

**NYC Department of Education
Building Condition Assessment Survey 2023-2024**

Mechanical Inspection

X109


Asset: P.S. 109 - BRONX, 1771 POPHAM AVENUE, BRONX, NY, 10453

Inspection Id	Inspection Type	Time In	Last Edited
1490	MECHANICAL	2023-12-06 09:02AM	2024-01-10 10:41AM

Asset Data

Question	Answer
Have any Systems/Major Building Components been upgraded?	Systems: Staff - Toilets; Student Fixtures - Toilets (~15%) Years: 2022 Systems: Sump Pump; Climate Control System - Electric System Years: 2018 Systems: Student Fixtures - Lavatory/Sinks (~90%), Toilets (~85%), Urinals (~80%); DX Split System for Camera Room next to Room 211 Years: 2017 Systems: F&T/Steam Drip Traps; Terminal Unit Thermostatic Traps (~60%) Years: 2015 Systems: Kitchen - Grease Trap, Kitchen Sink Years: 2013
Are there fuel tanks?	Yes
Total # of above ground tanks	2
Total capacity of all above ground tanks in gal.	20,000
Total # of below ground tanks	0
Total capacity of all below ground tanks in gal.	0
Total # of water main service entries to the asset	3
MERs/Fan Rooms Locations	Sub-Basement MER, Penthouse Fan Room
Are there any spaces with Missing or Defective CO Detectors?	Yes
Location(s)	Boiler Room
Are there any Painted/Obstructed Sprinkler Heads?	Yes
Location(s)	Rooms B18, M14, M17, M19, M24, 311 (painted, 11)
Are there any Emergency Stop Switches with Missing Hammers?	No components

Priority Condition

Exist Last Year?	Priority Category	Condition Description	Component Affected	Location Description	Person(s) Notified	Person(s) Title	Photo Image
Yes	Defective Boiler Safety Auxiliary	(2)	Boiler Safety Valve	Boiler Room @ Boiler #1	Yofre Andino	Fireman	

Inspection

Question	Response
Mechanical	
AIR CONDITIONING	Inspected
Chilled Water System	Does not exist
Condenser Water Distribution: Piping, Pumps and Auxiliaries	Does not exist
Cooling Coil in Ductwork	Does not exist
Cooling Tower	Does not exist
DX Split System	Inspected
Indoor Unit	Inspected
Condition	I- Good
Deficiency	No deficiencies recorded
Outdoor Unit	Inspected
Condition	I- Good
Deficiency	No deficiencies recorded
Dry Cooler	Does not exist

**NYC Department of Education
Building Condition Assessment Survey 2023-2024**

Mechanical Inspection

X109

Question	Response
AIR CONDITIONING	
Packaged / Rooftop Unit	Does not exist
Packaged Terminal A/C	Does not exist
Refrigerant Leak Detection System	Does not exist
Refrigerant Piping	Inspected
Condition	1- Good
Deficiency	No deficiencies recorded
Return Fan	Does not exist
CENTRAL ACID WASTE NEUTRALIZING TANK	
	Does not exist
CLIMATE CONTROL SYSTEM	
	Inspected
BMS	
Pneumatic System	Does not exist
Hybrid System	Does not exist
Electric System	Inspected
Instance	Auditorium, Gymnasium
Instance Condition	2- Between Good and Fair
Instance Quantity	1
Instance Quantity Uom	EACH
Building Area Covered by Operational System	81-100%
Deficiency	No deficiencies recorded
COMPACTOR	
	Does not exist
CONVEYING	
	Does not exist
DOMESTIC WATER SYSTEM	
	Inspected
Domestic Cold Water System	
	Inspected
Gravity System	
	Does not exist
Pressure Booster System	
	Does not exist
Water Service	
	Inspected
Instance	Sub-Basement Crawlspace, Boiler Room - Paint Storage Room
Instance Condition	5- Poor
Instance Quantity	2
Instance Quantity Uom	EACH
Deficiency	WATER MAIN:DETERIORATED
Deficiency Location/Instance	Sub-Basement Crawlspace, Boiler Room - Paint Storage Room
Deficiency Quantity	2
Quantity Uom	EACH
Potential Action	REPLACE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Deficiency	WATER MAIN:MISSING BACKFLOW PREVENTION DEVICE
Deficiency Location/Instance	Sub-Basement Crawlspace, Boiler Room - Paint Storage Room
Deficiency Quantity	2
Quantity Uom	EACH
Potential Action	INSTALL
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Instance	Boiler Room - Paint Storage Room
Instance Condition	3- Fair
Instance Quantity	1
Instance Quantity Uom	EACH
Deficiency	WATER MAIN:MISSING BACKFLOW PREVENTION DEVICE
Deficiency Location/Instance	Boiler Room - Paint Storage Room

**NYC Department of Education
Building Condition Assessment Survey 2023-2024**

Mechanical Inspection

X109

Question	Response
DOMESTIC WATER SYSTEM	
Domestic Cold Water System	
Water Service	
Deficiency Quantity	1
Quantity Uom	EACH
Potential Action	INSTALL
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Domestic Hot Water System	
Inspected	
Domestic Hot Water Remote Storage Tank	
Does not exist	
Domestic Water Heat Exchanger	
Inspected	
Condition	4- Between Fair and Poor
Deficiency	DAMAGED/MISSING INSULATION
Deficiency Location/Instance	Sub-Basement MER
Deficiency Quantity	20
Quantity Uom	S.F.
Potential Action	REPLACE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Deficiency	TANK RUSTY/LEAKS
Deficiency Location/Instance	Sub-Basement MER
Deficiency Quantity	1
Quantity Uom	EACH
Potential Action	REPAIR
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Electric Domestic Water Heater	
Does not exist	
Gas Fired Domestic Water Heater	
Does not exist	
Oil Fired Domestic Water Heater	
Does not exist	
Heat Pump Domestic Water Heater	
Under construction	
Domestic Water Distribution Piping	
Inspected	
Condition	3- Fair
Deficiency	No deficiencies recorded
DRAIN/WASTE/VENT AND STORM SYSTEM	
Inspected	
Interior Storm Piping	
Inspected	
Condition	3- Fair
Deficiency	No deficiencies recorded
Sewage/Waste/Vent Piping	
Inspected	
Condition	3- Fair
Deficiency	No deficiencies recorded
Sewage Ejector Pump	
Does not exist	
Sump Pump	
Inspected	
Condition	2- Between Good and Fair
Deficiency	No deficiencies recorded
DUAL TEMPERATURE SYSTEM (CHILLED AND HOT WATER)	
Does not exist	
FIXTURES	
Inspected	
Staff And Other	
Inspected	
Janitor Sink	
Inspected	
Condition	3- Fair
Deficiency	No deficiencies recorded
Lavatory/Sink	
Inspected	
Condition	3- Fair

**NYC Department of Education
Building Condition Assessment Survey 2023-2024**

Mechanical Inspection

X109

Question	Response
FIXTURES	
Staff And Other	
Lavatory/Sink	
Deficiency	No deficiencies recorded
Toilet	Inspected
Condition	1- Good
Deficiency	No deficiencies recorded
Urinal	Inspected
Condition	3- Fair
Deficiency	No deficiencies recorded
Student	Inspected
Drinking Fountain	Inspected
Condition	3- Fair
Deficiency	No deficiencies recorded
Lavatory/Sink	Inspected
Condition	1- Good
Deficiency	No deficiencies recorded
Locker Room Shower	Inspected
Instance on Boys Locker Room - M25	Inaccessible
Instance on Girls Locker Room B25	Inaccessible
Sink And Fountain Combo Unit	Inspected
Condition	3- Fair
Deficiency	No deficiencies recorded
Toilet	Inspected
Condition	1- Good
Deficiency	No deficiencies recorded
Urinal	Inspected
Condition	1- Good
Deficiency	No deficiencies recorded
GAS FIRED FURNACE	Does not exist
GAS SERVICE	Inspected
Gas Distribution Piping	Inspected
Condition	3- Fair
Deficiency	No deficiencies recorded
Gas Meter Room Exhaust Fan	Does not exist
Gas Meter Room Vent	Does not exist
Gas Pressure Booster	Does not exist
CO/Gas Leak Detection	Does not exist
HEATING	Inspected
Heating Coil In Ductwork	Inspected
Condition	2- Between Good and Fair
Deficiency	DEFECTIVE
Deficiency Location/Instance	Sub-Basement MER @ Auditorium Blower
Deficiency Quantity	1
Quantity Uom	EACH
Potential Action	MAINTENANCE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Hydronic Heating	Does not exist
Radiator/Convactor/Fin Tube	Inspected
Condition	3- Fair
Deficiency	AUXILIARY (VALVE, VENT):DEFECTIVE
Deficiency Location/Instance	Penthouse MER, Sub-Basement MER

**NYC Department of Education
Building Condition Assessment Survey 2023-2024**

Mechanical Inspection

X109

Question	Response
HEATING	
Radiator/Convactor/Fin Tube	
Deficiency Quantity	2
Quantity Uom	EACH
Potential Action	MAINTENANCE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Steam Heating	Inspected
F&T/Steam Drip Trap	
Condition	Inspected
Condition	2- Between Good and Fair
Deficiency	No deficiencies recorded
MER Steam and Condensate Piping	
Condition	Inspected
Condition	3- Fair
Deficiency	DAMAGED/MISSING INSULATION
Deficiency Location/Instance	Sub-Basement MER
Deficiency Quantity	30
Quantity Uom	L.F.
Potential Action	MAINTENANCE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Steam Condensate Return Piping	
Condition	Inspected
Condition	3- Fair
Deficiency	No deficiencies recorded
Steam Condensate Return Pumping System	
Condition	Inspected
Condition	4- Between Fair and Poor
Deficiency	DEFECTIVE TANK
Deficiency Location/Instance	Sub-Basement MER, Crawlspace
Deficiency Quantity	2
Quantity Uom	EACH
Potential Action	REPLACE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Steam Piping	
Condition	Inspected
Condition	3- Fair
Deficiency	No deficiencies recorded
Terminal Unit Thermostatic Trap	
Condition	Inspected
Condition	3- Fair
Deficiency	DEFECTIVE/DETERIORATED
Deficiency Location/Instance	Various Locations
Deficiency Quantity	20
Quantity Uom	EACH
Potential Action	REPLACE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Steam supplied by External Sources	
Condition	Does not exist
Unit Heater/Cabinet Heater	
Condition	Does not exist
HEATING PLANT	
Condition	Inspected
Instance on Mezzanine	Inspected
Is there a water meter on the boiler make-up water piping?	No
Burner Manufacturer	Preferred Utilities
Burner Model	N/A

NYC Department of Education
Building Condition Assessment Survey 2023-2024

Mechanical Inspection

X109

Question	Response
HEATING PLANT	
Burner Type	Oil
Heating Plant Oil Number	4
Boiler Auxiliaries	
Instance on Mezzanine	Inspected
Boiler Auxiliary Piping	
Instance on Mezzanine	Inspected
Instance Condition	3- Fair
Deficiency	No deficiencies recorded
Boiler Emergency Stop Switch	
Instance on Mezzanine	Inspected
Instance Condition	3- Fair
Deficiency	No deficiencies recorded
Boiler Feedwater System	
Instance on Mezzanine	Inspected
Instance Condition	3- Fair
Deficiency	No deficiencies recorded
Boiler Feedwater Treatment(Automatic)	
Instance on Mezzanine	Does not exist
Boiler Flue Exhaust	
Instance on Mezzanine	Inspected
Instance Condition	3- Fair
Deficiency	No deficiencies recorded
Boiler Make-up Water Backflow Preventer	
Instance on Mezzanine	Does not exist
Boiler Room Steam And Condensate Piping	
Instance on Mezzanine	Inspected
Instance Condition	3- Fair
Deficiency	No deficiencies recorded
Boiler Safety Valve	
Instance on Mezzanine	Inspected
Instance Condition	4- Between Fair and Poor
Deficiency	DEFECTIVE
Deficiency Location/Instance	Boiler Room @ Boiler #1
Deficiency Quantity	2
Quantity Uom	EACH
Potential Action	REPLACE
Urgency of Action	PRIORITY 5
Purpose of Action	LEVEL 6
Violations	No violations recorded
Boiler System	
Instance on Mezzanine	Inspected
Coal-fired Boiler	
Instance on Mezzanine	Does not exist
Hot Water Boiler	
Instance on Mezzanine	Does not exist
Modular Boiler	
Instance on Mezzanine	Does not exist
Steam Boiler	
Instance on Mezzanine	Inspected
Instance on Mezzanine	Inspected
Instance	Boiler Room
Instance Condition	3- Fair
Instance Quantity	4,053

**NYC Department of Education
Building Condition Assessment Survey 2023-2024**

Mechanical Inspection

X109

Question	Response
HEATING PLANT	
Boiler System	
Steam Boiler	
Instance Quantity Uom	MBH NET
Cast Iron Boiler?	No
Manufacturer	Farrar & Trefths, Inc
EquipmentId	42105-1
Capacity/Size Quantity	45
Capacity/Size UOM	Burner GPH
Source of Capacity/Size	Documented
Installation Year	1953
Source of Installation Year	Documented
Deficiency	No deficiencies recorded
Instance	Boiler Room
Instance Condition	3- Fair
Instance Quantity	4,053
Instance Quantity Uom	MBH NET
Cast Iron Boiler?	No
Manufacturer	Farrar & Trefths, Inc
EquipmentId	42105-2
Capacity/Size Quantity	45
Capacity/Size UOM	Burner GPH
Source of Capacity/Size	Documented
Installation Year	1953
Source of Installation Year	Documented
Deficiency	DAMAGED REFRACTORY
Deficiency Quantity	40
Quantity Uom	S.F.
Potential Action	REPLACE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Fuel System	
Instance on Mezzanine	Inspected
Boiler Fresh Air Louver/Damper	
Instance on Mezzanine	Inspected
Instance Condition	3- Fair
Type	Automatic
Deficiency	No deficiencies recorded
Burner/Burner Control Panel	
Instance on Mezzanine	Inspected
Instance Condition	3- Fair
Deficiency	No deficiencies recorded
Fuel Oil Storage/Supply System	
Instance on Mezzanine	Inspected
Instance Condition	3- Fair
Deficiency	FUEL OIL LEVEL GAUGE:DEFECTIVE
Deficiency Location/Instance	Boiler Room
Deficiency Quantity	2
Quantity Uom	EACH
Potential Action	MAINTENANCE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Deficiency	FUEL OIL PIPING:DEFECTIVE/LEAKS
Deficiency Location/Instance	Boiler Room

**NYC Department of Education
Building Condition Assessment Survey 2023-2024**

Mechanical Inspection

X109

Question	Response
HEATING PLANT	
Fuel System	
Fuel Oil Storage/Supply System	
Deficiency Quantity	1
Quantity Uom	EACH
Potential Action	MAINTENANCE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Gas Trains And Vent At The Boiler	
Instance on Mezzanine	Does not exist
Enclosed IDF Room	Does not exist
KITCHEN	Inspected
Instance on 1st Floor	Inspected
CO Detector	
Instance on 1st Floor	Inspected
Instance Condition	1- Good
Deficiency	No deficiencies recorded
Gas System	
Instance on 1st Floor	Does not exist
Grease Trap	
Instance on 1st Floor	Inspected
Instance Condition	2- Between Good and Fair
Deficiency	No deficiencies recorded
Hood	
Instance on 1st Floor	Inspected
Instance Condition	3- Fair
Deficiency	No deficiencies recorded
Hood Exhaust Ductwork	
Instance on 1st Floor	Inspected
Instance Condition	3- Fair
Deficiency	No deficiencies recorded
Hood Exhaust Fan	
Instance on 1st Floor	Inspected
Instance Condition	3- Fair
Deficiency	No deficiencies recorded
Hood Fire Suppression System	
Instance on 1st Floor	Does not exist
Hot Water Temperature Booster	
Instance on 1st Floor	Does not exist
Kitchen Sink	
Instance on 1st Floor	Inspected
Instance Condition	2- Between Good and Fair
Deficiency	No deficiencies recorded
MDF Room	Inspected
Instance on Room inside Computer Lab 215	Inspected
Dedicated A/C Equipment	
Instance on Room inside Computer Lab 215	Inspected
Instance Condition	3- Fair
Deficiency	No deficiencies recorded
SCIENCE DEMO ROOM	Does not exist
SCIENCE LAB	Does not exist
SCIENCE PREP ROOM	Does not exist
SPRINKLERS, STANDPIPE, FIRE SYSTEM	Inspected

**NYC Department of Education
Building Condition Assessment Survey 2023-2024**

Mechanical Inspection

X109

Question	Response
SPRINKLERS, STANDPIPE, FIRE SYSTEM	
Dry Sprinkler Alarm Valve Assembly	Does not exist
Wet Sprinkler Alarm Valve Assembly	Inspected
Condition	3- Fair
Deficiency	No deficiencies recorded
Fire Booster Pump Assembly	Does not exist
Roof Tank	Does not exist
Siamese Connection	Does not exist
Sprinkler Head	Inspected
Condition	3- Fair
Deficiency	DEFECTIVE/DETERIORATED
Deficiency Location/Instance	Rooms B18, M14, M17, M19, M24, 311 (painted, 11)
Deficiency Quantity	11
Quantity Uom	EACH
Potential Action	REPLACE
Urgency of Action	PRIORITY 5
Purpose of Action	LEVEL 6
Violations	No violations recorded
Sprinkler Piping	Inspected
Condition	3- Fair
Deficiency	No deficiencies recorded
Standpipe System	Does not exist
Water Gong	Does not exist
SWIMMING POOL	Does not exist
VENTILATION	Inspected
Is the building Mechanically ventilated?	Partial
Exhaust Fan	Inspected
Condition	3- Fair
Approximate Total # of Fans	1-25
Deficiency	DEFECTIVE
Deficiency Location/Instance	3rd Floor Roof / Exhaust Fan (Defective bearing)
Deficiency Quantity	1
Quantity Uom	EACH
Potential Action	MAINTENANCE
Urgency of Action	PRIORITY 3
Purpose of Action	LEVEL 2
Violations	No violations recorded
Heating And Ventilating Unit	Does not exist
Metal Ductwork	Inspected
Condition	3- Fair
Are there any uninsulated ductwork by design in Mechanical rooms?	Yes
Are there chain operated dampers?	Yes
Deficiency	No deficiencies recorded
Supply Fan	Inspected
Condition	3- Fair
Approximate Total # of Fans	1-5
Deficiency	No deficiencies recorded
Unit Ventilator	Does not exist