grade and provided with temporary plugs prior to the commencement of Deconstruction operations, and must be protected against damage during Deconstruction.

9. The site storm water system, including all roof drains converted to floor drains, connecting storm sewers discharging to the city system, and storm manholes and catch basins shall be cleaned at the completion of the Deconstruction Contract. Cleaning shall include locating manholes and catch basins and vacuuming these structures in an upstream to downstream path to the last structure prior to the outfall discharge to the City system.

B. Contractor Staging Areas

Contractor shall provide plan(s) and details for protection of areas adjacent to Contractor's staging areas from run-off containing sediment, grease, oils, and any construction debris.

C. General

Inlet filters, approved by the LMDC, shall be provided and maintained for the duration of Deconstruction operations on all site drainage inlets within the limits of construction activities.

The Contractor shall provide filtration devices to prevent any solid, grit, sand etc. from being washed into the City System. These filtration devices shall be regularly cleaned after every storm event, or as often as necessary to prevent any unsatisfactory discharge.

1.5 SUBMITTALS

- A. Before Deconstruction work is commenced, the Contractor shall submit for review and approval their Storm Water Management Plan signed and sealed by a New York State licensed Professional Civil Engineer. The engineer shall submit monthly status reports certifying that the requirements of the approved storm water management program are met.
- B. The Contractor shall include with its bid the name, address and N.Y.S. Professional Engineers License number of the person responsible for the Storm water Program.

MATERIALS AND EQUIPMENT

All materials and equipment required to maintain the storm water management system in service shall be approved by the LMDC and their Consultants.

**NEW YORK CITY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
INDUSTRIAL PRETREATMENT PROGRAM
INSPECTION & PERMIT SECTION**

**PROCEDURE FOR OBTAINING LETTER OF APPROVAL FOR
DEWATERING/DISCHARGE PERMIT**

Applicants must submit:

1. Cover letter with job description and complete Wastewater Quality Control Application.
2. Site plan (to scale) including type and size of public sewer lines, both existing and proposed sewer connections, location of equipment, pumps, pipes, and exact point of discharge (POD).
3. All documents and drawings must have a legend and a New York State Registered Architects' or Professional Engineers' original signature and stamp.
4. Properly sized and approved interceptor/separator/pH neutralization system or other pretreatment system - including specifications, engineering calculations and details.
5. For jobs requiring different types of pretreatment equipment, detailed flow diagrams must be provided.
6. Complete wastewater/groundwater analyses accompanied by chain of custody must be submitted on certified laboratory letterhead.
7. If the proposed discharge/dewatering exceeds 10,000 gallons per day additional Letter of Approval must be obtained from the DEP Division of Connections & Permitting. The contact person is Mr. Suresh Kumar, Associate Project Manager, and can be reached at (718) 595-5205.
8. Prior to commencement of discharge Applicants must obtain Discharge/Dewatering Permit from respected Borough office contingent to presenting the above Letter(s) of Approval and upfront payment of sewer charges.

All inquiries should be directed to the attention of Mr. Saied Islam, Assistant Mechanical Engineer, at (718) 595-4707.

BUREAU OF WASTEWATER TREATMENT

LIMITATIONS FOR EFFLUENT TO *SANITARY OR COMBINED* SEWERS

Parameter ¹	Daily Limit	Units	Sample Type	Monthly Limit
Non-polar material ²	50	mg/l	Instantaneous	---
pH	5-11	SU's	Instantaneous	---
Temperature	< 150	Degree F	Instantaneous	---
Flash Point	> 140	Degree F	Instantaneous	---
Cadmium	2	mg/l	Instantaneous	---
	0.69	mg/l	Composite	---
Chromium (VI)	5	mg/l	Instantaneous	---
Copper	5	mg/l	Instantaneous	---
Lead	2	mg/l	Instantaneous	---
Mercury	0.05	mg/l	Instantaneous	---
Nickel	3	mg/l	Instantaneous	---
Zinc	5	mg/l	Instantaneous	---
Benzene	134	ppb	Instantaneous	57
Carbontetrachloride	---	---	Composite	---
Chloroform	---	---	Composite	---
1,4 Dichlorobenzene	---	---	Composite	---
Ethylbenzene	380	ppb	Instantaneous	142
MTBE (Methyl-Tert-Butyl-Ether)	50	ppb	Instantaneous	---
Naphthalene	47	ppb	Composite	19
Phenol	---	---	Composite	---
Tetrachloroethylene (Perc)	20	ppb	Instantaneous	---
Toluene	74	ppb	Instantaneous	28
1,2,4 Trichlorobenzene	---	---	Composite	---
1,1,1 Trichloroethane	---	---	Composite	---
Xylenes (Total)	74	ppb	Instantaneous	28
PCB's (Total) ³	1	ppb	Composite	---
Total Suspended Solids (TSS)	350 ⁴	mg/l	Instantaneous	---
CBOD ⁵	---	---	Composite	---
Chloride ⁵	---	---	Instantaneous	---
Total Nitrogen ⁵	---	---	Composite	---
Total Solids ⁵	---	---	Instantaneous	---
Other				

- 1 All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 C.F.R. pt. 136. If 40 C.F.R. pt. 136 does not cover the pollutant in question, the handling, preservation, and analysis must be performed in accordance with the latest edition of “Standard Methods for the Examination of Water and Wastewater.” All analyses shall be performed using a detection level less than the lowest applicable regulatory discharge limit. If a parameter does not have a limit, then the detection level is defined as the least of the Practical Quantitation Limits identified in NYSDEC’s Analytical Detectability and Quantitation Guidelines for Selected Environmental Parameters, December 1988
- 2 Analysis for *non-polar materials* must be done by EPA method 1664 Rev. A. Non-Polar Material shall mean that portion of the oil and grease that is not eliminated from a solution containing N-Hexane, or any other extraction solvent the EPA shall prescribe, by silica gel absorption.
- 3 Analysis for PCB=s is required if *both* conditions listed below are met:
 - 1) if proposed discharge \geq 10,000 gpd;
 - 2) if duration of a discharge $>$ 10 days.Analysis for PCB=s must be done by EPA method 608 with MDL= \leq 65 ppt. PCB’s (total) is the sum of PCB-1242 (Arochlor 1242), PCB-1254 (Arochlor 1254), PCB-1221 (Arochlor 1221), PCB-1232 (Arochlor 1232), PCB-1248 (Arochlor 1248), PCB-1260 (Arochlor 1260) and PCB-1016 (Arochlor 1016).
- 4 For discharge \geq 10,000 gpd, the TSS limit is 350 mg/l. For discharge $<$ 10,000gpd, the limit is determined on a case by case basis.
- 5 Analysis for Carbonaceous Biochemical Oxygen Demand (CBOD), Chloride, Total Solids and Total Nitrogen are required if proposed discharge \geq 10,000 gpd.

Effective from May 1, 2005

End of Section 02010