

# 01.35.00 >< STANDARD PROCEDURES



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**00.41.26 >< Contract Management Best Practices**

- **Receipt of Work Order (WO).**
- Determine whether Architecture or Engineering Services are required. If so, arrange for a DOE Architectural or Engineering Firm to attend the Joint Scope Meeting.
- Prioritize your Work Orders (WOs) in the order in which they will be completed. Time sensitive Funding Codes such as GN12, MM12, receive a higher priority than funding sources that are not time sensitive.
- Select the appropriate Contractor by location or trade needed to complete the WO. If a Contractor cannot perform the WO due to unavailability, too much work, etc., the CM shall work with the Borough Contract Manager (BCM) to select the best alternative Contractor. For JOC Contracts, this is the Contractor with the lowest Adjustment Factor in that trade. The CM shall document why another Contractor was used in the notes panel of the WOT.
- Determine if a site visit is required for the Work requested for in the WO.
- **Site Visit.**
- Meet with the School Staff (Custodian and or Principal) DDF's, Architects, to determine the exact Work to be performed. Provide advice on cost savings methods that may decrease the cost of construction and save funding. If JOC is used, there must be a Joint Scope Meeting, never issue a Proceed Order without a Joint Scope Meeting.
- BCM hint - Try as much as possible to keep CM's in a limited geographic area for more efficient scope and inspection aspects of the job.
- At the initial site visit lay out the General Scope of Work and ask the following questions: access to the site, hours the Contractors can work, storage area, cut sheets needed, schedule or anticipated start and finish dates, hazardous material management.
- Determine if the Work is best addressed using a TYPE A Proceed Order, or if due to the nature of the Work it is best done with a TYPE B Proceed Order followed by a TYPE C Proceed Order.
- Accurately evaluate Work items with the Contractor to insure that the correct quantities are submitted in the Cost Proposal.
- Where necessary or appropriate, mark out the area of Work to clearly show the Work areas affected.

**00.55.00 >< Work Letter Notification**

TO:  
Mr./Ms. \_\_\_\_\_ Principal of school: \_\_\_\_\_

Mr./Ms. \_\_\_\_\_ Custodian of school: \_\_\_\_\_

This is to inform you that Mr./Ms. Enter **Name**: \_\_\_\_\_

This affiliation will be performing the **following Work**:

\_\_\_\_\_  
\_\_\_\_\_

at: \_\_\_\_\_  
(school name). The areas that will be directly and/or indirectly affected by the said work include, list areas:

The work will start on [**date**]: \_\_\_\_\_ [**time**]: \_\_\_\_\_  
and the

anticipated completion **date** is: \_\_\_\_\_. The work will take place during

the following hours: \_\_\_\_\_

The **designated entrance/exit**  
to be used during this project is/are: \_\_\_\_\_  
and the **designated facilities (restrooms/break area) to be used during this project are:**

\_\_\_\_\_

\_\_\_\_\_  
**Signature/Date**

Agreed By:

\_\_\_\_\_  
**School Principal/Date**

\_\_\_\_\_  
**School Custodian/Date**



**00.55.01 >< Proceed Order i, Print Package Details**

<b>Discipline</b>	<b>BCM Equivalent</b>	<b>CM</b>	<b>Print Rights</b>	<b>ERROR SITUATION</b>
I, K, Q & X	The BCM for the Team where the work is being performed	CM from the WOT Panel	CM, BCM, and if desired by Maintenance Planner others	If no CM assigned email report to BCM
JOCS	<b>John Saltenberger</b>	PM from the WOT Panel	PM, <b>John Saltenberger and Matias Prola</b>	If no PM assigned email report to <b>John Saltenberger, Matias Prola</b> and Nora Carreras
Health	Mohamed Hemida	CM from the WOT Panel	CM, Clerical staff defined by EHS	If no CM assigned email report to S. Thumma and F. Palmer
Facilities	Nora Carreras	PRINT DISPLAY ON EMAIL should show TEMCO (FMS Contractor)	Nora Carreras and clerical designated by Nora/Frank Borowiec	DDF to be assigned by Nora when creating the WOT for the work. If no CM(DDF) assigned on WOT, email report to Nora and Frank B.
M (Fuel)	Munendra Sharma	FUEL UNIT should be the print display on the email	Sharma and Bessie Hart	If no CM assigned email report to Ozgem Ornektekin, and Laura Ianaconne
Trade 44	Tony Bosco	TRUCKING DEPARTMENT should be the print display on the email	Khalilah Russel, Nora Carreras	If no CM assigned email report to Nora and Khalilah
Lead Testing	Mohamed Hemida	CM from the WOT Panel	CM, Clerical staff defined by Mohamed	If no CM assigned email report to Mohamed Hemida
Environmental Health and Safety	Thumma Saritha	CM from the WOT Panel	Randolph Murphy	If no CM email to Thumma Saritha and Randolph Murphy
ALL OTHERS	BCM from the CM	CM from WOT Panel	NONE UNTIL CORRECT DISCIPLINE ENTERED	EMAIL to creator of contract requisition and Maintenance Planner for the School where the work is to be done

**00.55.03 >< Proceed Order ii, System Wide Professional Services, SWPS**

- Notify the School through the CE in advance of any work, other than those Proceed Orders issued for emergency or critical work where you have been directed to respond immediately. Adherence to the schedule given the school is critical.
  - Report and check in at security desk. All employees must sign in with security.
  - Contractor Employees shall have and display photo ID while working in the building or grounds.
  - Report to custodian, inform CE of your WO#, what work you will be doing, where you will be working, how many workers.
  - Verify scope of job and the complaint by testing the system and or visiting the affected areas
  - Report to Principal or GO and give duration and impact of work to assure any shifting necessary to accommodate the work can and will be done.
  - When the scope of work requires a PROTOCOL meeting, work with the CM to schedule the meeting. Under no circumstances shall work be started prior to a required Protocol Meeting.
  - Make sure that any noise impact of the work is discussed with the Principal.
  - Perform ACM verification where required.
  - Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
  - Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
  - Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions.
  - Properly dispose of all removed materials and packing.
  - All materials and work shall conform to the standards referenced in the contract.
  - Notify the Contract Manager if there are any unforeseen issues with the work or the scope of work resulting from field conditions and when the NTE value of the PO is approached.
  - For projects taking multiple days, check in with CE each day to give progress update.
  - Employees shall not fraternize with staff or students.
  - For any Proceed involving the installation of new equipment, you must train the Custodial staff in the proper and safe operation of the equipment. Training must be scheduled with the CE. A copy of the Operations Manual for the equipment shall be given to the CE prior to the training.
  - Get ticket signed on completion, NOTIFY CONTRACT MANAGER of Work Completion.
1. Deliver one copy of warranty and guaranty to the CE and one copy to the CM.



May 8, 2020

Attn: All New York City Department of Education Contractors and Service Providers

Re: Guidelines for Preventing the Spread of the Novel Coronavirus (COVID 19)

Dear Valued Partners:

NYC Department of Education, Division of School Facilities (NYCDSF) has a number of vendors (i.e. contractors, consultants, maintenance service providers, and others) who regularly access our premises. In response to the COVID-19 pandemic, and to ensure the safety of our workforce and community, NYCDSF has instituted the following guidelines.

**Safety Policies & Rules**

**Contractors' Responsibilities**

**General**

- Contractors and subcontractors must adhere to the general guidance from the NYC Department of Health and Mental Hygiene, US Occupational Safety and Health Administration (OSHA), the Center for Disease Control, NYS Department of Health, and the New York City Department of Health and Mental Hygiene to reduce COVID-19 transmission and infection.
- Contractors must post Federal, NYS and NYC guidelines and directives throughout the job site.
- Non-essential in-person campus visits or meetings must be cancelled until further notice. Such meetings can be conducted via teleconference or videoconference.
- Contractors must ensure that workers with symptoms of COVID-19 do not report for work at any DOE facility. Symptoms (defined by the CDC) include: fever, cough, shortness of breath, sore throat, chills, repeated shaking with chills, muscle pain, headache, or new loss of taste or smell.<sup>1</sup>
- Contractors must train workers according to relevant CDC guidelines on what PPE to wear, how to put it on, and how to remove it.
- Contractors must provide and maintain hand sanitizer in/or around all portable bathrooms.



**COVID-19 Prevention Plan**

- Contractors must submit a COVID-19 Prevention Plan via e-mail to Steve Valente (svalente3@schools.nyc.gov) Director of Contracts and Technical Services stating that employees must do the following:
  - Frequently wash hands with soap and warm water for at least 20 seconds. When soap and running water are unavailable, employees may use an alcohol-based hand rub with at least 60% alcohol.
  - Wear applicable Personal Protective Equipment (PPE) and masks that cover their nose and mouth while in school buildings. (It is the Contractor's responsibility to make sure their employees are properly fitted for the masks worn.)
  - Avoid touching eyes, nose, or mouth with unwashed hands.
  - Cover their face with the inside of their sleeve when coughing and sneezing.
  - Avoid close contact with people who are sick.
  - Stay home when they are sick.
- Contractor's COVID-19 Provision Plan must also include:
  - Provisions for taking employees' temperature before their start schedule.
  - Procedures for employees who have tested positive for COVID -19 to return to work.

**Job site cleaning & disinfecting**

- Contractors must submit a job site cleaning and disinfection plan prior to project construction.
- This plan must ensure all work areas will be disinfected with EPA approved disinfectants.<sup>2</sup>
- Contractors must disinfect the job site daily:
  - Using disinfectant spray bottles that contain bleach diluted with water (1 to 10, respectively) to spray and wipe down vehicles and other heavy equipment, work area platforms, communal equipment and tools, etc.
  - According to DOE routine facility disinfection protocol.<sup>3</sup>
  - Upon any worker testing positive for COVID-19.

**Job site waste**

- Job sites must utilize disposable hand towels.
- Waste must be disposed of in no-touch enclosed trash receptacles.
- Containers must be emptied frequently.
- Waste removal must be conducted by workers wearing PPE, including nitrile, latex, or vinyl gloves.

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<sup>2</sup> <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

<sup>3</sup> Updated Covid-19 Aka Novel Coronavirus Cleaning Procedures

**COVID-19 Cases: Possible & Confirmed**

- **Possible job site case**
  - Immediately remove any worker who reports or exhibits COVID-19 symptoms (i.e. fever, cough, sore throat, or shortness of breath) from the job site.
- **Confirmed job site exposure** - report all incidents to Steve Valente (sva1ente3@schools.nyc.gov)
  - Report the last day worker reported to the job site.
  - Report all coworkers who worked within 6 feet of the worker who tested positive for COVID-19.  
Prior to returning to work, any worker who tested positive for COVID-19 and any potentially exposed worker must have been self-quarantined for 14 days and have been symptom-free for 3 consecutive days. Report and confirm identified COVID-19 positive worker and exposed worker subject to self-quarantine periods for 14 days or 3-days symptom free, whichever is longer.
  - Confirmed off-site exposure
    - Report when a worker has been exposed off-site to an individual who tested positive for COVID-19.
    - Worker must follow the self-quarantine procedure mentioned above.
- **Submitting Reports**
  - All reports are to be submitted via email to stayinghealthy@schools.nyc.gov and the Borough Contract Manager.

**Workers' Responsibilities**

- Workers must comply with NYCDSF's COVID-19 policies and may be denied entry or asked to leave DOE worksites and facilities at any time for failure to do so.
- Upon request of DOE authorized personnel, workers must submit to pre-entry screenings for COVID-19 symptoms at DOE facilities.
- Workers must adhere to relevant OSHA personal protective equipment (PPE) requirements to prevent workplace exposure to the novel coronavirus, SARS-COV-2, that causes COVID-19.
- Workers must use a mask that covers their nose and mouth at all times while on job sites, except while eating lunch. Anyone not wearing the appropriate face covering will be removed from the job site.
- Workers must maintain social distancing (6 feet) during lunch.
- Workers are required to wear gloves at all times except while eating lunch.
- Workers must not share PPE and must sanitize reusable PPE per manufacturer's recommendation prior to each use.

**00.55.02 >< Proceed Order iii, SWPS Samples**

**NEW YORK CITY DEPARTMENT OF EDUCATION**



**DIVISION OF SCHOOL FACILITIES**

44 -36 Vernon Blvd. L.I.C. NY 11101

TEL # (718) 349-5799

**Contract Maintenance Unit**

Contract Type :

Contract \ Proceed Order # :

Work Order # :

Contract Req # :

Violation # :

Contractor # :

Address :

Address2 :

City :

St., Zip :

Contact :

Tel/Fax # :

Date Issued :

Trade :

Priority :

Team :  District :  School Code :

School :

School Address :

Contract Managers Name :

Contract Managers Signature :

Specification # :

Discipline :

Fund Code :

Signature on File

**NOT TO EXCEED**

Work Start Date (Planned)

Completion Date (Planned)

This Proceed Order contains the following pages

- This cover page
- Scope of work
- Contractors timesheet
- General notes to contractor
- Standards and procedures (if applicable)

**Requirements and Authorizations :**

All of the requirements of the specification for this contract including the technical specification sections in addition to the terms, conditions, and provisions for guaranty and warranty of workmanship and materials, apply to all work performed under this proceed order. The Contractor is responsible to notify the CM when work required approaches or will exceed the Not To Exceed (NTE) value of the Proceed order and to obtain written authorization before performing work in excess of the NTE value of the order.

The contractor shall perform all work required to complete the scope of work called for in this order and to restore any areas damaged by the work required to complete the scope. All site based work and materials installed under this proceed order shall be noted on the attached time sheet signed by an authorized representative of the Custodian Engineer. The contractor may use an alternate work ticket form only if approved in advance.

This Proceed Order is invalid if authorized approvals do not appear below.

Signature on file

Signature on file

\_\_\_\_\_  
Borough Contract Manager

\_\_\_\_\_  
Director of Facilities /Borough Maintenance Planner



**NEW YORK CITY DEPARTMENT OF EDUCATION**



***DIVISION OF SCHOOL FACILITIES***

**Contract Maintenance Unit**

44 -36 Vernon Blvd. L.I.C. NY 11101

TEL # (718) 349-5799

**Scope of Work Description :**

Sample



**NEWYORK CITY DEPARTMENT OF EDUCATION**



**DIVISION OF SCHOOL FACILITIES**

44 -36 Vernon Blvd. L.I.C. NY 11101

TEL # (718) 349-5799

**TIME SHEET FOR CONTRACTOR'S FIELD WORK**

Contractor # :   
 Address :   
 Address2 :   
 City :   
 St., Zip :   
 Contact :   
 Tel/Fax # :

Contract / Proceed Order # :   
 Date Issued :  Specification # :   
 W.O. # :  Priority :   
 Team :  District :  School Code :   
 School :   
 Work Start Date (Planned) :   
 Completion Date (Planned) :   
 Contract Manager's Name :

EMPLOYEE NAME	EMPLOYEE ID	ARRIVAL TIME	DEPARTURE TIME	TOTAL HRS	DATE

**MATERIALS USED / INSTALLED**


*Custodian should cross out any unused time and /or material lines above before signing time sheet below*

I hereby certify that the Time Sheet is accurate and the above named technicians were present at the time of repair.

Contractor:  Contractors signature:

I certify, to the best of my knowledge, that this Time Sheet is accurate and the above named technicians were present at the time of repair.

Custodian's Name:  Signature:  Date:



**00.93.00 >< Renovation, and Record-Keeping Checklist**

Name of

Firm: \_\_\_\_\_

---

---

Date and Location of Renovation:

Brief Description of Renovation: \_\_\_\_\_

Name of Assigned Renovator: \_\_\_\_\_

Name(s) of Trained Worker(s), if \_\_\_\_\_

used:

Name of Firm providing Dust Sampling if used:

\_\_\_\_\_  
Name of Dust Sampling Technician,

Inspector, or Risk Assessor, if used:

Copies of renovator and dust sampling technician qualifications (training certificates, certifications) on file. Test kit or test results from an EPA-recognized laboratory on collected paint chip sample, used by certified renovator to determine whether lead was present on components affected by renovation (identify method used, type of test kit used (if applicable), laboratory used to conduct paint chip analysis, describe sampling locations and results):

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PAGE 1 OF 2



Certified Renovator provided training to Workers **and the Renovator complied with** - check all that applies:

	Warning signs posted at entrance to work area		Work area contained to prevent spread of dust and debris
	All objects in the work area removed or covered (interiors)		Windows in and within 20 feet of the work area closed (exteriors)
	HVAC ducts in the work area closed and covered (interiors)		Doors in and within 20 feet of the work area closed and sealed (exteriors)
	Windows in the work area closed (interiors)		Floors in the work area covered with taped-down plastic (interiors)
	Doors in the work area are closed and sealed (interiors)		Waste contained on-site and while being transported off-site.
	Doors that must be used in the work area covered to allow passage but prevent spread of dust		Vertical containment installed if property line prevents 10 feet of ground covering, or if necessary to prevent migration of dust and debris to adjacent property (exteriors)
	All chips and debris picked up, protective sheeting misted, folded dirty side inward, and taped for removal		Ground covered by plastic extending 10 feet from work area—plastic anchored to building and weighed down by heavy objects (exteriors)
	If dust clearance testing was performed instead, attach a copy of report		Work site properly cleaned after renovation
	Work area surfaces and objects cleaned using HEPA vacuum and/or wet cloths or mops (interiors)		All chips and debris picked up, protective sheeting misted, folded dirty side inward, and taped for removal.

Certified Renovator performed post-renovation cleaning verification. Describe results, including the number of wet and dry cloths used. If dust clearance testing was performed instead, attach a copy of the report:

I certify under penalty of law that the above information is true and complete:

---



---

PRINT NAME AND TITLE

DATE AND SIGNATURE





**01.30.00 >< Trade Supervisor, and Supervisor of Mechanics**

- Certification of Compliance with NYC MS4 Permit Requirements for the
- WORK PERFORMED ON WOT# \_\_\_\_\_ **PICK UP FROM WOT**
- BUILDING ID# \_\_\_\_\_ **PICK UP FROM WOT**
- **[The SUPERVISOR/SUPERVISOR OF MECHANICS]** PICK UP FROM CREW ASSIGNMENT PANEL
- certifies that throughout the term of the Work Order Task referenced above all Services/Work provided by the skilled trade workers in Trade **[insert trade # and trade title]** PICK UP FROM WOT FOR THE WORK NECESSARY TO COMPLETE [PICK UP WORK TO BE PERFORMED FROM THE WOT]
- was performed in accordance with all requirements of the NYC MS4 Permit.
- **[The SUPERVISOR/SUPERVISOR OF MECHANICS]** PICK UP FROM WOT certifies that the following measures were taken to meet the requirements of the SPDES Permit:
- {The Supervisor/SOM shall identify and describe all pollutant-generating activities for this work site (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal)}
- **[insert name/brief description of Compliance/Action]** We should provide a drop-down list of deliverable items with description
- **Cover/Contain – We covered all materials to prevent run off contamination.**
- **Clean Up –We cleaned up daily to prevent run-off contamination.**
- **Reduce/Minimize – We took appropriate steps to minimize contamination possibilities.**
- **Manage Runoff – We prevented run off from reaching the Storm Water System by use of appropriate barrier materials.**
- **Capture/Treat/Dispose –We properly disposed of removed materials and debris.**
- All work associated with the Work Order Task to provide the Deliverable(s) were performed in accordance with and complied with all requirements of the NYC MS4 Permit and that the Deliverable(s) likewise comply(ies) with all requirements of the NYC MS4 Permit.

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PAGE 1 OF 2

\_\_\_\_\_  
Authorized Representative (print name) Title

\_\_\_\_\_  
Signature Date

- Certification of Deliverable(s) — Certification for Deliverable(s) of Compliance with MS4 Permit Requirements
- **{INSERT CONTRACT TITLE}**\_\_\_\_\_
- **PICK UP THIS INFORMATION FROM THE CONTRACT**
- **MASTER**\_\_\_\_\_

---

• By this Certification, **the Contractor/Consultant** [*PICK UP THIS INFORMATION FROM THE CONTRACT MASTER*] certifies that all Services/Work associated with providing [*name of the Deliverable*], pursuant to [*Insert Contract Title from the Contract Master file*] dated [*Insert Date from the Contract Master File*] were performed in accordance with all requirements of the NYC MS4 Permit.

\_\_\_\_\_  
**Authorized Representative (print name) Title**

\_\_\_\_\_  
Signature Date



**01.45.16 >< Contractors**

- Notify the School through the CE in advance of any work, other than those Proceed Orders issued for emergency or critical work where you have been directed to respond immediately. Adherence to the schedule given by the school is critical.
- Report and check-in at security desk. All employees must sign in with security.
- Contractor Employees shall have and display photo ID while working in the building or grounds.
- Report to custodian, inform CE of your WORK ORDER NUMBER, what work you will be doing, where you will be working, how many workers.
- Verify scope of job and the complaint by testing the system and or visiting the affected areas.
- Report to Principal or GO and give duration and impact of work to assure any shifting necessary to accommodate the work can and will be done.
- When the scope of work requires a PROTOCOL meeting, work with the CM to schedule the meeting. Under no circumstances shall work be started prior to a required Protocol Meeting.
- Make sure that any noise impact of the work is discussed with the Principal.
- Perform ACM verification where required.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Keep in mind that these protocols also apply to outdoor work that may produce dust. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions.
- Properly dispose of all removed materials and packing.
- All materials and work shall conform to the standards referenced in the contract.
- Notify the Contract Manager if there are any unforeseen issues with the work or the scope of work resulting from field conditions and when the NTE value of the PO is approached.
- For projects taking multiple days, check in with CE each day to give progress up-date.
- Employees shall not fraternize with staff or students.
- For any Proceed Orders involving the installation of new equipment, you must train the Custodial staff in the proper and safe operation of the equipment. Training must be scheduled with the CE. A copy of the Operations Manual for the equipment shall be given to the CE prior to the training.
- Get ticket signed on completion.
- NOTIFY CONTRACT MANAGER of Work Completion.
- Deliver one copy of the warranty and guaranty to the CE and one copy to the CM.

**01.56.00 >< Fencing Work**

Please take note and keep in mind that you are required to adhere to the following policies and procedures.

- If your work plan includes accessing the yard with a vehicle, you are responsible to make appropriate arrangements with the Principal and the CE for access. You shall adhere to the directives from the Principal and the CE regarding the times when you may bring a vehicle into the yard.
- You shall secure any area where you work. Arrange protective barriers to prevent entry into the work location. Use of a flag person is not sufficient. Appropriate caution signs should be placed to alert pedestrians. **“DO NOT ENTER--- TRADE PERSONNEL AT WORK.”** Or **“Caution Construction Equipment in use – DO NOT ENTER”**.
- You must provide a safe path for pedestrians around your work area. This may require the installation of JERSEY BARRIERS for sidewalk work or where access paths in a play yard approach the work area.
- You shall provide temporary fencing when the work will take more than one day to complete, and the fence is not in place.
- Welding or cutting work requires the presence of an F-60 Fire Guard, and a fire extinguisher of an FDNY approved type or a hose connection.
- When welding or using torches, the F-60 Fire Guard shall inspect the area around the work locations (35-foot radius from the point of work) not sooner than thirty (30) minutes after the completion of the operations to insure there is no fire.
- Provide proper shielding for arc flash protection when welding is done.
- When welding or using torches, provide protection for the leads or hoses. When crossing sidewalks and walkways, you shall provide guards to prevent tripping.
- When working on roof fences or rails, appropriate precautions shall be taken to prevent injury to pedestrians below the work area.

**01.78.29 >< TROUBLE SHOOTING, Urgent and General**

- Check in with the Custodian Engineer or Person with knowledge of the defect of the system before entering the school.
- Verify the complaint by testing the system and or visiting the affected areas.
- Secure access to the areas where the work is to be done (examples: principal's office, auditorium, classroom, etc.).
- Troubleshoot the system and repair if parts are on hand or place order for parts needed.
- Where troubleshooting requires operation of the system, proper safeguards are to be taken to prevent injury. The measures to be taken depend on the system.
- **Where required, lock-out tag-out procedures are to be followed to prevent injury during troubleshooting and repair.**
- Inform school of status of repair and ETA of completion date.
- Install parts.
- Restore any locked-out systems or circuits to operation.
- Check system for proper operation. This check shall include all normal operating functions and should include all interruptions and overrides.
- Arrange for a call to the operators 5-10 days after completion to recheck the system. This can be done by clerical staff, supervisor, etc.
- Close Work Order.

**01.91.13 >< Model Work**

- Report and check in at security desk.
- Report to custodian, inform CE of your Work Order Number, what work you will be doing, where you will be working, how many workers.

**(Customize the line below for the work to be done and insert instructions for troubleshooting type Work)**

- Verify scope of Work.
- Report to Principal or GO and give duration and impact of work to assure any needed shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Perform ACM verification where required {Customize for Job Type}.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools, and material.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools, and equipment are available prior to starting work to avoid needless interruptions {Customize for Job Type and Standard Procedure where different}  
Plumbing Contractor shall have portable sump pump available.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the power, water, steam, etc. are shut down. {Customize for Job Type}.
- Insert special instructions for job types – example – Prior to cutting into slab check and verify whether it is a pressure slab or waterproof membrane is present before cutting.
- Properly dispose of all removed materials and packing.
- For projects taking multiple days, check in with CE each day to give progress up-date.
- Notify your team's clerical staff each AM of WO and attributes. Notify clerical staff each PM of any other attributes worked on that day.
- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Notify Supervisor of surplus materials, oversize debris items, tools, or equipment which requires pick-up by trucking. The supervisor will arrange for testing of removed metal doors where required and for pick-up by trucking.
- Notify CE (or designee) and Supervisor when work is completed.
- Arrange for a call to the CE 5-10 days after completion to recheck work. This can be done by clerical staff, supervisor, etc.
- Close Work Order.

**02.62.00 >< MS4 LIVE RECOVERY, Save of Contractors**

*MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.*

**MS4 - SPILL RESPONSE**

**Effectiveness for targeted Pollutants / Impairments:**

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F**= Fair; **P** = Poor

**Control Strategies:**

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

**CONTROL STRATEGIES/SUGGESTED PRACTICES:**

**COVER/CONTAIN:**

- N/A

**CLEAN UP:**

- Have appropriate materials available at targeted locations to contain and clean-up spills. Properly dispose of all waste materials.
- Engage trained employees, and third parties, agencies as required by the type, location, and magnitude of the spill event.
- Follow appropriate guidance in determining when cleanup standards have been met.
- In case of a spill, plug any drains impacted, contain the spill by placing absorbent booms or “socks” around perimeter, and properly dispose of waste materials.
- Use dry cleaning methods where possible.

**REDUCE/MINIMIZE:**

- Post cleanup procedures near potential spill areas and keep fully stocked spill kits nearby.

**PRODUCT SUBSTITUTION:**

- N/A.

**MANAGE RUNOFF:**

- Identify potential spill or source areas, such as loading and unloading, storage, processing, and waste disposal areas. Where necessary, implement practices to isolate them from waterways and storm drains.
- Stop additional material from spilling at its source, if possible, (e.g., plug a leaking hole, turn a leaking barrel on its side, or use temporary stormwater catch basin covers).

**CAPTURE/TREAT/DISPOSE:**

- When feasible, apply absorbent materials directly to spill to stop or slow flow.
- Retain and dispose of cleanup materials in accordance with regulations.

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**02.83.00 >< Lead Paint Stabilization**

The following procedure shall be followed for stabilizing deteriorated Lead-Based Paint (LBP) in targeted classrooms. EXCEPT FOR PO's ISSUED FOR EMERGENCY RESPONSE, no work shall commence until your firm has received a report on whether the work area has been tested and found positive for the presence of LBP. All work in targeted spaces positive for LBP shall be performed by workers with Renovation, Repair and Paint (RRP) certification.

- The work must be overseen by a Certified Renovator when disturbing 2 or more square feet of Lead-Based Paint (LBP) in any given room. The name and certification information of the Certified Renovator shall be given to the CE prior to the start of work, and the Certified Renovator must have with them at the work site copies of their initial course completion certificate and their most recent refresher course completion certificate. The Certified Renovator must be physically present at the work site when warning signs are posted, while the work-area containment is being established, and while the work-area cleaning is performed. The Certified Renovator must regularly direct work being performed by other individuals to ensure that the work practices are being followed, including maintaining the integrity of the containment barriers and ensuring that dust or debris does not spread beyond the work area, must be available, either on-site or by telephone, at all times renovations are being conducted, must perform project cleaning verification. The Certified Renovator is responsible for the preparation of all required records.
- The Inspector will identify the locations within the classroom(s) peeling/deteriorated LBP paint. The Inspector will then provide this information to the certified renovator to be addressed for immediate stabilization.
- Prior to beginning any stabilization work, the certified renovator shall post a general notice outlining the scope of work at each building, along with a copy of the RRP required pamphlet. This should be posted on the interior of the building in a conspicuous location.
- Work disturbing 2 square feet or greater of LBP must be conducted by a firm holding a valid EPA RRP Certification, utilizing workers that have valid RRP certification (Certified Renovators who have completed an 8-hour training course).

**Prior to starting any stabilization work, the following conditions shall be met:**

- No children, teachers or school staff may be present in any space during the stabilization work.
- Movable furniture and or objects shall be removed from the work area or covered and sealed with 6 mil poly and appropriate sealing material.
- A general pre-cleaning of the work area should be conducted.
- Door flaps will be installed at the work area entrance, and all vents, and non-moveable objects are to be covered with 6-mil polyethylene sheeting.
- Once the peeling/deteriorated LBP paint is identified, place a large piece of plastic sheeting directly underneath the area(s) with peeling/deteriorated paint in order to protect the floor and to catch any potential paint debris. Poly should extend at least 6 feet in all directions from the area being stabilized (i.e. 6' off the wall, and 6' in either direction of the impacted area).

- Pre-clean the surfaces to be stabilized with a HEPA vacuum to remove debris or loose paint chips.
- Where paint has already chipped away from a surface leaving a clean edge, these areas are to be covered with plaster weld, primer, or other bonding agent; final paint color should be off-white for walls, and flat white for ceilings; paint should be compatible with the existing surface to assure adhesion.
- Where paint chips are peeling away from the substrate, the chip shall be wet down then cut away with a razor knife to a clean edge and then coated with a bonding agent without disturbing the substrate.
- At any time during the work where the Contractor has determined that the damaged conditions cannot be done due to more extensive damage or where the damage “runs”, the Contractor shall cease work in that location immediately and notify the CM forthwith giving information on the reasons for the problem. The Contractor shall list the specifics of the location, take photos, and provide this information to the CM. The CM will notify the EHS Unit for a reinspection and test by the inspection firm.
- Upon completion of LBP stabilization, remove plastic sheeting after lightly spraying any debris that may have fallen on it and then fold sheeting in and place it in the waste bag. The Inspector is responsible for ensuring that all areas of deteriorated lead-based paint have been stabilized.
- Using a HEPA vacuum first, then wiping/wet mopping methods, clean all repaired surfaces and work area (excluding window wells) of any visible dust and debris. After areas are dry, perform a final HEPA-vacuuming of all surfaces. Subsequently, follow procedures under 40 CFR 745.85 (b) (Standards for post-renovation cleaning verification) - by comparing the disposable cleaning cloth to the cleaning verification card for windowsills, work area floors and the adjacent work area entrance floor. Re-cleaning must be performed as applicable. The Inspector will confirm that this process has been completed as 3rd party verification.
- Once the cleaning verification is met per above, the Inspector will perform a final visual inspection and ensure that the work area is clean and clear of all waste.
- All waste generated must be double bagged and taken off-site by the contractor following successful visual clearance in all spaces at the site. Removed materials shall be disposed of accordingly as non-hazardous Construction & Demolition waste. Contractors must maintain all waste disposal records.
- Notify the on-site custodial staff that the work is complete in the applicable spaces.
- Provide a signed copy of the completed check list form attached.

**03.01.10 >< Concrete, Asphalt, and Masonry Work**

- To ensure the safety of the students, administrative staff and your mechanics, this work procedure shall be used for all work of this type.
- Please take note and keep in mind that you are required to adhere to following policies and procedures.
- **The Contractor shall take all protective measures required by code regulations or at the direction of the Contract Manager for the safety of students and staff.**
- Arrange for protective barriers to prevent entry into the work location.
- Use of a flag person is not sufficient. Appropriate caution signs should be placed to alert pedestrians. **“DO NOT ENTER---TRADE PERSONNEL AT WORK.”** Or **“Caution Construction Equipment in use – DO NOT ENTER”**.
- You must provide a safe path for pedestrians around your work area. This may require the installation of JERSEY BARRIERS for sidewalk work or where access paths in a play yard approach the work area. NOTE: Sidewalk closings require explicit permission from the Department of Transportation and must be coordinated with and approved by the school Principal. These costs will be back charged to you.
- You must provide protection for drains, valves, curb boxes, and piping in the areas of your work.
- Cleaning of tools and mixing containers is not permitted in sinks or near drains. You are responsible for the costs associated with removing debris created by your work from clogged pipes or drains, and the cost will be back charged to you.

**06.01.00 >< Carpentry**

- Report and check-in at security desk.
- Report to custodian, inform CE of your WORK ORDER NUMBER, what work you will be doing, where you will be working, how many workers.
- Check in with Custodian or Person with the knowledge of the complaint.
- Verify the complaint by checking the complaint and or visiting the affected areas.
- Perform ACM verification where required AND Verify SOW.
- Report to CE and if requested/required the Principal or GO to give duration and impact of work and assure any shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions.
- Properly dispose of all removed materials and packing AND Notify Supervisor of surplus materials, oversize debris items, tools, or equipment which requires pick-up by trucking. The supervisor will arrange for testing of removed metal doors where required and for pick-up by trucking.
- For projects taking multiple days, check in with CE each day to give progress up-dates.
- Notify your team's clerical staff each AM of WO and attributes. Notify clerical staff each PM of any other attributes worked on that day.
- If you are called away for an emergency, inform the CE (and if required/requested, the Principal) of the break in work and that you will return when the emergency is completed
- Notify CE (or designee) and Supervisor when work is completed.
- Arrange for a call to the CE 5-10 days after completion to recheck work. This can be done by clerical staff, supervisor, etc.
- Supervisor shall arrange for the Work Order to be closed.

**06.10.53 >< Classrooms, Work in**

- Provisions of the General Work Standard for the type of work apply and shall be observed in addition to the items below.
- Preplanning access is important for work in classrooms. Whenever possible you or your supervisor should arrange for access when the classroom will be empty.
- If work is for an EMERGENCY REPAIR, or a CRITICAL REPAIR and the Principal(s) are not giving access, contact your supervisor and/or the Deputy Director of Facilities to arrange access
- Never work around students alone.
- If work is not for emergency or critical work, check school calendar for upcoming no school, ½ days or no student days, and/or arrange area in advance with principal and CE for exclusive access to work areas.
- It may be possible, if the repair is quick and easy (no power tools), to make arrangements to have students move a safe distance from work area.

**06.10.54 >< Corridors and Stairways, Work in**

- Provisions of the General Work Standard for the type of work apply and shall be observed in addition to the items below.
- Preplanning access is important for work in corridors and stairways. Whenever possible you or your supervisor should arrange access when these spaces will not be in use. **Work requiring closing a staircase during occupied hours has special considerations that must be observed. See below in RED.**
- If work is for an EMERGENCY REPAIR or CRITICAL REPAIR, and the Principal(s) are not giving access, contact your supervisor and/or the Contract Manager to arrange access.
- If work is not for an emergency or critical work, check school calendar for upcoming no school days, ½ days or no student days, or arrange area in advance with principal and CE to have exclusive access to work areas.
- Have a safe place to store material near the work site (slop sink, empty classroom).
- Know the change of class schedule. Avoid being in the area during class change. Move all materials, tools, and equipment out of the area prior to the change of class.
- Have a 2nd person (may be school based staff) there to watch over tools and material.
- Never go on ladder when alone.
- Use cordless tools when available to avoid power cord trip hazards.

**06.10.55 >< Intermittently Occupied Spaces; Gyms, Auditoriums, Cafeterias, etc.**

- Provisions of the General Work Standard for the type of work apply and shall be observed in addition to the items below.
- Preplanning access is important for work in these spaces. Whenever possible you or your supervisor should arrange access when the space is empty.
- If work is for an EMERGENCY REPAIR, or a CRITICAL REPAIR and the Principal(s) are not giving access, contact your supervisor and/or the Deputy Director of Facilities to arrange access.
- If non-emergency work, check school calendar for upcoming no school, ½ days or no student days, or arrange area in advance with principal and CE for exclusive access to work areas.
- It is crucial when the school has arranged for your access to the space that you or your supervisor notify the school if you cannot fulfill the plan in order that the school can use the areas.
- If there is a need to share space with students or staff be sure work area is separated with physical barriers when possible.
- Never work alone when students or staff are in the area.

**06.10.56 >< Rest and Locker Rooms, Work in**

- To ensure the safety of the students, administrative staff, and your mechanics, and to protect against any possible allegation of wrongdoing, this work procedure shall be used for all work in Rest Rooms.
- Please take note and keep in mind that you are required to adhere to the following policies and procedures.
- Contractor employees are **not to use** any of the student toilets.
- If work is required to be done in **any** toilet whether it is a student toilet (boys or girls) or a pedagogical staff toilet (men's or women's) the Custodian Engineer and the Principal must be notified of the location and the expected duration of the work
- Prior to starting work in a bathroom, if possible, the bathroom door should be locked with a sign indicating.
- **“DO NOT ENTER---TRADE PERSONNEL AT WORK.”**
- If the door cannot be locked, it must be **secured in the open position**. Rope or shade cord should be strung across the doorway with a sign attached indicating.
- **“DO NOT ENTER---TRADE PERSONNEL AT WORK.”**
- **Locker Rooms:** The same procedure for toilets should be applied when working in locker rooms. However, in these areas, obtaining the schedule from the gym teacher or instructor as to when the classes begin and end is a practical approach. This will allow mechanics to perform their work and vacate the area prior to the students entering the locker room for the start of a new period or returning from the gym.
- **This is very important!** If, while working in a bathroom, a student or a member of the pedagogical staff enters the room, politely ask them to leave. If they refuse, then immediately cease work, vacate the room and inform the Principal and Custodian Engineer of the situation. Do not re-enter the room until the student(s) or staff leave.



**08.01.80 >< Glazing**

To ensure the safety of the students, administrative staff and your mechanics, this work procedure shall be used for all work of this type.

Please take note and keep in mind that you are required to adhere to following policies and procedures.

- Contractor shall take all protective measures required by code, regulation, and/or at the direction of the Contract Manager for the safety of students and staff.
- Arrange for protective barriers to prevent entry into the work location. Appropriate caution signs should be placed to alert pedestrians. **“DO NOT ENTER---TRADE PERSONNEL AT WORK.” Or “Caution Construction Equipment in use – DO NOT ENTER”**
- You must provide a safe path for pedestrians around your work area. This may require the installation of JERSEY BARRIERS for work adjacent to a sidewalk or where access paths approach the work area. NOTE: Sidewalk closings require explicit permission from the Department of Transportation and must be coordinated with and approved by the school Principal.
- You must provide protection on each side of the glazed area.
- Provide MSDS information for all sealants, cleaners, primers, and any odor producing materials used in the work.
- If using power equipment that produces fumes, smoke, or dust, protect locations where these may be taken into the building. This will require notification to the school that windows should not be opened during the work period. Notice should be given to the CE to seal the grills/intakes and/or to coordinate operation of fans.
- If you use open flames you are required to follow the HOT WORK protocol.

**10.22.00 >< Zones and Partitions for Schools**

Partitions are defined as one or more zones. Partitions shall be established to assist in the use and function of the building. Each partition shall have a keypad. The keypad shall be located at the point of entrance. The “rights” (what partitions may be set or disarmed) for each keypad shall be determined based on input from the assigned building personnel (CE and Principal at minimum).

Zones are defined as one or more devices. Zones shall be established in a logical grouping that will make troubleshooting and determining faults easy for the staff. The zones should be established “geographically” with interrelated devices assigned to the same zone. The display associated with the zone shall be explicit for the zone, and the descriptors shall reference the space/geographic location.

At minimum schools should have the following partitions:

- Exterior entrances and corridors
- Kitchen/Servers/Cafeteria– School Foods Areas
- Custodial Spaces – Boiler Rooms, storage spaces, work shops
- Where there are multiple buildings (interconnected or not) on a site, each building should be on its own partition. Note the partition for a building should include all the exterior entrances and corridors in the building. EXCEPTION- multiple TCUs should be on one partition.

Consideration for additional Partitions may include partitions for Medical Suites, Boiler Rooms, Computer Rooms, General Offices, Principal’s Offices, Guidance or Counseling

## **12.92.00 >< Landscaping**

- Please take note and keep in mind that you are required to adhere to following policies and procedures.
- If your work plan includes accessing the yard with a vehicle, you are responsible to make appropriate arrangements with the Principal and the CE for access. You shall adhere to the directives from the Principal and the CE regarding the times when you may bring a vehicle into the yard.
- You shall secure any area where you work. Arrange protective barriers to prevent entry into the work location. Use of a flag person is not sufficient. Appropriate caution signs should be placed to alert pedestrians. “DO NOT ENTER---TRADE PERSONNEL AT WORK.” Or “Caution Construction Equipment in use – DO NOT ENTER”
- You must provide a safe path for pedestrians around your work area. This may require the installation of JERSEY BARRIERS for sidewalk work or where access paths in a play yard approach the work area.
- No hazardous or dangerous material shall be left in the work area at the end of the workday without protection approved by the Contract Manager.
- This work is inherently noisy due to the operation of chain saws, stump grinders, and chippers. Coordinate work times with the school to prevent disruption of the educational process.
- Comply with all the requirements for the prevention of the spread of the Asian Longhorn Beetle.

**22.00.00 >< Plumbing**

- Report and check in at the security desk and report to Custodian Engineer of your WORK ORDER NUMBER, what work you will be doing, where you will be working, how many workers.
- Check in with Custodian or Person with the knowledge of the complaint.
- Verify the complaint by checking the complaint and or visiting the affected areas.
- Perform ACM verification where required and Verify the Scope of Work for this job.
- Report to CE and if requested/required the Principal or GO to give duration and impact of work and assure any shifting necessary to accommodate the work can and will be done. This is critical when any shutdown is required to accomplish the work.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools, and equipment are available prior to starting work to avoid needless interruptions.
- Prior to starting work make sure that all valves required for safe working practices are closed and properly dispose of all removed materials and packing.
- Notify Supervisor of surplus materials, oversize debris items, tools, or equipment which requires pick-up by trucking.
- For projects taking multiple days, check in with CE each day to give progress up-dates.
- Notify your team's clerical staff each AM of WO and attributes. Notify clerical staff each PM of any other attributes worked on that day.
- If you are called away for an emergency, inform the CE (and if required/requested, the Principal) of the break in work and that you will return when the emergency is completed
- Notify CE (or designee) and Supervisor when work is completed.
- Arrange for a call to the CE 5 -10 days after completion to recheck the Work. This can be done by clerical staff, supervisor, etc.
- Carefully restore all valves and systems to operating position and Verify operation of all valves potentially affected by shutdown.
- Close Work Order

**22.13.01 >< MS4 i, Municipal Separate Storm Sewer System**

**WORK STANDARD - TRADE SUPERVISOR OR SUPERVISOR OF MECHANICS**

**Certification of Compliance**  
with NYC MS4 Permit Requirements for the

WORK PERFORMED ON WOT# \_\_\_\_\_ PICK UP FROM  
WOT

BUILDING ID# \_\_\_\_\_ PICK UP FROM WOT

***[The SUPERVISOR/SUPERVISOR OF MECHANICS] PICK UP FROM CREW ASSIGNMENT PANEL*** certifies that throughout the term of the Work Order Task referenced above all Services/Work provided by the skilled trade workers in Trade ***[insert trade # and trade title]*** **PICK UP FROM WOT FOR THE WORK NECESSARY TO COMPLETE [PICK UP WORK TO BE PERFORMED FROM THE WOT]** was performed in accordance with all requirements of the NYC MS4 Permit.

***[The SPERVISOR/SUPERVISOR OF MECHANICS] PICK UP FROM WOT*** certifies that the following measures were taken to meet the requirements of the SPDES Permit:

The Supervisor/SOM shall identify and describe all pollutant-generating activities for this work site (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal}

***[insert name/brief description of Compliance/Action]*** We should provide a drop down list of deliverable items with description

**Cover/Contain – We covered all materials to prevent run off contamination.**

**Clean Up –We cleaned up daily to prevent run off contamination.**

**Reduce/Minimize – We took appropriate steps to minimize contamination possibilities.**

**Manage Runoff – We prevented run off from reaching the Storm Water system by use of appropriate barrier materials.**

**Capture/Treat/Dispose –We properly disposed of removed materials and debris.**

All work associated with the Work Order Task to provide the Deliverable(s) were performed in accordance with and complied with all requirements of the NYC MS4 Permit and that the Deliverable(s) likewise comply(ies) with all requirements of the NYC MS4 Permit.

\_\_\_\_\_  
Authorized Representative (print name)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



Certification of Deliverable(s) — Certification for Deliverable(s) of Compliance with MS4 Permit Requirements

PICK UP THIS INFORMATION FROM THE WORK ORDER

By this Certification, *[the Contractor/Consultant]* PICK UP THIS INFORMATION FROM THE WORK ORDER] certifies that all Services/Work associated with providing *[name of the Deliverable]*, pursuant to { WORK ORDER file} dated *{Insert Date from the WORK ORDER File}* were performed in accordance with all requirements of the NYC MS4 Permit,.

\_\_\_\_\_  
**Authorized Representative (print name)**

\_\_\_\_\_  
**Title**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

- Prior to the start of work, all of the assigned workers shall be informed of the need to adhere to the requirements of this Standard, the DSF Dust Control Protocol, and the requirements of the NYS SPDES permit.
- Skilled Trades performing work at sites covered by the city wide MS4 permit issued to the City of New York by the New York State Department of Environmental Conservation are required to manage all sources of storm water runoff from the work being performed to protect and improve water quality.
- Pursuant to the MS4 Permit, the Department of Education and its workers must provide adequate assurance, through a signed certification statement, that any work for the Department of Education including construction and maintenance work at sites subject to MS4 must also adhere to the good housekeeping requirements particularly cited in the MS4 permits and agreements. All work with debris creation, cleaning of site and tools, material and debris storage, potential for liquid runoff or spills is subject to the MS4 requirements.
- Your responsibility as a Department of Education skilled trade employee/supervisor is to implement pollution prevention practices that prevent the generation of potential pollutants of concern that may come in contact with storm water and discharge to the City’s MS4 waterways in the city. This process will allow the Department of Education to comply with all requirements included in the Pollution Prevention/Good Housekeeping section of the City’s State Pollutant Discharge Elimination System (SPDES) MS4 General Discharge Permit for storm water discharges from the New York State Department of Environmental Conservation (NYS DEC).
- Deliverables **are the specific work to be performed as required by the Work Order Task**
- **Compliance/Action Items are the MS4 Pollution Prevention/Good Housekeeping practices which may be required to complete the Deliverables. These Action Items** include the following items (NOTE- your work may not involve all the categories listed below).



- Cover/Contain – This is a deliverable associated with exterior excavation, material storage, and related work. The Supervisor and employees working at the site shall prevent run off from improper storage from reaching the storm water systems.
  - Clean Up – The Supervisor and employees working at the site shall perform regular daily cleanup of the work site shall be performed in addition to post completion final cleaning. Your clean up should be sufficient to prevent run-off contamination from reaching the storm water system.
  - Reduce/Minimize – The Supervisor and employees working at the site shall limit run off from cleaning and take steps to prevent entry of debris and contaminants into drainage systems. This applies to work associated with landscaping, concrete, exterior masonry, painting, plastering, drywall (especially taping), work on drains and piping systems, etc.
  - Manage Runoff – The Supervisor and employees working at the site shall act to prevent entry of contaminants into waste systems. Special attention shall be taken by the Supervisor and employees working at the site during exterior work such as excavation, landscaping, paving (asphalt and concrete), and site work. Use of barriers (such as hay bales or “pigs”) to absorb or deflect run off is encouraged when the work area indicates this is needed.
  - Capture/Treat/Dispose – The Supervisor and employees working at the site shall properly dispose of removed materials and debris.
  - The Supervisor is responsible for ensuring that all the workers assigned to this Work Order Task, and any skilled trade employees performing assists on related WOT’s are aware of and adhere to all of the MS4 requirements.
  - In addition to properly performing work at a site subject to MS4 requirements under the SPDES Permit, the Supervisor shall provide a General Certification — Certification of Compliance with NYC MS4 Permit Requirements for the work performed at the site. A copy of the form is attached.
-

- Certification of Compliance with NYC MS4 Permit Requirements for the \_\_\_\_\_
- WORK PERFORMED ON WORK ORDER NUMBER \_\_\_\_\_ BUILDING ID# \_\_\_\_\_
- As supervisor of the trade(s) performing work on the above Work Order I certify that throughout the term of the Work required to complete the above WO all Services/Work provided by in-house DSF employees was performed in accordance with all requirements of the NYC MS4 Permit.
- As Supervisor I certify that we took the following measures to meet the requirements of the SPDES Permit: {identify and describe all pollutant-generating activities for this work site (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal)}
- Cover/Contain – We covered all materials to prevent run off contamination.
- Clean Up –We cleaned up daily to prevent run off contamination.
- Reduce/Minimize – We took appropriate steps to minimize contamination possibilities.
- Manage Runoff – We prevented run off from reaching the Storm Water system by use of appropriate barrier materials.
- Capture/Treat/Dispose –We properly disposed of removed materials and debris.
- **Select and identify any measures below that were in addition to those you listed above**

- 
- \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - All work associated with the Work Order Deliverable(s) and with providing the Compliance/Action Items were performed in accordance with and complied with all requirements of the NYC MS4 Permit and that the Deliverable(s) likewise comply(ies) with all requirements of the NYC MS4 Permit.

\_\_\_\_\_  
Project Manger NAME (PRINT)

\_\_\_\_\_  
Project Manger TITLE (PRINT)

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE





**22.13.02 >< MS4 ii, Municipal Separate Storm Sewer System – Work with a Permit**

- Prior to the start of work, all of assigned workers shall be informed of the need to adhere to the requirements of this Standard, the DSF Dust Control Protocol, and the requirements of the NYS SPDES permit.
- You shall take appropriate measures to adhere to the good housekeeping requirements cited in the MS4 permits and agreements.
- All work with debris creation, cleaning of site and tools, material and debris storage, potential for liquid runoff or spills is subject to the MS4 requirements to prevent runoff and contamination of the storm and/or sewer systems.
  - Floatables
  - Sediments
  - Nitrogen
  - Phosphorus
  - Pathogens
  - Oxygen Demand
  - PCBs
  - Metals
  - Petroleum Products
- Report and check in at security desk.
- Report to custodian, inform CE of your PO#, what work you will be doing, where you will be working, and how many workers are present.
- Verify scope and location of job.
- Discuss with the CE access to work area, location for storage of materials and debris and the requirement that the handling of these is subject to the MS4 Permit requirements.
- Ensure that any location for stored materials is protected from the elements. Provide tarps or storage container and barriers where the location requires such measures.
- Protect any on site locations where debris or removed materials (which will be restored) are stored from the elements. This may include placement of tarps or barriers to prevent runoff.
- Follow the requirements of the SPDES Permit and the DSF Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area; this includes protection of drains from removed material. Clean the work area daily using appropriate equipment per the Dust Control Protocol and the requirements of the SPDES permit for work at MS4 locations.
- Inspect your exterior storage areas every day and after every rain and make sure protective measures are still in place.
- Tools and equipment shall not be cleaned where runoff will carry materials into the locations storm or sewer system. This includes shovels, brushes, trowels, hawks, containers, and mixing containers.
- For projects requiring excavation, special care must be taken to prevent runoff from carrying materials into the storm water system. For projects involving excavation, unless otherwise directed by the Project Manger or Contract Manager, removed material is assumed to be acceptable as backfill material. If in the opinion of the CM, the removed material is unsuitable (contaminated by oil or other materials) the material shall be removed from the site and disposed of properly.
- Notify CM and CE when work is completed.
- Contractor to sign Certification of Compliance for the Building File on Completion.

**Certification of Compliance with NYC MS4 Permit Requirements for the**

WORK PERFORMED ON WORK ORDER NUMBER \_\_\_\_\_ BUILDING ID# \_\_\_\_\_

As Project Manager for the Trade(s) performing Work on the above Work Order I certify that throughout the term of the Work required to complete the above WO all Services/Work provided by in-house DSF employees was performed in accordance with all requirements of the NYC MS4 Permit.

As Supervisor I certify that we took the following measures to meet the requirements of the SPDES Permit: { identify and describe all pollutant-generating activities for this work site (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal}

**Cover/Contain – We covered all materials to prevent run off contamination.**

**Clean Up –We cleaned up daily to prevent run off contamination.**

**Reduce/Minimize – We took appropriate steps to minimize contamination possibilities.**

**Manage Runoff – We prevented run off from reaching the Storm Water system by use of appropriate barrier materials.**

**Capture/Treat/Dispose –We properly disposed of removed materials and debris.**

**Select and identify any measures below that were in addition to those you listed above.**

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*All work associated with the Work Order Deliverable(s) and with providing the Compliance/Action Items were performed in accordance with and complied with all requirements of the NYC MS4 Permit and that the Deliverable(s) likewise comply(ies) with all requirements of the NYC MS4 Permit.*

\_\_\_\_\_  
**Supervisor NAME (PRINT)**

\_\_\_\_\_  
**Supervisor TITLE (PRINT)**

\_\_\_\_\_  
**SIGNATURE**

\_\_\_\_\_  
**DATE**



**22.13.03 >< MS4 iii, *Municipal Separate Storm Sewer System – Work Without a Permit***

Skilled Trades performing work at sites covered by the city wide MS4 permit issued to the City of New York by the New York State Department of Environmental Conservation are required to manage all sources of storm water runoff from the work being performed to protect and improve water quality.

Pursuant to the MS4 Permit, the Department of Education and its workers must provide adequate assurance, through a signed certification statement, that any work for the Department of Education including construction and maintenance work at sites subject to MS4 must also adhere to the good housekeeping requirements particularly cited in the MS4 permits and agreements. All work with debris creation, cleaning of site and tools, material and debris storage, potential for liquid runoff or spills is subject to the MS4 requirements.

Your responsibility as a Department of Education skilled trade employee/Project Manager is to implement pollution prevention practices that prevent the generation of potential pollutants of concern that may come in contact with storm water and discharge to the City's MS4 waterways in the city. This process will allow the Department of Education to comply with all requirements included in the Pollution Prevention/Good Housekeeping section of the City's State Pollutant Discharge Elimination System (SPDES) MS4 General Discharge Permit for storm water discharges from the New York State Department of Environmental Conservation (NYS DEC).

**Deliverables are the specific work to be performed as required by the Work Order Task**

**Compliance/Action Items** are the MS4 Pollution Prevention/Good Housekeeping practices **which may be required to complete the Deliverables. These Action** Items include the following items (NOTE- your work may not involve all the categories listed below).

**Cover/Contain** – This is a deliverable associated with exterior excavation, material storage, and related work. The Project Manager and employees working at the site shall prevent run off from improper storage from reaching the storm water systems.

**Clean Up** – The Project Manager and employees working at the site shall perform regular daily cleanup of the work site shall be performed in addition to post completion final cleaning. Your clean up should be sufficient to prevent run-off contamination from reaching the storm water system.

**Reduce/Minimize** – The Project Manager and employees working at the site shall limit run off from cleaning and take steps to prevent entry of debris and contaminants into drainage systems. This applies to work associated with landscaping, concrete, exterior masonry, painting, plastering, drywall (especially taping), work on drains and piping systems, etc.

**Manage Runoff** – The Project Manager and employees working at the site shall act to prevent entry of contaminants into waste systems. Special attention shall be taken by the Project Manager and employees working at the site during exterior work such as excavation, landscaping, paving (asphalt and concrete), and site work. Use of barriers (such as hay bales or "pigs") to absorb or deflect run off is encouraged when the work area indicates this is needed.

**Capture/Treat/Dispose** – The Project Manager and employees working at the site shall properly dispose of removed materials and debris.

The Project Manager is responsible for ensuring that all of the workers assigned to this Work Order Task, and any skilled trade employees performing assists on related WOT's are aware of and adhere to all of the MS4 requirements.

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In addition to properly performing work at a site subject to MS4 requirements under the SPDES Permit, the Project Manger shall provide a General Certification — Certification of Compliance with NYC MS4 Permit Requirements for the work performed at the site. A copy of the form is attached.

### **23.00.01 >< REFRIGERATION**

- Verify scope of job and the complaint by testing the system and or visiting the affected areas.
- Report to Principal or GO and give duration and impact of work to assure any needed shifting necessary.
- Perform ACM verification where required.
- Verify that all needed parts, tools, and equipment, including Personnel Protective Equipment (PPE), are available prior to starting work to avoid needless interruptions. Required tools include a gauge manifold, leak detector, multi-meter, and may include a refrigerant recovery system.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the **power and interconnected systems are shut down and locked out.**
- **Identify the type of refrigerant and follow any special procedures required. Use PPE whenever working with refrigerants.**
- Removed refrigerant shall be disposed of properly.
- Restore system to operation. Verify proper operation of the system.
- Demonstrate operation of the system to designated school personnel.

**MS4 - Refrigeration and Air Conditioning** (applicable to MS4 sites)

MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.

**Effectiveness for targeted Pollutants / Impairments:**

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F** = Fair; **P** = Poor

**Control Strategies:**

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

**Y** = Yes

**Process:**

- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area.
- Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Store shop towels and absorbents in separate metal containers with tight-fitting lids.
- Whenever handling or filling refrigerant cylinders, always make certain you are wearing the proper personal protective equipment (PPE).
- When working with any solvent, chemical or refrigerant read and understand the manufacturer's MSDS (Material Safety Data Sheet) before handling.
- Venting any refrigerant is a violation of the Clean Air Act (CAA). This includes CFC & HCFC's, CFC & HCFC refrigerant substitutes. Only the de minimis release is allowed during service, maintenance, or repair, which refers to the small amount of refrigerant emitted unintentionally during good faith efforts to recover refrigerants, during the normal course of appliances operation or during the connection/disconnection to change or service an appliance. Nitrogen that is used to hold charges or as leak test gases may be released; nitrogen may not be added to a fully changed system for the purpose for leak detention and then released.
- Before disposing of any appliance containing a CFC or HCFC refrigerant, the refrigerant must be recovered.
- Removed refrigerant shall be disposed of properly.
- When checking for small leaks, using a halide torch is the most effective method. Third party contractors can also evacuate the system and pull a vacuum on it. If the system will not hold the vacuum, you have a leak.

- If there is a major leak or major component failure, an oil sample should be taken. If there are contaminants in the oil, the system will need to be flushed. In an event of a burnout of the compressor:
  1. **Triple-evacuate the system.**
  2. **Install a permanent filter drier.**
  3. **Conduct a deep vacuum before recharging.**
- For projects taking multiple days, check in with CE each day to give progress up-date.
- Notify your team's clerical staff each AM of WO and attributes. Notify clerical staff each PM of any other attributes worked on that day.
- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Get ticket signed on completion.
- Arrange for a call to the operators 5-10 days after completion to recheck system. This can be done by clerical staff, supervisor, etc.
- Close Work Order.
- Clean-up/Follow-up.
- Monitor floor drains for evidence of solvents, cleaners, and any other liquid products, and clean out as necessary.
- All refrigeration systems must have safety relief valves. The valves must not be installed in series and must be replaced if corrosion build-up is found within the body of a relief valve.
- Any minor spills of waste or solvents, cleaners, and any other liquid products that occur during transfer to the storage container should be cleaned up immediately.
- Refrigerant safety is addressed in ASHRAE Standard 15-1994, safety code for mechanical refrigeration.
- Disposable cylinders are used only for virgin refrigerants and should never be used for recovery.
- Recovery cylinders are specifically designed to be refilled. For safety reasons, only cylinders designated as "refillable" by the department of transportation DOT can be used for refrigerant recovery.
- Cylinders should always be stored and moved in the upright position and secured so they won't fall over.

**Documentation:**

**Records of any major refrigerant venting Control Strategies/Suggested Practices.**

**COVER/CONTAIN:**

- Store used solvents, refrigerants, cleaners, and any other liquid products in sturdy, leak proof metal containers or tanks approved by DOT, State or local building and fire codes.

**CLEAN UP:**

- Keep spill cleanup materials on site and readily accessible.

**REDUCE/MINIMIZE:**

- Label storm drains to increase awareness.
- Keep storage areas secure to prevent vandalism/unauthorized access.
- Use material transfer procedures that reduce the chance of venting.
- Recover, recycle, and reclaim refrigerants

**PRODUCT SUBSTITUTION and MANAGE RUNOFF:**

- N/A

**CAPTURE/TREAT/DISPOSE:**

- Do not use fluids or wash water during spill cleanup. If unavoidable, all fluids and wash water generated during spill cleanup must be disposed of properly and not into storm sewer drains.
- Used solvents, refrigerants, cleaners, and any other liquid products should only be stored in material appropriate containers.

**23.00.00 >< REFRIGERATION, and Air Conditioning**

- Report and check in at security desk.
- Report to custodian, inform CE of your WORK ORDER NUMBER, what work you will be doing, where you will be working, how many workers.
- Verify scope of job and the complaint by testing the system and or visiting the affected areas
- Report to Principal or GO and give duration and impact of work to assure any needed shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Perform ACM verification where required.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools, and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol
- Verify that all needed parts, tools and equipment, including personnel protective equipment (PPE), are available prior to starting work to avoid needless interruptions. Required tools include a gauge manifold, leak detector, multi-meter, and may include a refrigerant recovery system.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the **power and interconnected systems are shut down and locked out.**
- **Identify the type of refrigerant and follow any special procedures required. Use PPE whenever working with refrigerants.**
- Properly dispose of all removed materials and packing.
- Removed refrigerant shall be disposed of properly.
- For projects taking multiple days, check in with CE each day to give progress update.
- Notify your team's clerical staff each AM of WO and attributes. Notify clerical staff each PM of any other attributes worked on that day.
- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Notify Supervisor of surplus materials, oversize debris items, tools, or equipment which requires pick-up by trucking. The supervisor will arrange for testing of removed metal doors where required and for pick-up by trucking.
- Notify CE (or designee) and Supervisor when work is completed.
- Arrange for a call to the CE 5-10 days after completion to recheck work. This can be done by clerical staff, supervisor, etc.
- Close Work Order

**23.09.93 >< System Controls Modifications or Sequence of Operations**

- Prior to any work modifying the controls for any system or device, verify the scope of work to be performed with the Contract Manager. Do not start any work without an amended Proceed Order incorporating the modifications. All systems, equipment, and devices affected by the modifications shall be noted in the Scope of Work.
- Provide cut sheets and details for all equipment added to the system or device. The submittal should include manufacturer, model, equipment specifications and maintenance procedures for the equipment and required accessory materials for the installation.
- Provide wiring diagrams that show modifications made and all connections made to the system, equipment, or devices installed. The wiring diagram shall be provided as follows: one (1) copy to be given to the Custodian at the site; one (1) hard copy to be included with the Application for Payment; one (1) electronic copy to be given to the CM.
- Provide a written sequence of operation for modifications to controls that change the previous sequence of operation. Changes should be shown in the document highlighting the changes in a manner agreed to with the Contract Manager. Documentation of modifications to the Sequence of Operation shall be provided as follows: one (1) copy to be given to the Custodian at the site; one (1) hard copy to be included with the Application for Payment; one (1) electronic copy to be given to the CM.
- Restore System to operation.
- Demonstrate the system, including start up, shut down, emergency shut down and start up after emergency shutdown (when appropriate) to the Custodian Engineer or designee. Notice shall be given to the CM of the day and time of the system demonstration.
- Provide copies of warranties and guaranties for new equipment to the Custodian. Provide a copy to the CM with the Application for Payment. **NOTE: contact information for the warranty/guaranty provider shall be included if different than the contractor.**



**23.06.20 >< PUMPS i, Hydronic Circulating Pump Set**

- Report and check-in at security desk.
- Report to custodian, inform CE of your WORK ORDER NUMBER, what work you will be doing, where you will be working, how many workers.
- Check in with Custodian or the CM about the defective system.
- Verify the complaint by testing the system and or visiting the affected areas.
- Perform ACM verification where required.
- Verify scope of job.
- Report to Principal or GO and give duration and impact of work to assure any needed shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the water, steam, and electrical power are shut down and locked out.
- Properly dispose of all removed materials and packing.
- For projects taking multiple days, check in with CE each day to give daily progress.
- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Get ticket signed on completion.
- Arrange for a call to the operators 5-10 days after completion to recheck the system. This can be done by clerical staff, supervisor, etc.
- Close Work Order.

**MS4 - Hydronic Circulating Pump Set** *(applicable to MS4 sites)*

*MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.*

Effectiveness for targeted Pollutants / Impairments:

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F** = Fair; **P** = Poor

**Control Strategies:**

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

**Process**

- Store shop towels and absorbents in separate metal containers with tight-fitting lids.
- Treat shop towels and absorbents as hazardous wastes until they are properly managed.
- Do not overfill containers.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area.
- Clean the work area daily using appropriate equipment per the Dust Control Protocol.

**For projects taking multiple days, check in with CE each day to give progress up-date:**

- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Get ticket signed on completion.
- Arrange for a call to the operators 5-10 days after completion to recheck the system. This can be done by clerical staff, supervisor, etc.
- Close Work Order.
- Clean-up/Follow-up.
- Monitor floor drains for evidence of solvents, cleaners, and any other liquid products, and clean out as necessary.
- Any minor spills of waste or solvents, cleaners, and any other liquid products that occur during transfer to the storage container should be cleaned up immediately.
- Documentation.
- Records of any major spill.

**Control Strategies/Suggested Practices:**

**COVER/CONTAIN:**

- Store used solvents, cleaners, and any other liquid products in sturdy, leak proof metal containers or tanks approved by State or local building and fire codes. Place adequate secondary containment sufficient to capture emptied used oil container volumes.

**CLEAN UP:**

- Keep spill cleanup materials on site and readily accessible.
- Clean spills, promptly using an absorbent material or other appropriate dry-cleaning method that can be swept and properly disposed.

**REDUCE/MINIMIZE:**

- Perform regular inspections of solvents, cleaners, and any other liquid products storage area to identify leaks/spills and damaged oil storage containers, and transfer hoses and nozzles.
- Label storm drains to increase awareness.
- Keep storage areas secure to prevent vandalism/unauthorized access.
- Use material transfer procedures that reduce the chance of leaks or spills.
- Keep secondary containment clean.
- Minimize risk of spills by frequently disposing of storage solvents, cleaners, and any other liquid products off-site.

**PRODUCT SUBSTITUTION:**

- N/A

**MANAGE RUNOFF:**

- Use curbing or berm at edge of storage area to prevent runoff/runon from adjacent areas to minimize storm water contact.
- Avoid storing drums near open storm drains or areas that sheet flow directly into water bodies.
- Seal drains that discharge to storm drains, where feasible.

**CAPTURE/TREAT/DISPOSE:**

- Do not use fluids or wash water during spill cleanup. If unavoidable, all fluids and wash water generated during spill cleanup must be disposed of properly and not into storm sewer drains.

**23.12.13 >< PUMPS ii, Fuel Oil Pumps**

- Report and check-in at security desk.
- Report to custodian, inform CE of your WORK ORDER NUMBER, what work you will be doing, where you will be working, how many workers.
- Check in with Custodian or Person with the knowledge of the defect of the system.
- Verify the complaint by testing the system and or visiting the affected areas.
- Perform ACM verification where required.
- Verify scope of job.
- Report to Principal or GO and give duration and impact of work to assure any needed shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Discuss the potential impact of possible oil spillage from the work with the CE. Discuss availability of fans to be used to exhaust fumes if needed.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Ensure that all oil spillage is contained with proper methods. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools, and equipment are available prior to starting work to avoid needless interruptions.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the oil, steam, and electrical power **are shut down and locked out.**
- Properly dispose of all removed materials and packing. Dispose of all contaminated materials using appropriate methods.
- For projects taking multiple days, check in with CE each day to give progress update.
- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Get ticket signed on completion.
- Arrange for a call to the operators 5-10 days after completion to recheck system. This can be done by clerical staff, supervisor, etc.
- Close Work Order.

**MS4 - Fuel Oil Pumps** (applicable to MS4 sites)

*MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.*

**Effectiveness for targeted Pollutants / Impairments:**

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F** = Fair; **P** = Poor

**Control Strategies:**

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

- Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the oil, steam, and electrical power are shut down and locked out.

**Process:**

- Store shop towels and absorbents in separate metal containers with tight-fitting lids.
- Treat shop towels and absorbents containing used oil as hazardous wastes until properly managed.
- Do not overfill used oil tanks and used oil containers.
- For projects taking multiple days, check in with CE each day to give progress up-date.
- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Get ticket signed on completion.
- Arrange for a call to the operators 5-10 days after completion to recheck the system. This can be done by clerical staff, supervisor, etc.
- Close Work Order.
- Clean-up/Follow-up.
- Monitor floor drains for evidence of used oil and clean out as necessary.
- Any minor spills of waste or used products that occur during transfer to the storage container should be cleaned up immediately.
- Documentation.
- Records of any major spill.

**Control Strategies/Suggested Practices:**

**COVER/CONTAIN:**

- Store used oil in sturdy, leak proof metal containers or tanks approved by State or local building and fire codes. Place adequate secondary containment sufficient to capture emptied used oil container volumes.

**CLEAN UP:**

- Keep spill cleanup materials on site and readily accessible.
- Clean spills, promptly using an absorbent material or other appropriate dry-cleaning method that can be swept and properly disposed.

**REDUCE/MINIMIZE:**

- Perform regular inspections of used oil storage area to identify leaks/spills and damaged oil storage containers, and transfer hoses and nozzles.
- Label storm drains to increase awareness.
- Keep storage areas secure to prevent vandalism/unauthorized access.
- Use material transfer procedures that reduce the chance of leaks or spills.
- Keep secondary containment clean.
- Keep storage area clear of all materials that may cause damage to the used oil storage container.
- Minimize risk of spills by frequently disposes storage used oil off-site.

**PRODUCT SUBSTITUTION**

- N/A

**MANAGE RUNOFF**

- Use curbing or berm at edge of storage area to prevent runoff/run-on from adjacent areas to minimize storm water contact.
- Avoid storing drums near open storm drains or areas that sheet flow directly into water bodies.
- Seal drains that discharge to storm drains, where feasible.

**CAPTURE/TREAT/DISPOSE:**

- Do not use fluids or wash water during spill cleanup. If unavoidable, all fluids and wash water generated during spill cleanup must be disposed of properly and not into storm sewer drains.

**23.22.14 >< PUMPS iii, Vacuum Condensate Pump Set**

- Check in at Security desk upon arrival.
- Check in with Custodian, the CM or Person with the relevant knowledge of the complaint and defect of the system.
- Acquire system information.
  - AHERA report
  - Heating plant specs BOC report
  - Relevant issues from staff
- Verify complaint by testing the system or effected equipment.
- Perform ACM verification where required.
- Verify scope of job.
- Prior to starting work make sure that all required lock-out tagout procedures are followed and that the water, steam, and electrical power **are shut down and locked out.**
- Inform the school rep of schedule of impending repair and the effect if any on the daily operations of the school.
- Ensure that all heating and power are locked out as per OSHA standard.
- Effect repair ensuring that all oil spillage is contained with proper methods.
- Properly clean area. Dispose of all contaminated materials.
- Unlock all the heating and power.
- Retest the system in the presence of a building rep.
- Check for leaks.
- Call for assessment of system after 5-10 days.
- Close Work order.
- Return system to operation and when possible, verify operation at time of restoration.

**23.52.01 >< BOILER i, Masonry and Other Boiler Repairs**

- Verify the scope of the job and the complaint by testing the system and/or visiting the affected areas.
- All workers shall display approved identification badges at all times while on school property.
- Only appropriately licensed Contractors shall perform all work.
- All work shall comply with DOE standards and specifications, and shall satisfy the requirements and codes of N.Y.C.
- Perform ACM verification where required.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the **power, water, steam, etc. are shut down.**
- All removed and demolished materials shall be taken off the school property and disposed of properly by the Contractor.
- The contractor shall obtain required permits for working off-hours. The contractor shall supply a copy of each custodial permit accompanying the Applications for Payments.
- Contractors shall provide full dust protection and seal off all work areas with appropriate barriers and signage, in accordance with the standard DUST PROTOCOLS. ALL THE CLEANING SHALL BE PERFORMED USING A HEPA APPROVED SYSTEM.
- The contractor shall always have a copy of the “Detailed scope of Work”, on the site.
- **Protect all equipment in the work area to prevent damage**
- Restore System to operation.
- Always present the SCHEDULE OF WORK:
- Contractor shall submit a Schedule of the start of work through completion to the CONTRACT MANAGER.
- **Protect all equipment in the work area to prevent damage.**
- Restore System to operation.



**23.52.02 >< Boiler ii, Re-tubing**

- Verify the scope of job by visual inspection of and if possible, by testing the boiler.
- During the heating season, or when the boilers are used to provide hot water, it is critical to keep at least one boiler online. Determine if there are multiple boilers and if it is possible to isolate the boiler needing work from the system. If the boiler cannot be isolated, notify the CM immediately. The CM will coordinate with you and the school to determine when the work will be done.
- If retubing work will require welding repairs, notify the CM immediately. NOTE: Welded repairs may require coordination with the school Principal. This is determined based on the amount of welding fumes that will be created by the work to be done, the ventilation available in the boiler room, the availability of contractor supplied exhaust devices and can be determined only on a case-by-case basis. This makes the involvement of the CM and the CE critical for planning welded work.
- Boiler tube delivery and disposal require special consideration and coordination with the school due to the size of the material. Schedule this work with the CE and the principal to minimize disruption to the school.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the **power, water, steam, etc. are shut down.**
- Arrange with the Department of Buildings Boiler Division for an internal inspection of the boiler after removal of the tubes to be replaced and to have this inspection performed in a timely manner.
- If welding is required, notify the authorized inspection agency of the scope of the work.
- Where welding cables are run across publicly accessible areas, you must provide suitable caution notice to pedestrians, students, and staff, to avoid trip hazards.
- Properly protect any welding cables and hoses used within the boiler room.
- **Protect all equipment in the work area to prevent damage**
- Restore any systems isolated, turned off and/or locked out to operation.
- Arrange for all required inspections and tests.

**23.52.03 >< Boiler iii, Weld Repairs**

- Verify the scope of the job and the complaint by testing the system and/or visiting the affected areas.
- NOTE: Welded repairs may require coordination with the school Principal. This is determined based on the amount of welding fumes that will be created by the work to be done, the ventilation available in the boiler room, the availability of contractor supplied exhaust devices and can be determined only on a case-by-case basis. This makes the involvement of the CM and the CE critical for planning welded work.
- During the heating season, or when the boilers are used to provide hot water, it is critical to keep at least one boiler online. Determine if there are multiple boilers and if it is possible to isolate the boiler needing work from the system. If the boiler cannot be isolated, notify the CM immediately. The CM will coordinate with you and the school to determine when the work will be done.
- Notify the authorized inspection agency of the scope of the work.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the **power, water, steam, etc. are shut down.**
- Where welding cables are run across publicly accessible areas, you must provide suitable caution notice to pedestrians (including students and staff) to avoid trip hazards.
- Properly protect any welding cables and hoses used within the boiler room.
- Make sure all personnel have the required Certificates of Fitness.
- Properly secure any compressed gas tanks used during movement and use.
- Protect all equipment in the work area to prevent damage.
- Restore any systems isolated, turned off and/or locked out to operation.
- Arrange for all required inspections and tests.
- Coordinate with the Department of Buildings Boiler Division to have the DOB inspections performed in a timely manner.
- Submit a copy of the R-1 form on completion with the billing.

**25.12.23 >< ATS , Automate The Schools**

Automate The Schools (ATS) is the school-based administrative system used by all New York City public schools since 1988. It has many functions, including recording biographical data for all students, handling admissions, discharges, and transfers to other schools, and recording other student-specific data, such as exam scores, grade levels, attendance, and immunization records. It also provides aggregate student and human resources data to school administrators. Access to the ATS system is strictly limited to school system personnel; however, much of the non-personally identifiable information is available online at the New York City Department of Education website.

- Many critical electrical systems are not being maintained to the proper standard, and some are not maintained at all.
- Why? Maybe it's because electrical systems and components are being installed improperly. Maybe it's because of poor system design that leaves little access. Or maybe it's because many facility engineers still regard maintenance as a necessary evil. To evaluate the cost of maintenance, one must factor in the cost of lost service due to an unplanned failure plus the cost of replacement.
- The automatic transfer switch (ATS) is a critical system component of the emergency power system, and proper maintenance of an ATS depends on the type of switch and its position in the critical power infrastructure.
- There are four basic ATS types:
  - break-before-make (open transition)
  - make-before-break (closed)
  - delayed transition (center off)
  - solid state
- The break-before-make (open transition) is the most common. As its name implies, the load will be interrupted during the transition from normal to the emergency source.
- The make-before-break (closed transition) allows a hot-to-hot transfer without the loss of critical load.
- The delayed transition (center off) switch is especially suited to applications in which large inductive loads result in large inrush currents. The delayed transition allows magnetic fields to completely collapse before reconnection.
- The solid-state ATS lacks the traditional mechanical transfer switch. Because this unit relies on SCR or transistor technology, sub-cycle transfers are possible. Although there is technically a "break" in load current, the speed of these units prevents adverse effects to sensitive equipment.
- Some manufacturers of ATS units provide the option of an isolation bypass feature. This feature allows maintenance or repairs to be made with no impact to the critical load.
- Regardless of manufacturer, the automatic transfer switch provides the following basic functions.

- Upon sensing the loss of normal or street power, the ATS logic signals the emergency engine or turbine generator system to start. When the emergency source of power is available at the ATS, the control logic samples the source to ensure critical parameters are within proper tolerance. At this point, the ATS will transfer to the emergency power supply.
- These steps are reversed upon the return of the normal power source. The ATS logic will again verify the street power is within the desired parameters and stable prior to retransfer. Once the ATS is back in the normal position, the ATS logic dictates a cool down period for the emergency power system. Note that most set points and timing functions are adjusted to the customer's requirements.
- ATS preventive maintenance checklist the following is a list of the basic tasks required to maintain an ASCO ATS.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the electrical power **is shut down and locked out. Verify by test that the power is off prior to starting work on the circuit or device.**
- De-energize the switchgear (ATSs equipped with an isolation bypass feature do not need to be de-energized).
- Remove the arc chutes and pole covers. Consult the manufacturer's information for proper procedure. This step will allow visual inspection of the main and arcing contacts.
- Test and recalibrate all trip-sensing and time-delay functions in the switchgear. Depending on the manufacturer, the steps required here will vary. The focus here should be to verify and record what current settings are and to ensure the current adjustments meet the customer's needs and expectations. If adjustments are necessary, the means to make and verify those adjustments need to be examined. For example, a voltage pick-up or dropout adjustment may require the use of a variable source such as a variable ac transformer. The standby engine can be a source of variable frequency, etc. In any case, the manufacturer is your source for information concerning these adjustments.
- Vacuum the accumulated dust from the switchgear and accessory panels. Never use air to blow out dirt. Subjecting the TS unit to compressed air may have a detrimental effect by forcing dirt and debris into the switch mechanism.
- Inspect for moisture or signs of previous wetness or dripping.
- Clean grime with an approved solvent. Consult the OEM for a recommendation.
- Inspect all insulating parts for cracks or discoloration due to excessive heat. Part of any complete maintenance program is an infrared scan. This work is done prior to maintenance with normal loads applied to the gear being scanned. The resultant report will define problem areas. The use of this information will allow the maintenance provider to take a proactive approach.
- Inspect all main arcing contacts for excessive erosion. Arcing contacts are intended to be sacrificial by nature. They take the brunt of the energy when making or breaking the load. Careful attention should be paid to these contacts.
- Inspect all main current-carrying contacts for pitting and discoloration due to excessive heat.

- Inspect all control relay contacts for excessive erosion and discoloration due to excessive heat.
- Manually operate the main transfer movement to check proper contact alignment, deflection, gap, and wiping action.
- Check all cable and control wire connections to the transfer switch control and sensing panel and other system components and tighten if necessary.
- Re-energize the switchgear and conduct a test by simulating a normal source failure.
- These listed tasks do not appear especially extraordinary; however, steps 3 and 11 require training and knowledge. More than one failure can be attributed to inattention or ignorance in these areas. Imagine a major data center crash because the UPS ran out of battery because of a maladjusted ATS control panel. The reality of the situation is that proper maintenance of all components of the emergency power system is essential and directly linked to the integrity of the critical power system. This system is only called upon to function in an emergency. Of course, this is the worst time for a malfunction of any one element. The total aspect of maintenance extends far beyond the routine tasks recommended to properly maintain any one element. Just as with the example of the ATS, maintenance programs must be carefully thought out.
- The selection of a maintenance provider is just as important as any other aspect.
- Look under the hood. A surface comparison of maintenance proposals is sometimes misleading. Ask any aggressive maintenance company how their program measures up and you will probably be told that they can do everything you ask. Go beyond that, ask the tough questions, and ask for references. Don't settle for the low bid. It's been said, "you get what you pay for." I prefer, "pay me now or pay me later."

**26.01.01 >< Electric i, General Work**

- Verify the complaint by checking the complaint and or visiting the affected areas.
- Troubleshooting the problem to determine the cause may require work with energized circuits. Safe work practices need to be observed during any tests or system checks performed to troubleshoot the problem.
- Perform ACM and PCB (NOTE: ballasts may contain PCB) verification where required.
- Verify scope of job
- If any leakage of possible PCB containing material is observed, notify the CE and the Contract Manager forthwith. **DO NOT REMOVE THE FIXTURE OR DEVICE.**
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the electrical power **is shut down and locked out. Verify by test that the power is off prior to starting work on the circuit or device.**
- Removed ballasts containing PCBs shall be left on site with the CE in a location designated for disposal by DSF.
- Restore power to all de-energized circuits.
- Check operation of installed equipment.

**MS4 - Electrical Work** (applicable to MS4 sites)

*MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.*

**Effectiveness for targeted Pollutants / Impairments:**

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F**= Fair; **P** = Poor

**Control Strategies:**

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

**CONTROL STRATEGIES/SUGGESTED PRACTICES:**

**CLEAN UP:**

- Inspect the site at the end of each day; pick up debris and ensure construction materials are properly stored.
- Provide adequate dumpster capacity on site to store rubble and construction debris.
- Use dry cleaning methods, such as sweeping or vacuuming surfaces, immediately after electrical work is performed.

**REDUCE/MINIMIZE:**

- Store materials away from storm drains and inlets.
- Regularly inspect inlet protection devices for damage.
- Label storm drains with “No Dumping” signs
- Recycle and reuse products such as electrical materials.
- Clearly define pollution prevention activity responsibility between all involved parties on-site.
- Train construction personnel in proper handling of electric materials.

**PRODUCT SUBSTITUTION and MANAGE RUNOFF:** N/A.

**CAPTURE/TREAT/DISPOSE:**

- Recycle solids if possible.

**26.01.02 >< Electric ii, Lighting Work**

- Report and check-in at security desk.
- Report to custodian, inform CE of your WORK ORDER NUMBER, what work you will be doing, where you will be working, how many workers. Troubleshoot the problem to determine the cause which may require work with energized circuits. Safe work practices need to be observed during any tests or system checks performed to troubleshoot the problem.
- Check in with Custodian or Person with the knowledge of the complaint.
- Verify the complaint by checking the complaint and or visiting the affected areas. Troubleshooting of the problem to determine the cause may require work with energized circuits. Safe work practices need to be observed during any tests or system checks performed to troubleshoot the problem.
- Perform ACM and PCB (NOTE: ballasts may contain PCB) verification where required.
- Verify the Scope of Work for this Site and notify the CM each morning, which PO you are working on.
- Report to CE and if requested/required the Principal or GO to give duration and impact of work and assure any shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools, and equipment are available prior to starting work to avoid needless interruptions.



- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the electrical power **is shut down and locked out. Verify by test that the power is off prior to starting work on the circuit or device.**
- Where lighting ballasts are replaced, indicate the fixture number using the DOE standard for identification – row nearest the window (furthest from entry door from corridor) is ROW 1, fixture number is sequential from front of room to rear.
- Where fixtures are replaced individually, provide location information to CM with billing using the fixture identification method above.
- Properly dispose of all removed materials and packing.
- Notify the CM of surplus materials, oversize debris items, tools, or equipment which requires pick-up by trucking. This includes the quantity and location of any PCB containing ballasts so that the CM can arrange for pick-up and proper disposal. Properly dispose of all other removed materials and packing.
- For projects taking multiple days, check in with CE each day to give progress updates.
- Notify your team's clerical staff each AM of WO and attributes. Notify clerical staff each PM of any other attributes worked on that day.
- If you are called away for an emergency, inform the CE (and if required/requested, the Principal) of the break in work and that you will return when the emergency is completed.
- Notify CE (or designee) and Supervisor when the Work is completed.
- Arrange for a call to the CE 5-10 days after completion to recheck work. This can be done by clerical staff, supervisor, etc.
- Submit with the billing a list of all locations worked.
- Restore circuits to operation.
- Supervisor shall arrange for the Work Order to be closed and notify the CE and CM when the Work is completed.

**MS4 - Electric Lighting** (applicable to MS4 sites)

*MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.*

Effectiveness for targeted Pollutants / Impairments:

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F**= Fair; **P** = Poor

Control Strategies:

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

**CONTROL STRATEGIES/SUGGESTED PRACTICES:**

**COVER/CONTAIN:**

- N/A

**CLEAN UP:**

- Inspect the site at the end of each day; pick up debris and ensure construction materials are properly stored.
- Provide adequate dumpster capacity on site to store rubble and construction debris.
- Use dry cleaning methods, such as sweeping or vacuuming surfaces, immediately after electrical work is performed.

**REDUCE/MINIMIZE:**

- Store materials away from storm drains and inlets.
- Regularly inspect inlet protection devices for damage.
- Label storm drains with “No Dumping” signs
- Recycle and reuse products such as electrical materials.
- Clearly define pollution prevention activity responsibility between all involved parties on-site.

**PRODUCT SUBSTITUTION:**

- N/A

**MANAGE RUNOFF:**

- N/A

CAPTURE/TREAT/DISPOSE:

- Recycle solids if possible.

**Electric Motor and Motor Control Work:**

Effectiveness for targeted Pollutants / Impairments:

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F**= Fair; **P** = Poor

Control Strategies:

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

CONTROL STRATEGIES/SUGGESTED PRACTICES;

COVER/CONTAIN:• N/A

CLEAN UP:

- Inspect the site at the end of each day; pick up debris and ensure construction materials are properly stored.
- Provide adequate dumpster capacity on site to store rubble and construction debris.
- Use dry cleaning methods, such as sweeping or vacuuming surfaces, immediately after electrical work is performed.

REDUCE/MINIMIZE:

- Store materials away from storm drains and inlets.
- Regularly inspect inlet protection devices for damage.
- Label storm drains with “No Dumping” signs.
- Recycle and reuse products such as electrical materials.
- Clearly define pollution prevention activity responsibility between all involved parties on-site.
- Train construction personnel in proper handling, spill response, spill kit location, and emergency actions to be taken.

PRODUCT SUBSTITUTION and MANAGE RUNOFF:

- N/A

CAPTURE/TREAT/DISPOSE:

- Recycle solids if possible.

**26.01.03 >< Electric iii, Motor and Motor Control**

- Report and check in at security desk.
- Verify the Sope of Work.
- Report to custodian, inform CE of your WORK ORDER NUMBER, what work you will be doing, where you will be working, how many workers.
- Check in with Custodian or Person with the knowledge of the complaint. Check whether the motor circuit is HVAC and if IFA is interlocked.
- Verify the complaint by checking the complaint and or visiting the affected areas by troubleshooting the problem to determine the cause that may require work with energized circuits. Safe work practices need to be observed during any tests or system checks performed to troubleshooting procedure. Safe work practices need to be observed during any tests or system checks performed in order to troubleshoot the problem
- Check whether the motor circuit is HVAC and if IFA is interlocked.
- Perform ACM and PCB (NOTE: single phase motors with capacitors and part winding starters may contain PCB) verification where required.
- If any leakage of possible PCB containing material is observed, notify the CE and the Contract Manager forthwith. DO NOT REMOVE THE MOTOR.
- Report to CE and if requested/required the Principal or GO to give duration and impact of work and assure any shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions.

- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the electrical power **is shut down and locked out. Verify by test that the power is off prior to starting work on the circuit or device.**
- Properly dispose of all removed materials and packing.
- Notify Supervisor of surplus materials, oversize debris items, tools, or equipment which requires pick-up by trucking.
- For projects taking multiple days, check in with CE each day to give progress updates.
- Notify your team's clerical staff each AM of WO and attributes. Notify clerical staff each PM of any other attributes worked on that day.
- If you are called away for an emergency, inform the CE (and if required/requested, the Principal) of the break in work and that you will return when the emergency is completed.
- Restore power to all circuits de-energized for this work.
- Check operation of installed equipment.
- Notify CE (or designee) and Supervisor when work is completed.
- Arrange for a call to the CE 5-10 days after completion to recheck work. This can be done by clerical staff, supervisor, etc.
- Close Work Order.

**27.15.01 >< Alarms, Fire**

- All work on a Fire Alarm system (other than Smoke Detector test and cleaning) is required to be done by persons holding an S-97/S-98 Certificate of Fitness (CoF). The Technician is required to show his/her CoF to the Custodian Engineer (CE) and to ensure that the CoF number is recorded on the Work Ticket. The CE shall enter the Technician's CoF number on the Fire Safety Log.
- For any Central Monitoring Station (CMS) Fire Alarm System (FAS), on arrival at the Site's CE or CMS Company that the alarm is off line for test and repair.
- Prior to disconnecting power to the Interior Fire Alarm (IFA), discuss the building's HVAC sequence of operation to determine if the system will operate with the IFA off line. If the HVAC system of fans and dampers will shut with the IFA disconnected, contact the CM to discuss the appropriate procedure and time when the work shall be performed in order to ensure the safety of the occupants and the educational/operational processes.
- **If you are given authorization to take the IFA off-line, discuss with the principal and the CE how notifications will be done. Points to be included are: notification procedures that will take place when the system is taken off line; what to do in the case of a fire; how will the notifications be handled; who will be handling the fire watch; and notification procedures that will take place when the system is restored to operation.**
- Prior to disconnecting power to the IFA, determine if the building has an emergency generator. If there is an emergency generator, proper lock-out tag-out will require that you lock out the generator to prevent operation of the generator.
- Observe all appropriate lock-out tag-out procedures for the system and work you are performing.
- **If the system cannot be restored to operation by the close of the work day, prior to departure from the work site, the Contract Manager must be notified of the condition of the system, with specific issues noted to allow the CM to make an informed decision of the appropriate next steps. If the CM cannot be reached, notify the Custodial Staff to contact the CE and the DDF.**
- Any request for work that requires filing should be called to the attention of the CM forthwith, and no work should be performed prior to obtaining approval from the CM. Schedule test with the FDNY Alarms Unit and notify the CM of the date and time for the test.
- Do not change any passwords or access codes to the panel or program without the express written permission of the CM. If you are requesting a change in access codes, you should provide reasons for the change request. Always leave the default program access code of 3-3-3-3 in place.
- For any central station monitored fire alarm system, prior to departure from the site, notify (or have the CE notify) the central station monitoring company that the alarm is restored to operation.
- Provide and submit a hard and an electronic copy, on a media approved by the CM, of any programming changes to the CE.

**27.53.00 >< PA System, Public Announcements/Assembly and Clocks**

- Verify scope of job; verify the complaint by testing the system and visiting the affected areas.
- Report and check in at security desk.
- Perform ACM verification where required.
- Report to Principal or GO and give duration and impact of work to assure any needed shifting necessary to accommodate the work can and will be done.
- Report to Custodian Engineer of your WORK ORDER NUMBER, what work you will be doing, where you will be working, how many workers.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the power, is shut down.
- Restore power to systems and circuits you turned off
- On completion of your work, check system for proper operation. This check shall include all normal operating functions and should include all interrupts and over rides
- Make sure that any noise impact of the work is discussed with the Principal.
- For projects taking multiple days, check in with CE each day to give progress update.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the power, is shut down.
- On completion of your work, check system for proper operation. This check shall include all normal operating functions and should include all interrupts and over rides.
- Properly dispose of all removed materials and packing. Check the work area to make sure that you leave no tools or equipment behind, and space is in a safe clean condition.
- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Get ticket signed on completion.
- Arrange for a call to the operators 5-10 days after completion to recheck system. This can be done by clerical staff, supervisor, etc.
- Close Work Order.

**MS4 - PA and Clocks** *(applicable to MS4 sites)*

*MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.*

Effectiveness for targeted Pollutants / Impairments:

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F** = Fair; **P** = Poor

Control Strategies:

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

**CLEAN UP:**

- Inspect the site at the end of each day; pick up debris and ensure construction materials are properly stored.
- Provide adequate dumpster capacity on site to store rubble and construction debris.
- Use dry cleaning methods, such as sweeping or vacuuming surfaces, immediately after electrical work is performed.

**REDUCE/MINIMIZE:**

- Store materials away from storm drains and inlets.
- Regularly inspect inlet protection devices for damage.
- Label storm drains with “No Dumping” signs.
- Recycle and reuse products such as electrical materials.
- Clearly define pollution prevention activity responsibility between all involved parties on-site.

**CONTROL STRATEGIES/SUGGESTED PRACTICES; COVER/CONTAIN; PRODUCT SUBSTITUTION and MANAGE RUNOFF:**

- N/A.

**CAPTURE/TREAT/DISPOSE:**

- Recycle solids if possible.



**28.46.24 >< ALARMS, Intrusion Alarm Work**

- Obtain the Intrusion Alarm System Building Identification Code for the school with the Contract Manager prior to the start of work. Verify that the Identification number for the school is correct.
- When testing the system, if School Safety informs you that the identification is duplicated, notify the Contract Manager forthwith and get direction on how to correct the problem.
- Confirm that the communicator is dialing out to the correct central Station phone numbers for the school location.
- Make sure that the ENABLE DOWNLOAD feature is set to ON (1).
- Make sure that the disable CALL BACK feature is set to ON (1).
- After completion of work and prior to departure, test and verify signal to Central Station.

**31.01.51 >< Excavation Model i**

- Report and check-in at security desk.
- Report to custodian, inform CE of your Work Order Number, what work you will be doing, where you will be working and how many workers.
- Verify Scope of Work and the details of the job.
- For any work outside the lot line, notify 811 or 800-272-4480 to locate any buried utility lines around the work. For work inside the lot line, review available plans with the CE to determine if there are any underground utilities in the work area.
- Report to Principal or GO and give duration and impact of work to assure any needed shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools, and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area; this includes protection of drains from removed material. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools, and equipment are available prior to starting work to avoid needless interruption of work. Arrange for a suitable portable pump to be on site and available.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the **power, water, steam, etc. are shut down.**
- For excavations more than 4 feet deep, there must be a ladder or ramp within 25 feet of every area within the excavation.
- **For excavations more than 5 feet deep, there must be a protective system installed – either shoring or sloping to protect the workers in the excavation.**
- The excavation must be inspected every day and after every rain prior to the entry of workers into the excavation by a competent person knowledgeable of applicable standards, who can identify workplace hazards relating to the specific operation and has the authority to correct them.
- Heavy equipment and material loads shall be kept not less than 2 feet away from trench edges.
- For interior excavation, prior to cutting into slab check and verify whether it is a pressure slab or waterproof membrane is present before cutting. For projects taking multiple days, the excavation must be protected via fence and/or covering to prevent injury.
- Provide a progress up-date to CE each day.
- Notify your CM of daily progress on the job.
- Prior to backfill, properly support the installed piping or utilities. No backfilling shall be performed until the support is verified by the Contract Manager.
- Unless otherwise directed by the supervisor or Contract Manager, removed material is assumed to be acceptable as backfill material. If in the opinion of the CM, the removed material is

unsuitable which might be contaminated by oil or other materials. The material shall be removed from the site and disposed of properly.

- When new backfill, material is placed, it shall conform to the requirements of the Standard Specification for backfill materials.
- Backfill material shall be placed in lifts not to exceed 8". In placing backfill, care shall be taken not to disturb the piping, utilities, or installed supports.
- Backfilled materials shall be compacted by mechanical compaction methods prior to installation of the next lift of backfill material.
- Surface shall be restored to as close a match as practical to the adjacent surfaces.
- Get ticket signed on completion.
- Notify CE (or designee) and Contract Manager when work is completed.

**31.23.16 >< Excavation Model ii, MS4 Sites**

- Prior to the start of work, all of your workers and any subcontractors shall be informed of the need to adhere to the requirements of this Standard, the DSF Dust Control Protocol, and the requirements of the NYS SPDES permit.
- You, any Sub-Contractors, and all of your employees, shall adhere to the good housekeeping requirements cited in the MS4 permits and agreements.
- All work with debris creation, cleaning of site and tools, material and debris storage, potential for liquid runoff or spills is subject to the MS4 requirements to prevent runoff and contamination of the storm and/or sewer systems.
- Report and check in at security desk.
- Report to custodian, inform CE of your PO#, what work you will be doing, where you will be working, and how many workers are present.
- Verify scope and location of job.
- Discuss with the CE access to work area, location for storage of materials and debris and the requirement that the handling of these is subject to the MS4 Permit requirements.
- Ensure that any location for stored materials is protected from the elements. Provide tarps or storage container and barriers where the location requires such measures.
- Protect any on site locations where debris or removed materials (which will be restored) are stored from the elements. This may include placement of tarps or barriers to prevent runoff.
- Follow the requirements of the SPDES Permit and the DSF Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area; this includes protection of drains from removed material. Clean the work area daily using appropriate equipment per the Dust Control Protocol and the requirements of the SPDES permit for work at MS4 locations.
- Inspect your exterior storage areas every day and after every rain and make sure protective measures are still in place.
- Tools and equipment shall not be cleaned where runoff will carry materials into the locations storm or sewer system. This includes brushes, trowels, hawks, containers, and mixing containers.
- For projects requiring excavation, special care must be taken to prevent runoff from carrying materials into the storm water system. For projects involving excavation, unless otherwise directed by the supervisor or Contract Manager, removed material is assumed to be acceptable as backfill material. If in the opinion of the CM, the removed material is unsuitable (contaminated by oil or other materials) the material shall be removed from the site and disposed of properly.
- Notify CE (or designee) and Contract Manager when work is completed.

**33.63.00 >< Steam Trap**

- Report and check in at security desk.
- Report to custodian, inform CE of your Work Order Number, what work you will be doing, where you will be working, how many workers.
- Check in with Custodian or Person with the knowledge of the defect of the system.
- Verify the complaint by testing the system and or visiting the affected areas.
- Perform ACM verification where required.
- Verify Scope of Work.
- Report to Principal or GO and give duration and impact of work to assure any needed shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the steam and electrical power are shut down and locked out, except where work is performed on traps with bypass valves and piping.
- No bypass shall be installed on a radiator trap.
- Bypass valves on existing systems shall be THROTTLED to minimum position to allow heat while work is performed on the trap.
- When work is completed on bypassed traps, verify that the bypass valve has been shut and that the valves to and from the trap are fully open.
- Properly dispose of all removed materials and packing.
- For projects taking multiple days, check in with CE each day to give progress update.
- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Get ticket signed on completion.
- Arrange for a call to the operators 5-10 days after completion to recheck system. This can be done by clerical staff, supervisor, etc.
- Close Work Order.

**MS4 – Steam Work** *(applicable to MS4 sites)*

*MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.*

**Effectiveness for targeted Pollutants / Impairments**

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F**= Fair; **P** = Poor

**Control Strategies**

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

**CONTROL STRATEGIES/SUGGESTED PRACTICES:**

**CLEAN UP:**

- Inspect the site at the end of each day; pick up residual materials are properly stored.
- Use dry cleaning methods, such as sweeping or vacuuming surfaces, immediately after High Temperature Water Work is performed.

**REDUCE/MINIMIZE:**

- Store materials away from storm drains and inlets.
- Regularly inspect inlet protection devices for damage.
- Label storm drains with “No Dumping” signs
- Recycle and reuse products such as plumbing materials.
- Clearly define pollution prevention activity responsibility between all involved parties on-site.
- Train construction personnel in proper handling, spill response, spill kit location, and emergency actions to be taken.

**MANAGE RUNOFF:**

- Identify potential spill or source areas. Where necessary, implement practices to isolate them from waterways and storm drains.
- Stop additional material from spilling at its source if possible, (e.g., plug a leaking hole, turn a leaking barrel on its side, or use temporary stormwater catch basin covers).

**CAPTURE/TREAT/DISPOSE:**

- When feasible, apply absorbent materials directly to spill to stop or slow flow.
- Retain and dispose of cleanup materials in accordance with regulations.
- Do not use fluids or wash water during spill cleanup. If unavoidable, all fluids and wash water generated during spill cleanup must be disposed of properly and not into storm sewer drains.

**40.01.10 >< Gas Leaks, Combustible Detection Systems**

- Prior to repairs to these systems and controls, verify with the Custodian Engineer that there are no active leaks causing the gas leak system to operate. If the CE reports that there is a leak, call the Contract Manager immediately and report the leak.
- In conjunction with the Custodian Engineer and/or the Contract Manager, determine which systems are impacted by any defective gas leak detection system components.
- Lock outs impacting heat and hot water are critical and you need to work diligently until these affected items are operational and fully restored to normal operating conditions.
- Prepare a proposal for repairs or replacement of all defective gas leak equipment/components. Defective devices shall be noted in your report and included in the estimate provided to the Contract Manager regarding the work needed. If you propose replacement, provide information on the reasons for the replacement and information on the equipment proposed for installation.
- After completion of repairs, calibrate all sensing equipment.
- Test system and restore to normal operating conditions.
- If new panel and components are installed, provide training to the Custodian Engineer and designee on the panel.
- Provide copies of warranties and guaranties for any new equipment to the Custodian. Provide a copy to the CM with the Application for Payment.



**40.05.76 >< Hot Work**

**Torch use in and around buildings has risks. There are legal requirements that MUST be followed any time you or your employees use or operate a torch.**

Please take note and keep in mind that you are required to adhere to the following policies and procedures.

Your firm must have a current valid Citywide Permit for Torch Operations. **City-Wide Inspection (Hazardous Cargo Unit):**

- UL listed and approved torch and associated equipment.
- Proof of Liability Insurance.
- If transporting your own compressed gases associated with hot work, the vehicle will undergo a visual DOT inspection.
- The torch user must hold a valid G-60 Certificate of Fitness for Torch Use.
- Except for emergency and critical repairs, 48 hours' notice must be given to the school.
- Prior to starting work, you must submit to the Custodian Engineer a **HOT WORK AUTHORIZATION PERMIT** on a form (attached) approved by the FDNY. You should fax a copy of the fully signed permit to the CM.
- There shall be at least one (1) F-60 Fire Guard for each torch in operation on the job site, with at least one (1) additional F-60 Fire Guard assigned to the floor below the HOT WORK area. **The minimum number of F-60 Fire Guards for Hot Work is two (2).**
- There shall be a Pre-Hot Work check performed before the start of any HOT WORK, and at least once each day thereafter.
- Caution Signs shall be posted around (or at the entry to) Hot Work areas.
- There shall be one (1) 2A:20 BC Fire Extinguisher for each Fire Guard. **NOTE: Torch Down Roofing requires the use of 3A:40 BC Fire Extinguishers.**
- The F-60 Fire Guard shall perform an inspection of the area and the floor below thirty minutes after the completion of the torch operations.
- All flammable and compressed gas containers must be removed from the premises at the end of each workday. **No storage of flammable or compressed gas is allowed in schools overnight.**

**MS4 - High Temperature Water Work** (applicable to MS4 sites)

*MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.*

**Effectiveness for targeted Pollutants / Impairments:**

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F** = Fair; **P** = Poor

- **Control Strategies:**
- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

**CONTROL STRATEGIES/SUGGESTED PRACTICES:**

**CLEAN UP:**

- Inspect the site at the end of each day; pick up residual materials are properly stored.
- Use dry cleaning methods, such as sweeping or vacuuming surfaces, immediately after High Temperature Water Work is performed.

**REDUCE/MINIMIZE:**

- Store materials away from storm drains and inlets.
- Regularly inspect inlet protection devices for damage.
- Label storm drains with “No Dumping” signs.
- Recycle and reuse products such as plumbing materials.
- Clearly define pollution prevention activity responsibility between all involved parties on-site.
- Train construction personnel in proper handling, spill response, spill kit location, and emergency actions to be taken.

**PRODUCT SUBSTITUTION:** N/A

**MANAGE RUNOFF:**

- Identify potential spill or source areas. Where necessary, implement practices to isolate them from waterways and storm drains.

- Stop additional material from spilling at its source if possible, (e.g., plug a leaking hole, turn a leaking barrel on its side, or use temporary stormwater catch basin covers).

CAPTURE/TREAT/DISPOSE:

- When feasible, apply absorbent materials directly to spill to stop or slow flow.
- Retain and dispose of cleanup materials in accordance with regulations.
- Do not use fluids or wash water during spill cleanup. If unavoidable, all fluids and wash water generated during spill cleanup must be disposed of properly and not into storm sewer drains.

**40.23.00 >< Waste Line**

- Report and check in at security desk.
- Report to custodian, inform CE of your Work Order Number, what work you will be doing, where you will be working, how many workers.
- Check in with Custodian or Person with the knowledge of the complaint.
- Verify the complaint by checking the complaint and or visiting the affected areas.
- Perform ACM verification where required.
- Verify the Scope of Work.
- Report to CE and if requested/required the Principal or GO to give duration and impact of work and assure any shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol. Cleaning after work on waste lines may involve disinfecting the area if there are spills.
- Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions. Take appropriate protective actions when working on waste lines to prevent contamination of the area and workers. Use gloves and face shields when indicated. **Verify with EHS/OOSH personal cleaning that may be needed.**
- Prior to starting work make sure that all valves required for safe working practices are closed. Use Lock-out Tag-out procedures to assure safe working conditions. Where electric feeds to the device are involved these should be turned off and locked-out.
- Properly dispose of all removed materials and packing.
- Notify Supervisor of surplus materials, oversize debris items, tools, or equipment which requires pick-up by trucking.
- For projects taking multiple days, check in with CE to give daily progress.
- Notify your team's clerical staff each AM of WO and attributes. Notify clerical staff each PM of any other attributes worked on that day.
- If you are called away for an emergency, inform the CE (and if required/requested, the Principal) of the break in work and that you will return when the emergency is completed.
- Notify CE (or designee) and Supervisor when work is completed.
- Arrange for a call to the CE 5-10 days after completion to recheck work. This can be done by clerical staff, supervisor, etc.
- Close Work Order.

**MS4 - Waste Line Work** (applicable to MS4 sites)

*MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.*

**Effectiveness for targeted Pollutants / Impairments:**

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F** = Fair; **P** = Poor

**Control Strategies:**

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

- Sloping may be used following OSHA guidelines. Trench shoring or sloping should be used if there is any question about the safety of the trench, regardless of trench depth. A ladder is required in any trench 4 feet deep or greater, with additional ladders placed every 25 feet. The ladder should be a minimum height of 3 feet higher than the existing embankment. Insure that lighting is adequate to safely perform the necessary work.
- If ground water is encountered, set up pump and dewater trench as necessary.
- Remove all unstable material and the old pipe.
- Rebed the ditch to proper grade.
- Backfill pipe according to New York City Standard Specifications. This should be done carefully to prevent damage to the newly placed pipe.
- Backfill pipe with gem sand, sand, or washed rock in uniform lifts a minimum of 6 inches under the pipe to 12 inches or a maximum of 18 inches over the top of the pipe, depending on the depth of the pipe.
- Lay polywrap or filter fabric over gravel or washed rock to prevent migration of backfill and possible trench failure.
- Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions. Take appropriate protective actions when working on waste lines to prevent contamination of the area and workers. Use gloves and face shields when indicated. Verify with EHS/OOSH personal cleaning that may be needed.
- Prior to starting work make sure that all valves required for safe working practices are closed. Use Lock-out Tag-out procedures to assure safe working conditions. Where electric feeds to the device are involved, these should be turned off and locked-out.
- Notify Supervisor of surplus materials, oversize debris items, tools, or equipment which requires pick-up by trucking.
- For projects taking multiple days, check in with CE each day to give progress up-dates.

- Notify your team's clerical staff each AM of WO and attributes. Notify clerical staff each PM of any other attributes worked on that day.
- If you are called away for an emergency, inform the CE (and if required/requested, the Principal) of the break in work and that you will return when the emergency is completed
- Notify CE (or designee) and Supervisor when work is completed.
- Arrange for a call to the CE 5-10 days after completion to recheck work. This can be done by clerical staff, supervisor, etc.
- Close Work Order.
- Clean-up/Follow-up.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol. Cleaning after work on waste lines may involve disinfecting the area if there are spills.
- Dewater the waste with outflow into the sanitary sewer if permitted.
- Remove spoils, insuring that all contaminated spoils are handled in an appropriate manner and hauled to an approved site for proper disposal.
- Properly dispose of all removed materials and packing.
- Cleanup work site and remove erosion controls if possible. Always insure that work site is properly cleaned before removing any erosion controls.
- Dress the area for vegetation and restore it to original condition per stipulations of the General Permit. Maintain erosion controls in place until such time as vegetation has adequately covered disturbed area.
- Before leaving the site ensure proper clean-up and disinfection of all contaminated uniforms and tools to ensure health and safety of personnel.

**Documentation:**

- Keep any notes or comments of any problems.

**CONTROL STRATEGIES/SUGGESTED PRACTICES:**

- N/A

**COVER/CONTAIN:**

- During waste line repair, provide temporary cover, such as mulch or a tarp, over exposed earth areas to minimize exposure to rain or snow.

**CLEAN UP:**

- Plan cleaning to coincide with municipal street sweeping, when feasible.
- Inspect catch basins and other inlets frequently and clean as needed.
- Clean during dry weather when catch basin sump is greater than one-third full.
- Clean up sediment and debris using dry methods, when feasible.
- Maintain a log of the amount of sediment collected and date removed.

**REDUCE/MINIMIZE:**

- Conduct repairs during dry weather.

PRODUCT SUBSTITUTION: N/A.

**MANAGE RUNOFF:**

- Avoid waste line repair during or immediately before rainfall events.
- Protect disturbed areas with an erosion control mulch or mat until area has stabilized. Remove dead/dying vegetation and grass clippings to reduce the release of nutrients during decomposition.
- Minimize use of heavy equipment in and around practices to avoid compaction and increased runoff.

CAPTURE/TREAT/DISPOSE:

- Liquids collected during clean-outs should be disposed of properly. Do not discharge to the storm sewer or into water bodies.
- Sediment and debris removed should be properly handled and disposed of in a location not exposed to stormwater.
- Analyze materials to determine appropriate disposal method.



**40.42.00 >< Water Systems, High Temperatures**

- Report and check in at security desk.
- Report to custodian, inform CE of your WORK ORDER NUMBER, what work you will be doing, where you will be working, how many workers.
- Check in with Custodian or Person with the knowledge of the complaint. Ask CE for information on special conditions related to the site (high pressure steam or HW for example).
- Verify the complaint by checking the complaint and or visiting the affected areas.
- Perform ACM verification where required. Verify scope of job .
- Report to CE and if requested/required the Principal or GO to give duration and impact of work and assure any shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools and equipment are available prior to starting work to avoid needless interruptions.
- Prior to starting work make sure that all valves required for safe working practices are closed. Use Lock-out Tag-out procedures to assure safe working conditions. Where electric feeds to the device are involved these should be turned off and locked-out.
- Properly dispose of all removed materials and packing.
- Notify Supervisor of surplus materials, oversize debris items, tools, or equipment which requires pick-up by trucking.
- For projects taking multiple days, check in with CE each day to give progress updates.
- Notify your team's clerical staff each AM of WO and attributes. Notify clerical staff each PM of any other attributes worked on that day.
- If you are called away for an emergency, inform the CE (and if required/requested, the Principal) of the break in work and that you will return when the emergency is completed.
- Notify CE (or designee) and Supervisor when work is completed.
- Arrange for a call to the CE 5-10 days after completion to recheck work. This can be done by clerical staff, supervisor, etc.
- Restore System to Operation.
- Close Work Order.



**40.42.00 >< Temperature Controls, Work for**

- Report and check in at the security desk.
- Report to custodian, inform CE of your WORK ORDER NUMBER, what work you will be doing, where you will be working and how many workers.
- Check in with Custodian or Person with the knowledge of the defect of the system.
- Verify the complaint by testing the system and or visiting the affected areas.
- Perform ACM verification where required and verify the Scope of Work.
- Report to Principal or GO and give duration and impact of work to assure any needed shifting necessary to accommodate the work can and will be done.
- Make sure that any noise impact of the work is discussed with the Principal.
- Where required and appropriate arrange for access path including exit to be used for delivery and movement of equipment, tools and materials.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area. Keep the work clean using appropriate equipment per the Dust Control Protocol.
- Verify that all needed parts, tools, and equipment are available prior to starting work to avoid needless interruptions.
- Prior to starting work make sure that all required lock-out tag-out procedures are followed and that the water, steam, air, and electrical power **are shut down and locked out.**
- Devices shall be calibrated to standard temperatures and device set points shall conform to established CITY and Department standard settings for heating and cooling (where applicable), unless otherwise directed by your Supervisor. The Heating set point shall be 68 degrees and the cooling set point shall be 78 degrees.
- Restore systems to operation and check systems for proper operation.
- **All pneumatic connections shall be tested for leaks when work is completed.**
- Verify electrical connections and continuity for electronic devices.
- **Verification of BMS controls work shall be done with the School Operator Console and the CE or designee.**
- Verification of BMS controls work shall be done with the School Operator Console and the CE.
- Properly dispose of all removed materials and packing.
- For projects taking multiple days, check in with CE each day to give progress up-date.
- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Get ticket signed on completion AND Arrange for a call to the operators 5-10 days after completion to recheck system. This can be done by clerical staff, supervisor, etc.
- Close Work Order.

**MS4 - Temperature Controls** (applicable to MS4 sites)

MS4 permittees are required to develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from industrial facilities. Regulations addressing industrial stormwater management in Phase I. Regulations specify that several key elements be included in Phase I MS4 stormwater management programs. These elements include adequate legal authority to require compliance and inspect sites, inspection of priority industrial and commercial facilities, establishing control measure requirements for facilities that may pose a threat to water quality, and enforcing stormwater requirements. To implement these requirements, MS4 permits require the development of an inventory of facilities and prioritization protocol and adequate staff training to ensure proper inspection and enforcement of requirements.

**Effectiveness for targeted Pollutants / Impairments:**

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F**= Fair; **P** = Poor

**Control Strategies:**

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

**CONTROL STRATEGIES/SUGGESTED PRACTICES:**

**COVER/CONTAIN:**

- N/A

**CLEAN UP:**

- Inspect the site at the end of each day; pick up residual materials are properly stored.
- Use dry cleaning methods, such as sweeping or vacuuming surfaces, immediately after High Temperature Water Work is performed.

**REDUCE/MINIMIZE:**

- Store materials away from storm drains and inlets.
- Regularly inspect inlet protection devices for damage.
- Recycle and reuse products materials.
- Clearly define pollution prevention activity responsibility between all involved parties on-site.

**PRODUCT SUBSTITUTION:**

- N/A

**MANAGE RUNOFF**

- N/A

**CAPTURE/TREAT/DISPOSE:**

- Retain and dispose of cleanup materials in accordance with regulations.

**Work Standard for Vacuum or Condensate Pump Set**

**Effectiveness for targeted Pollutants / Impairments**

- Floatables
- Sediments
- Nitrogen
- Phosphorus
- Pathogens
- Oxygen Demand
- PCBs
- Metals
- Petroleum Products

**G** = Good; **F**= Fair; **P** = Poor

**Control Strategies**

- Cover / Contain
- Clean Up
- Reduce / Minimize
- Product Substitution
- Manage Runoff
- Capture / Treat / Dispose

\* = Yes

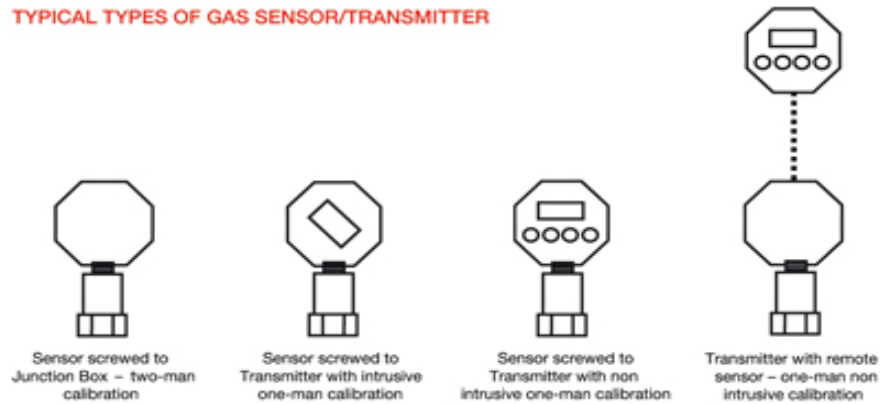
**Process**

- Store shop towels and absorbents in separate metal containers with tight-fitting lids.
- Treat shop towels and absorbents as hazardous wastes until properly managed.
- Do not overfill containers.
- Follow the requirements of the Dust Control Protocol, including covering and protecting items adjacent to work area including floors and fixtures. Prevent migration of dust and debris outside the work area.
- Clean the work area daily using appropriate equipment per the Dust Control Protocol.
- For projects taking multiple days, check in with CE each day to give progress up-date.
- If you are called away for an emergency, inform the principal and the CE of the break in work and that you will return when the emergency is completed.
- Get ticket signed on completion.
- Arrange for a call to the operators 5-10 days after completion to recheck system. This can be done by clerical staff, supervisor, etc.
- Close Work Order
- Clean-up/Follow-up.
- Monitor floor drains for evidence of solvents, cleaners, and any other liquid products, and clean out as necessary.
- Any minor spills of waste or solvents, cleaners, and any other liquid products that occur during transfer to the storage container should be cleaned up immediately.

**Documentation**

### 40.79.23 >< Calibration

#### TYPICAL TYPES OF GAS SENSOR/TRANSMITTER



- The most common failure in catalytic sensors is performance degradation caused by exposure to certain poisons'. It is therefore essential that any gas monitoring system should not only be calibrated at the time of installation, but also checked regularly and re-calibrated as necessary. Checks must be made using an accurately calibrated standard gas mixture so that the zero and 'span' levels can be set correctly on the controller.
- Codes of practice such as EN50073:1999 can provide some guidance about the calibration checking frequency and the alarm level settings. Typically, checks should initially be made at weekly intervals but the periods can be extended as operational experience is gained. Where two alarm levels are required, these are normally set at 20-25% LEL for the lower level and 50-55% LEL for the upper level.
- Older (and lower cost) systems require two people to check and calibrate, one to expose the sensor to a flow of gas and the other to check the reading shown on the scale of its control unit. Adjustments are then made at the controller to the zero and span potentiometers until the reading exactly matches that of the gas mixture concentration.
- Remember that where adjustments have to be made within a flameproof enclosure, the power must first be disconnected, and a permit obtained to open the enclosure.
- Today, there are several 'one-man' calibration systems available which allow the calibration procedures to be carried out at the sensor itself. This considerably reduces the time and cost of maintenance, particularly where the sensors are in difficult to get to locations, such as an offshore oil or gas platform. Alternatively, there are now some sensors available which are designed to intrinsically safe standards, and with these it is possible to calibrate the sensors at a convenient place away from the site (in a maintenance depot for instance). Because they are intrinsically safe, it is allowed to freely exchange them with the sensors needing replacement on site, without first shutting down the system for safety.
- Maintenance can therefore be carried out on a 'hot' system and is very much faster and cheaper than early, conventional systems.

**41.65.16 >< EMERGENCY GENERATORS, *Testing and Servicing of***

- This checklist is generic and intended to be used as a general guide. The contractor shall, in addition to this checklist, refer to the manufacturer’s operation and maintenance manual for the specific unit that it is working on and follow all instructions that apply, are relevant. Repair procedures shall be proposed to the Contract Manager and approved before carrying out the work.
- Service calls for routine maintenance shall provide all the manufacturer’s recommended service including lubrication, checks and service for the radiator system, exhaust system, batteries, electrical system, the prime mover, the generator and automatic transfer switch.
- The contractor shall complete the Checklist for Inspection, Testing and Servicing of Emergency Generators found below. One copy of the signed Checklist shall be left with the building custodian and one copy submitted to the BoE’s designated representative.
- This list may be copied, completed and submitted with applicable information.

**GENERATOR LOCATED AT:**

**School:** \_\_\_\_\_

**Address:** \_\_\_\_\_

			EMERGENCY GENERATORS, CHECKLIST:INSPECTOR, PRINT YOUR NAME IN THIS BOX, SIGN AND DATE:
	N/A	DONE	
		a.	<b>ENGINE LUBRICATION SYSTEM</b>
1.			Check for leaks
2.			Check Engine Oil Level & P.S.I
3.			Change lubricating oil filters
4.			Change engine oil
5.			Test old lubrication oil, submit report
6.			Change hydraulic governor oil and check level
		b.	<b>ENGINE COOLING SYSTEM</b>
1.			Check for leaks
2.			Check radiator air restriction
3.			Check operation of coolant heater
4.			Check all hoses and connections
5.			Check coolant level & temperature
6.			Check belt condition and tension

	N/A	DONE	EMERGENCY GENERATORS, CHECKLIST:INSPECTOR, PRINT YOUR NAME IN THIS BOX, SIGN AND DATE:
7.			Check antifreeze concentration
8.			Change coolant filter
9.			Check radiator cap and thermostat for operation
		<b>c.</b>	<b>ENGINE AIR INTAKE SYSTEM</b>
1.			Check air cleaner element
2.			Visually inspect and clean ductwork and louvers
3.			Test and inspect louver and motors, lubricate links and controls
		<b>d.</b>	<b>EXHAUST SYSTEM</b>
1.			Test for excessive back pressure, measure and record reading U/S of turbocharger
2.			Visually inspect for leaks and fix them
3.			Replace joints/ as necessary
4.			Measure exhaust temperature at each cylinder. Measure and record turbo charger in and exhaust gas temperature when running at maximum load
5.			Measure and record turbo charger Outlet air temperature
		<b>e.</b>	<b>ENGINE FUEL SYSTEM</b>
1.			Check day tank, fuel lines and connections for leaks
2.			Change fuel filters
3.			Check day tank fuel level
4.			Check fuel transfer pump
5.			Drain water separators if necessary
6.			Check governor control linkage
		<b>f.</b>	<b>ENGINE ELECTRICAL SYSTEM</b>
1.			Load test batteries
2.			Check battery electrolyte level and clean terminals
3.			If batteries are not good replace them
4.			Check battery charger system
		<b>g</b>	<b>GENERATOR/ ALTERNATOR</b>
1.			Inspect and clean commutator and slip ring
2.			Visually inspect and clean rotor and stator
3.			Visually inspect and clean exciter and voltage regulator
4.			Measure and record resistance of winding
5.			Measure and record the output A/C Voltage

	N/A	DONE	EMERGENCY GENERATORS, CHECKLIST:INSPECTOR, PRINT YOUR NAME IN THIS BOX, SIGN AND DATE:
6.			Measure and record the output Frequency (Hz)
7.			Record Run Hours
		<b>h.</b>	<b>ELECTRICAL SYSTEM</b>
1.			Check and tighten control and power wiring connections
2.			Inspect, clean and test all circuit breakers, switches and fuses, repair or replace as required
3.			Check and test calibration of sensing relays/devices
		<b>i.</b>	<b>AUTOMATIC TRANSFER SWITCH</b> <b>When working, turn off power, lockout, tag out, and coordinate with Custodian Engineer.</b>
1.			Brush clean and vacuum ATS Cabinets
2.			Check condition of normal and emergency contacts
3.			Check rectifier for abnormal condition or wear
4.			Check bypass power supply functions to ensure it operates within the manufacturer's recommended specifications
5.			Check for evidence of thermal damage to current carrying and isolated parts. Include evidence of cracking or moisture on insulating parts
6.			Lubricate cams, links, gears, etc. (USE MOLYKOTE 321R)
7.			Check sensing/timing for normal. Pickup and dropout per engineer specified set points
8.			Check emergency to normal time delay settings per engineer specified set points
9.			Measure contact resistance of ATS normal and emergency contacts and bypass normal and emergency contacts
10			Rack the ATS to TEST position and control voltage is present and within specifications. Then cycle the ATS 3 times ensuring proper switching. Return ATS to the CONNECTED position.
		<b>j.</b>	<b>GENERAL</b>
1.			Load test the unit, assist custodian in checking ATS
2.			Visually inspect and clean gen installation area
3.			Check bearings, vibrations, and record in the data sheet.
4.			Inspect and test all interlocks
5.			Check that all switches are back in Automatic Mode
6.			Prepare written report of observations / recommendations
7.			Provide estimates of parts and labor for major repairs if necessary

COMMENTS

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Signature of Technician conducting the Inspection and Service:

Signature \_\_\_\_\_

Name (Printed) \_\_\_\_\_

END OF EMERGENCY GENERATORS CHECKLIST





**44.30.00 >< Odors, Fumes or Smoke, Work that may produce**

- Please take note and keep in mind that you are required to adhere to the following policies and procedures.
- Work that may disturb students and staff due to the production of odors, fumes or smoke requires that precautions be taken to prevent incidents resulting from the work. This means that you need to fully explain the potential problems to the Principal and/or the CE.
- Do not begin work without having delivered the MSDS sheets for materials to be used on site to the CE.
- If your work is indoors, make sure that the area is properly and fully ventilated during the work period. Where and when possible, coordinate work with the CE to have the exhaust fans supplying the area operate after the work is completed to remove odors.
- Where possible and practical seal the work area off to prevent migration of the odors/fumes/smoke to other areas of the building.
- **Work likely to produce smoke (welding and torch operations) shall also conform to the requirements of the HOT WORK Standard.**
- Before performing work likely to produce smoke, you must check for the presence of smoke detectors in the work area.
- Coordinate with the CE to prevent transient alarms from the activation of area and/or duct smoke detectors in your work area from disturbing the building occupants.

**44.51.00 >< DUMPSTERS; Waste Containers and Sanitation****CONTAINERIZATION SERVICE GUIDE LINES  
REFUSE and RECYCLING  
COLLECTION OPERATIONS**

This is part of the Department of Sanitation procedures for the Roll/On Roll/Off Compacting Containers and E/Z Pack Containers approval of the site and containers which are necessary for compliance with the Department of Sanitation specifications. Locations will be approved on the following basis:

- Locations desiring Roll On/Roll Off container service must contact the: Department of Sanitation Office of Containerization, 125 Worth Street, Room 700, New York, N.Y. 10013
- The Office of Containerization will conduct a feasibility study to ascertain if containerization is suitable for the location in question and advise the location of the type and size of containers that may be used.
- Once the location has been approved, the site may install a Roll On/Roll Off Container System subject to the following:
  - Containers must be compatible with Department of Sanitation equipment and conform to the Department of Sanitation specifications for container types and meet all the requirements of Trip Article General Order Number 2. No modification to the Department of Sanitation equipment will be permitted.
  - Sufficient space, including head room, must be available at the site for maneuverability of trucks when servicing the location.
  - Containers must dump cleanly without jogging of truck. Containers must be maintained in good working order by the owner.
  - The density of compacted garbage must meet the Department of Sanitation standards of 700 lbs. per cubic yard.
  - Containers shall not be stored on any public sidewalk or street. If portable *E/Z Pack* containers on wheels are used, they must **be** stored in the building or on the building's property. Building maintenance personnel must transport the containers into position for service onto the collection by the *E/Z Pack* truck. Sanitation personnel are not to handle the container. They must be removed from the street or any public property after service by the Department by the building maintenance personnel.
  - Equipment and installation must meet the latest industry safety standard of ANSI Z245.1 and in addition to the City, State and OSHA requirements.

Periodically the containers will be subject to inspection to determine that the above conditions are being met. If the above conditions are not met, then the Department of Sanitation reserves the right to suspend canonized service until the violations has been corrected.

[www.nyc.gov/sanitation](http://www.nyc.gov/sanitation)

## HOIST COMPACTOR REFUSE CONTAINER SPECIFICATIONS 7/24/89

- **SCOPE:**

This specification covers refuse containers operationally suitable for use with the front-loading compaction type refuse collection trucks used by the New York City Department of Sanitation all containers set for service by the Department of Sanitation shall be guaranteed in writing by the manufacturer to be compatible with *this* specification. This purchaser/owner shall in all cases be responsible for the satisfactory interface of containers and service vehicles. Container design shall permit complete discharge by gravity without joggling the container, without interfering with the loading arms or the hopper mechanism of the truck, and by using the operating controls of the truck without manual assistance of any kind. It shall not be necessary to manually open the container in order to accomplish the dumping of refuse into the truck. The maximum allowable weight of containers and contents shall not exceed 7,000 lbs. The maximum container size permitted to be used with this system is 8 cubic yards.

- **DESIGN:**

Four, Six and Eight cubic yards. containers shall have front and back lids with their meeting edge parallel to the front face of the container of the container. The lids shall be hinged fore, and aft and front lid shall have two shock absorbing torsion spring stops to protect them from destructive overswing when the container is dumped. Two cubic yard containers with one-piece lids shall be hinged from the back.

One drain not less than 1 1/2" in nominal diameter of pipe size, shall be fitted with a threaded plug and shall be provided at the bottom of each container.

A means of escape consisting of an internal/external latch on a slide type door, whereby the container can be opened from the inside, shall be provided on six and eight cubic yard containers.

For containers supplied for integration into a compactor container system, wherein refuse compaction is performed within the container, the following design provision shall be incorporated: Front and rear inner walls of the Container shall have a 5% or larger taper, to permit easy dumping of compacted refuse. The area of the opening at the top of the container shall be larger than the area at the bottom of the container. The design of the container must provide easy dumping in all temperature conditions. Containers for this type of service cannot exceed six cubic yards and shall incorporate a manual locking mechanism on the lids during compaction and shall be released prior to dumping.

- **CONSTRUCTION:**

All refuse containers shall be fully reinforced to withstand stresses from heavy loading and rough usage and to provide rigidity to resist buckling. Lift sleeves shall be reinforced with three or more gussets at **the top and** bottom of not less than 1/4" thick steel plate. Sleeve shall be not less than 24" long or more than 32" long (including gaps if required) and designed to withstand a lift of not less than 7,000 pounds per sleeve.

The ends of angles, channels, pipes and other hollow members shall be closed to prevent entry to vermin or other objects.

The two front vertical corners of container, forward of sleeves, shall externally be reinforced using a minimum 3" x 3" x 1/8" stainless steel angles, each 12" long and welded in place.

The top lid hinges of the four, six and eight (4, 6, and 8) yard containers shall not be less than 3/8" thick **and 1"** wide with heavy duty hinge pins no less than 3/4" in diameter. The minimum number of hinges shall be four (4) for each door with spring return, and with provision for greasing hinge pin.

The container shall be constructed of ten (10) gauge stainless steel minimum, irrespective of size. Hard Rubber lids may be used in lieu of metal lids. For call containers.

The containers shall be leak proof and continuously welded. Where side doors are provided, the door edge shall be free from sharp edges and shall make a close seal to prevent flies from entering. The latch shall be spring loaded: and strong enough to hold the door closed while the container is being dumped. All containers directly fed from compactors shall be provided with means of sealing the compactor opening. The closure shall prevent spillage of waste during the dumping cycle.

No one yard or twin one-yard containers shall be permitted for new installations.

The container bottom shall be provided with at least two heavy duty skids to keep the container bottom off the ground and reduce wear. Stiffening channels should be provided where necessary.

Casters where used shall be heavy duty with a minimum of six (6) inches in diameter. For ease of movement, 2 wheels. shall be of the swivel type and shall be paired at one end of the container. The other two (2) shall not swivel and shall be paired at the other end. Wheels will not be permitted on containers over 2 cubic yard capacity, without prior written approval by the New York City Department of Sanitation.

- **Paint and Finish:**

The container shall be properly prepared for painting by sandblasting (welds shall be ground smooth) to remove scale, rust and grease. Paint should consist of one prime coat and two 1.5mil epoxy enamel coats; free of sags, orange peel or other defects. The color should be white for paper and green or refuse. Identification should consist of owner name, capacity in-cubic yards and tare weight. Warning signs should be placed on all four sides: "STAND CLEAR. WHEN CONTAINER IS BEING SERVICED". Letters should be at least 1" block.

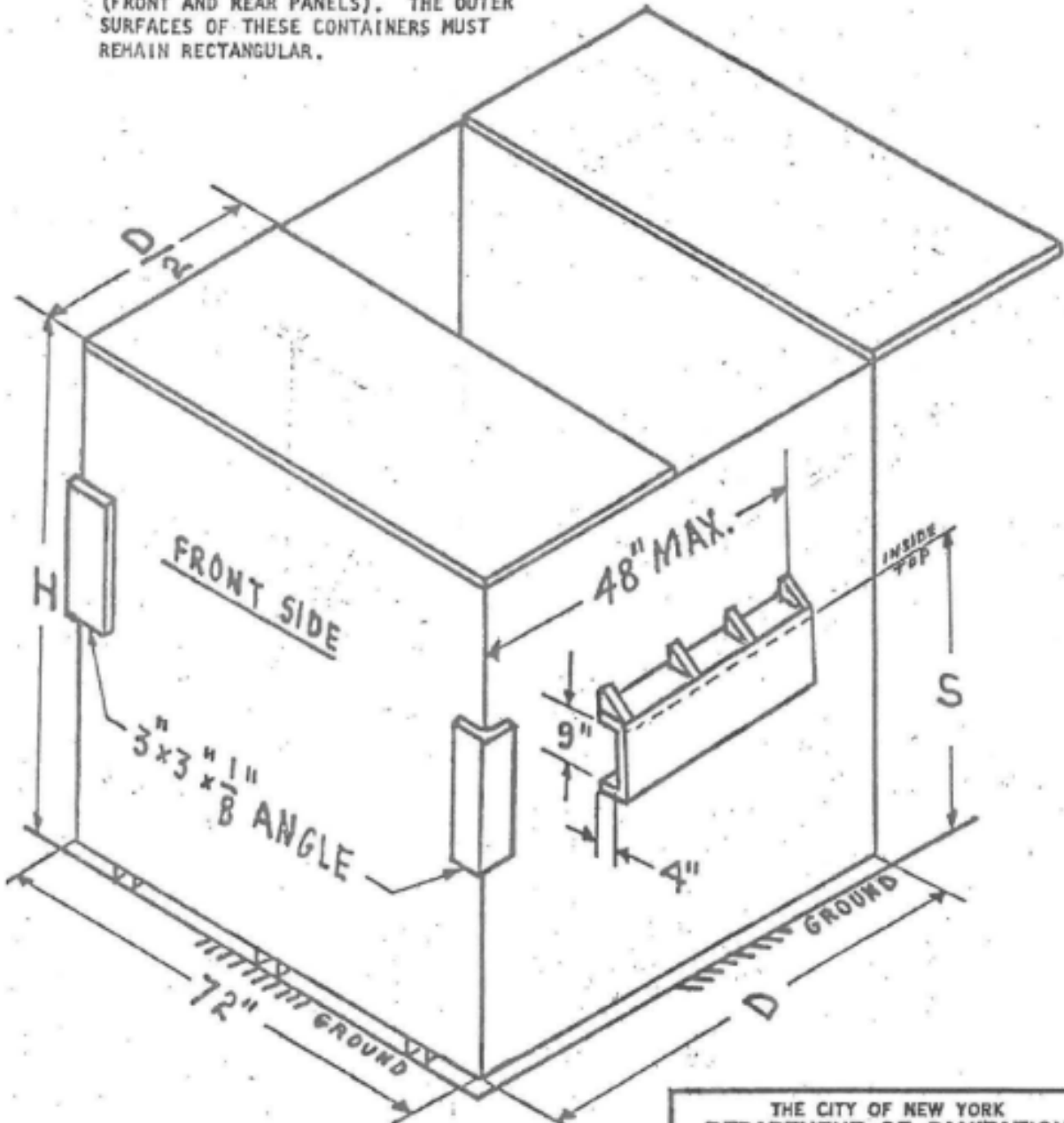
\_The purchaser shall obtain from the supplier and submit to the D.S. a certificate stating that the container complies with this specification. This certificate shall be submitted to the Office .of Containerization Room 821- A, 125 Worth ~Street, New **York**, N.Y. 10013. The Certificate shall contain the following information:

- Container size and number of containers supplied.
- *site* name and address.

One copy of *this* Certificate shall be retained by subject site. NOTE: Failure to send required certificate will delay subject site from receiving containerized service.

If you have been given. a E-Z Pack container by the Department of Sanitation you are now the owner of the container and must repair and maintain it as needed.

**NOTE:** CONTAINERS USED IN CONJUNCTION WITH COMPACTOR SHALL HAVE INTERNAL TAPER (FRONT AND REAR PANELS). THE OUTER SURFACES OF THESE CONTAINERS MUST REMAIN RECTANGULAR.



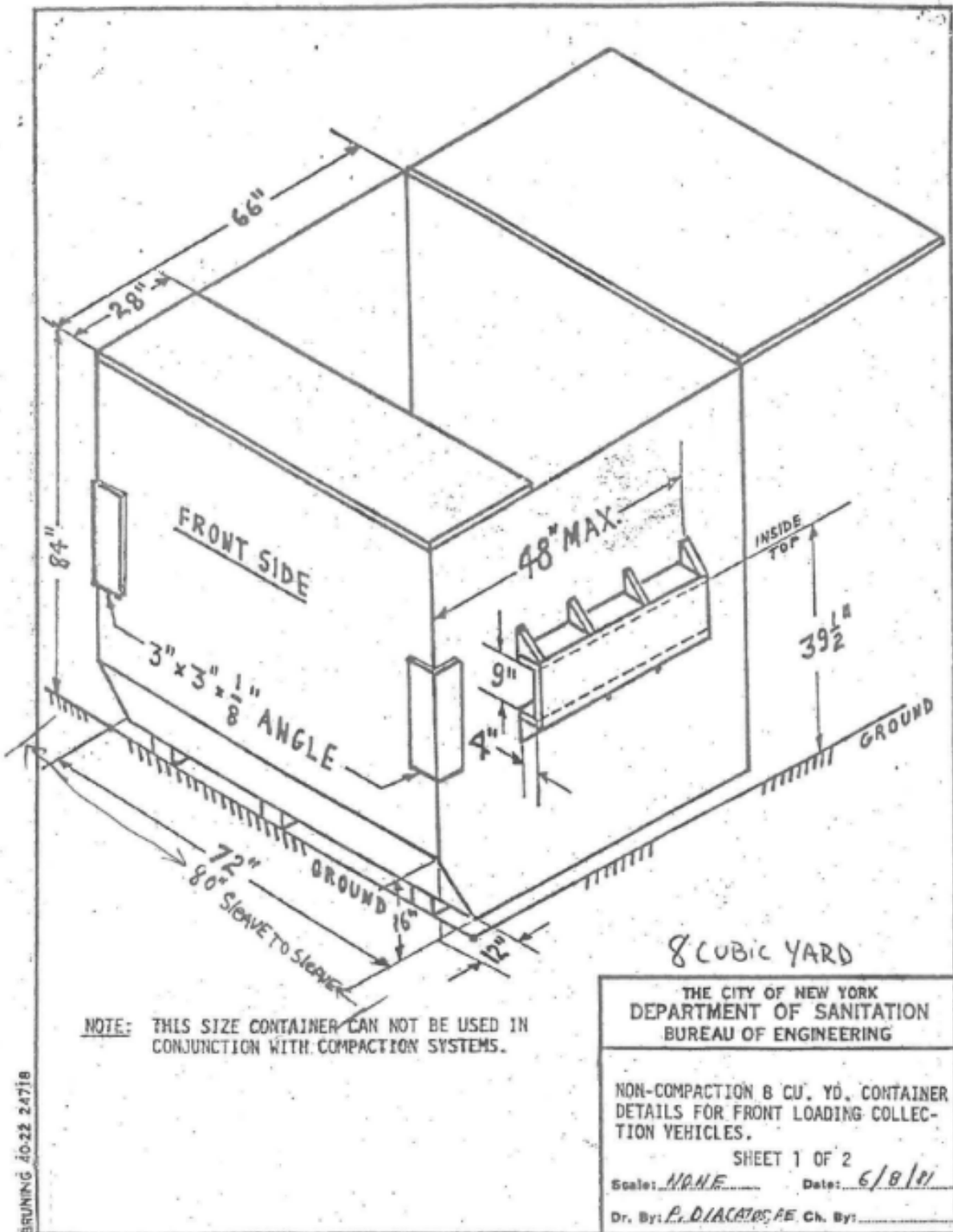
CONTAINER	BODY DIMENSIONS			
	H <sup>±3"</sup>	D <sup>±3"</sup>	S-MIN	S-MAX.
2 C.Y.	41"	34"	27"	27"
3 C.Y.	48"	43"	27"	33"
4 C.Y.	48"	54"	27"	33"
6 C.Y.	72"	54"	34"	38"

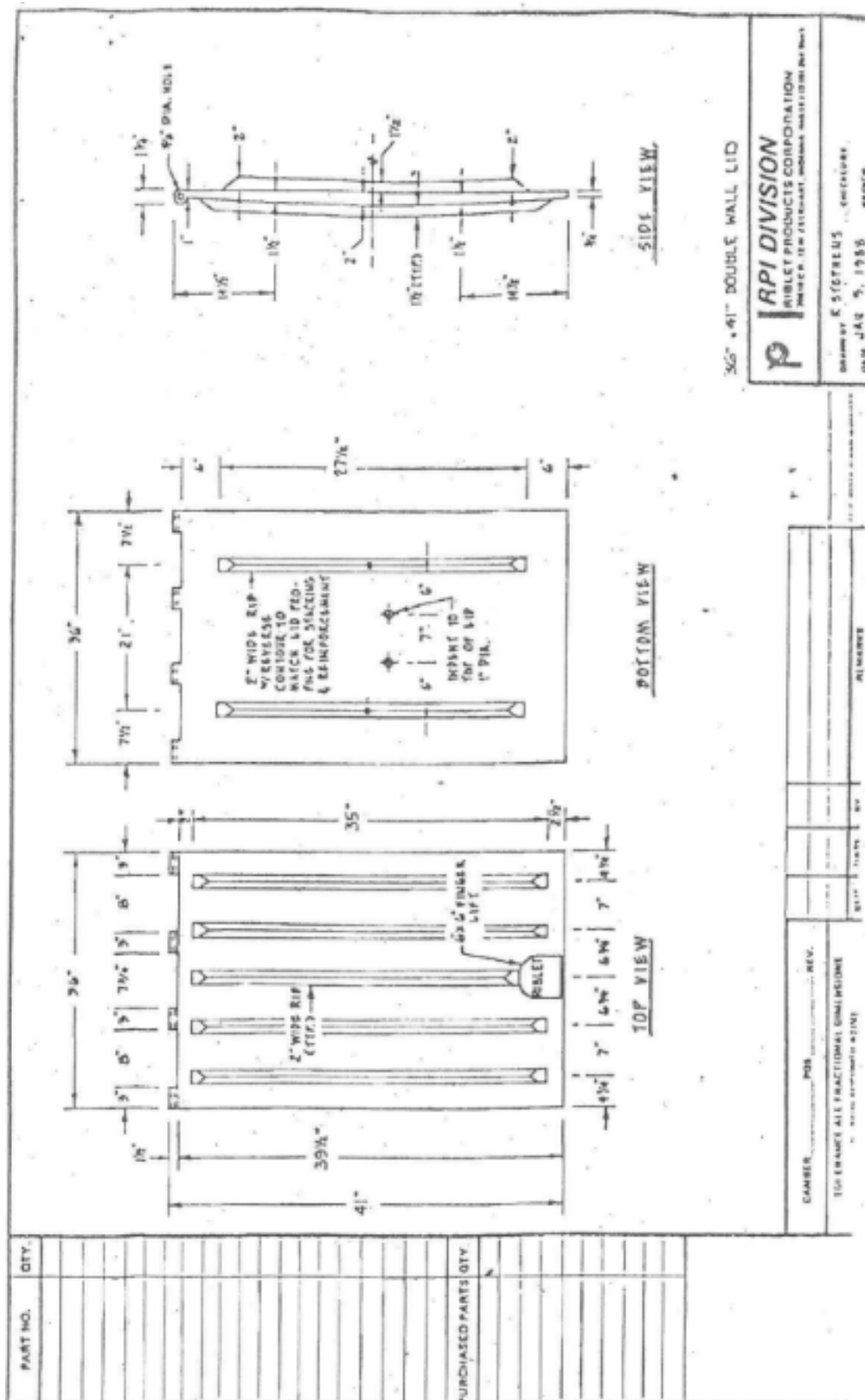
† Sleeves 8" x 8"

THE CITY OF NEW YORK  
 DEPARTMENT OF SANITATION  
 BUREAU OF ENGINEERING

2 TO 6 CU. YD. CONTAINER DETAILS  
 FOR FRONT LOADING COLLECTION  
 VEHICLES.

SHEET 2 OF 2  
 Scale: NONE Date: 6/8/81  
 Dr. By: *P. Licata* P.E. Ch. By: \_\_\_\_\_





*end of  
Standard Procedures*





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