

May 3, 2023

**Ms. Denise Grattan**

Environmental Analyst 2  
Division of Environmental Permits  
NYSDEC Region 2  
47-40, 21<sup>st</sup> Street – 4<sup>th</sup> Floor  
Long Island City, NY 11101

- Re: • **NYC – HH – BELLEVUE HOSPITAL – 462 FIRST AVE, NEW YORK, NY 10016**  
• **DEC ID: 2-6206-00032/00004**  
• Air State Facility Renewal and Modification Application

Dear Ms. Grattan:

Attached is an Air State Facility Permit Renewal and Modification for NYC Health and Hospitals – Bellevue Hospital (DEC ID: 2-6206-00032/00004). In addition to permit renewal, the hospital is in the process of installing two (2) new natural gas fired co-generation Engines – Caterpillar G3516 each with 1982 kW rating. Also in order to meet NYSDEC's part 222 requirements, the following generators are participating in Demand Response (DR) Program: Four (4) Cat C27 generators on 13th floor, one (1) Caterpillar 3512C located on the ER Roof and One (1) Cummins 3100 located in basement. The rest of the generators (three) are for emergency purpose only and exempt.

This submission includes CLCPA Analysis and a draft Public Participation Plan per CP-29.

Should you have any further queries, do not hesitate to contact me at 914-788-4165 or email me at [madalyn@eespc.com](mailto:madalyn@eespc.com).

Very truly yours,

**ENVIRONMENTAL AND ENERGY SOLUTIONS, INC.**

**Madalyn Bozinski**

Senior Environmental Engineer

**New York State Department of Environmental Conservation  
Air Permit Application**



**Department of  
Environmental  
Conservation**

DEC ID											
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Application ID											
-											

Application Type	
<input checked="" type="checkbox"/> State Facility	<input type="checkbox"/> Title V

**Section I - Certification**

**Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information required to complete this application, I believe the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Responsible Official <b>Patrick Benn</b>	Title <b>Director of Engineering</b>
Signature	Date <b>4/26/23</b>

**Professional Engineer Certification**

I certify under penalty of law that I have personally examined, and am familiar with the statements and information submitted in this document and all its attachments as they pertain to the practice of engineering. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Professional Engineer <b>Rengasamy Kasinathan</b>	NYS License No. <b>072776-1</b>
Signature	Date <b>4/27/2023</b>



**Section II - Identification Information**

**Type of Permit Action Requested**

New	<input checked="" type="checkbox"/> Renewal	<input checked="" type="checkbox"/> Significant Modification	Administrative Amendment	Minor Modification
Application for the construction of a new facility		<input checked="" type="checkbox"/> Application involves the construction of new emission unit(s)		

**Facility Information**

Name <b>NYC-HHC/Bellevue Hospital</b>	
Location Address <b>462 First Avenue</b>	
<input checked="" type="checkbox"/> City / <input type="checkbox"/> Town / <input type="checkbox"/> Village <b>New York</b>	Zip <b>10016</b>

**Owner/Firm Information**

Name <b>The New York City Health and Hospitals Corporation</b>	Business Taxpayer ID <b>EX - 128307</b>		
Street Address <b>125 Worth Street</b>			
City <b>New York</b>	State/Province <b>NY</b>	Country <b>USA</b>	Zip <b>10013</b>
Owner Classification: <input type="checkbox"/> Federal <input type="checkbox"/> State <input checked="" type="checkbox"/> Municipal <input type="checkbox"/> Corporation/Partnership <input type="checkbox"/> Individual			

**Owner/Firm Contact Information**

Name <b>Patrick Benn</b>	Phone <b>(212)562-6295</b>		
E-mail Address <b>bennp4@nychhc.org</b>	Fax		
Affiliation <b>NYC-HH Bellevue Hospital</b>	Title <b>Director of Engineering</b>		
Street Address <b>462 First Avenue</b>			
City <b>New York</b>	State/Province <b>NY</b>	Country <b>USA</b>	Zip <b>10016</b>

**Facility Contact Information**

Name <b>Patrick Benn</b>	Phone <b>(212)562-6295</b>		
E-mail Address <b>bennp4@nychhc.org</b>	Fax		
Affiliation <b>NYC-HH Bellevue Hospital</b>	Title <b>Director of Engineering</b>		
Street Address <b>462 First Avenue</b>			
City <b>New York</b>	State/Province <b>NY</b>	Country <b>USA</b>	Zip <b>10016</b>

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Project Description		<input type="checkbox"/> Continuation Sheet(s)
<p>NYC HHC Bellevue Hospital is currently an Air State Facility. This application is for the renewal of the hospital's State Facility Permit. In addition to the renewal, the hospital is in the process of installing two (2) new natural gas fired co-generation Engines - Caterpillar G3516 each with 1982 kW rating. Also in order to meet NYSDEC's part 222 requirements, the following generators are participating in Demand Response (DR) Program. Four (4) Cat C27 generators on 13th floor, one (1) Caterpillar 3512C located on the ER Roof and One (1) Cummins 3100 located in basement. Rest of the generators (three) are for emergency purpose only.</p>		

**Section III - Facility Information**

Facility Classification					
<input checked="" type="checkbox"/> Hospital	<input type="checkbox"/> Residential	<input type="checkbox"/> Educational/Institutional	<input type="checkbox"/> Commercial	<input type="checkbox"/> Industrial	<input type="checkbox"/> Utility

Affected States (Title V Applications Only)					
<input type="checkbox"/> Vermont	<input type="checkbox"/> Massachusetts	<input type="checkbox"/> Rhode Island	<input type="checkbox"/> Pennsylvania	Tribal Land: _____	
<input type="checkbox"/> New Hampshire	<input checked="" type="checkbox"/> Connecticut	<input checked="" type="checkbox"/> New Jersey	<input type="checkbox"/> Ohio	Tribal Land: _____	

SIC Code(s)			NAICS Code(s)		
8062					

Facility Description		<input type="checkbox"/> Continuation Sheet(s)
<p>NYC HHC Bellevue Hospital is currently an Air State Facility. This application is for the renewal of the hospital's State Facility Permit. In addition to the renewal, the hospital is in the process of installing two (2) new natural gas fired co-generation Engines - Caterpillar / G3516H, each with 1982 kW rating. Also in order to meet NYSDEC's part 222 requirements, the following generators are participating in Demand Response (DR) Program. Four (4) Cat C27 generators on 13th floor, one (1) Caterpillar 3512C located on the ER Roof and One (1) Cummins 3100 located in the basement. Rest of the generators (three) are for emergency purpose only</p>		

Compliance Statements (Title V Applications Only)	
<p>I certify that as of the date of this application the facility is in compliance with all applicable requirements. Yes No</p> <p>If one or more emission units at the facility are not in compliance with all applicable requirements at the time of signing this application (the 'NO' box must be checked), the noncomplying units must be identified in the "Compliance Plan" block on page 8 of this form along with the compliance plan information required. For all emission units at the facility that are operating <u>in compliance</u> with all applicable requirements, complete the following:</p> <p><input type="checkbox"/> This facility will continue to be operated and maintained in such a manner as to assure compliance for the duration of the permit, except those emission units referenced in the compliance plan portion of this application.</p> <p><input type="checkbox"/> For all emission units subject to any applicable requirements that will become effective during the term of the permit, this facility will meet such requirements on a timely basis.</p> <p><input type="checkbox"/> Compliance certification reports will be submitted at least once per year. Each report will certify compliance status with respect to each applicable requirement, and the method used to determine the status.</p>	

Facility Applicable Federal Requirements										<input type="checkbox"/> Continuation Sheet(s)
Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause	
6	NYCRR	201	5	1	a					
6	NYCRR	201	5	4						
6	NYCRR	227	1	3	a					

Facility State Only Requirements										<input type="checkbox"/> Continuation Sheet(s)
Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause	
6	NYCRR	227	2	4	d					
6	NYCRR	227	1	2	a	2				
6	NYCRR	225	1	2	f					
6	NYCRR	225	1	6	f					

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**Facility Compliance Certification**  Continuation Sheet(s)

Rule Citation									
Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause
6	NYCRR	227	2	4	d				
Applicable Federal Requirement			* Capping		CAS Number		Contaminant Name		
State Only Requirement					NY210-00-0		OXIDES OF NITROGEN		

**Monitoring Information**

Work Practice Involving Specific Operations    Ambient Air Monitoring    \* Record Keeping/Maintenance Procedures

**Compliance Activity Description**

The total facility wide NOx Emissions will be limited to 24.9 tons/year

Work Practice Type Code	Process Material			Reference Test Method	
	Code	Description			
Monitored Parameter				Manufacturer's Name/Model Number	
Code	Description				
Limit		Limit Units			
Upper	Lower	Code	Description		
24.9		38	TONS PER YEAR		
Averaging Method		Monitoring Frequency		Reporting Requirements	
Code	Description	Code	Description	Code	Description
15	CALENDAR	09	ANNUALLY	09	ANNUALLY

**Facility Emissions Summary**  Continuation Sheet(s)

CAS Number	Contaminant Name	Potential to Emit (tons/yr)	Actual Emissions (pounds/yr)
0NY075 - 00 - 5	PM-10	51.64	5513.00
0NY750 - 02 - 5	PM-2.5	51.64	5513.00
007446 - 09 - 5	Sulfur Dioxide	91.57	2021.80
0NY210 - 00 - 0	Oxides of Nitrogen	1396.1	37,668.6
000630 - 08 - 0	Carbon Monoxide	331	64380
007439 - 92 - 1	Lead (elemental)	0.00	0.00
0NY998 - 00 - 0	Total Volatile Organic Compounds	135.9	43133.8
0NY100 - 00 - 0	Total Hazardous Air Pollutants	6.654	8663.02
0NY750 - 00 - 0	Carbon Dioxide Equivalent	250238.8131	41301021

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Section IV - Emission Unit Information

Emission Unit Description											✕ Continuation Sheet(s)
Emission Unit	U	-	0	0	0	0	0	1			
<p>This unit consists of Six (6) generators that participate in coordinated demand response program. Four (4) of the six generators are located on the 13th floor and emit via a common stack. Two other generators are in the Basement and on the ER Roof and emit via independent stacks.</p>											

Building Information					☐ Continuation Sheet(s)
Building ID	Building Name		Length (ft)	Width (ft)	Orientation
1	Main Building				
2	Main Building				

Emission Unit		Emission Unit Emissions Summary							✕ Continuation Sheet(s)
U	-	0	0	0	0	1			
CAS Number		Contaminant Name							
0NY075-00-0		PARTICULATE MATTER-10							
ERP (lbs/yr)		Potential to Emit			Actual Emissions				
		(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/hr)		(lbs/yr)		
73321		8.37	73321	8.37	837				
CAS Number		Contaminant Name							
0NY750-02-5		PARTICULATE MATTER-2.5							
ERP (lbs/yr)		Potential to Emit			Actual Emissions				
		(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/hr)		(lbs/yr)		
73321		8.37	73321	8.37	837				
CAS Number		Contaminant Name							
007446-09-5		SULFUR DIOXIDE							
ERP (lbs/yr)		Potential to Emit			Actual Emissions				
		(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/hr)		(lbs/yr)		
137182		15.66	137182	15.66	15.66				
CAS Number		Contaminant Name							
0NY210-00-0		OXIDES OF NITROGEN							
ERP (lbs/yr)		Potential to Emit			Actual Emissions				
		(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/hr)		(lbs/yr)		
2086106		238.14	2086106	238.14	23814				

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**Section IV - Emission Unit Information**

Emission Unit Description (continuation)											
Emission Unit	U	-	0	0	0	0	2				
<p>This emission unit consists of two (2) CHP units Caterpillar G3516H, each rated at 1982 kW and a combined capacity of 3964 kW or 43.6 MMBtu/Hr.</p> <p>These CHP units uses natural gas as their primary sources of fuel. Emissions from these CHP units will exit via two (2) different stacks (EP003 and EP004). The details of the emission sources are as follows:</p> <p>Emission Source - S0007</p> <p>S0007 - Caterpillar G3516H (operating on Natural Gas Only) - 21.8 MMBtu/Hr</p> <p>Emission Source - S0008</p> <p>S0008 - Caterpillar G3516H (operating on Natural Gas Only) - 21.8 MMBtu/Hr</p>											

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Section IV - Emission Unit Information

Emission Unit		Emission Unit Emissions Summary (continuation)			
U	- 0 0 0 0 1				
CAS Number		Contaminant Name			
0NY630-08-0		CARBON MONOXIDE			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
449388	51.3	449388	51.3	5130	
CAS Number		Contaminant Name			
0NY750-02-5		TOTAL VOLATILE ORGANIC COMPOUNDS			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
170294	19.4	170294	19.4	1944	
CAS Number		Contaminant Name			
007446-09-5		TOTAL HAZARDOUS AIR POLLUTANTS			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
3034.2	0.35	3034.2	0.35	34.6	
CAS Number		Contaminant Name			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
CAS Number		Contaminant Name			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
CAS Number		Contaminant Name			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
CAS Number		Contaminant Name			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	

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Section IV - Emission Unit Information

Emission Unit		Emission Unit Emissions Summary (continuation)			
U	-	0	0	0	2
CAS Number		Contaminant Name			
0NY075-00-5		PARTICULATES-10			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
4964	0.57	4964	0.57	4533	
CAS Number		Contaminant Name			
0NY750-02-5		PARTICULATES-2.5			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
4964	0.57	4964	0.57	4533	
CAS Number		Contaminant Name			
007446-09-5		SULFUR DIOXIDE			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
201.9	0.023	201.9	0.023	184.4	
CAS Number		Contaminant Name			
0NY210-00-0		OXIDES OF NITROGEN			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
106509	1.22	10650.9	1.22	9726.8	
CAS Number		Contaminant Name			
0NY630-08-0		CARBON MONOXIDE			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
63905	7.29	63905	7.29	58361	
CAS Number		Contaminant Name			
0NY750-02-5		TOTAL VOLATILE ORGANIC COMPOUNDS			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
44733.9	5.107	44733.9	5.107	40852.9	
CAS Number		Contaminant Name			
007446-09-5		TOTAL HAZARDOUS AIR POLLUTANTS			
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
9750.5	1.1131	9750.5	0.8572	8904.6	



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Emission Point Information							x Continuation Sheet(s)
Emission Point		0	0	0	0	1	
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section		
					Length (in)	Width (in)	
10	220	20		850	18	18	
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal	
138	18629.66	4510.2	586.5	1			
Emission Point		0	0	0	0	2	
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section		
					Length (in)	Width (in)	
10	148	90	6	850			
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal	
790.35	9314.83	4510.2	586.5	2			
Emission Point		0	0	0	0	3	
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section		
					Length (in)	Width (in)	
10	220	20	6	850			
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal	
474.21	5588.90	4510.2	586.5	2			

Emission Source/Control Information								x Continuation Sheet(s)	
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model Number		
ID	Type				Code	Description			
0	S	0	0	1	C			Caterpillar C 27	
Design Capacity	Design Capacity Units			Waste Feed		Waste Type			
	Code	Description		Code	Description	Code	Description		
7.50	25	Million BTU per Hour							
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model Number		
ID	Type				Code	Description			
0	S	0	0	2	C			Caterpillar C 27	
Design Capacity	Design Capacity Units			Waste Feed		Waste Type			
	Code	Description		Code	Description	Code	Description		
7.50	25	Million BTU per Hour							
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model Number		
ID	Type				Code	Description			
0	S	0	0	3	C			Caterpillar C 27	
Design Capacity	Design Capacity Units			Waste Feed		Waste Type			
	Code	Description		Code	Description	Code	Description		
7.50	C	Million BTU per Hour							

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Section IV - Emission Unit Information

Emission Point Information (continuation)											
Emission Unit					U - 0 0 0 0 2			Emission Point			
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section						
					Length (in)	Width (in)					
10	185	170	24	850							
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (km)	NYTM (N) (km)	Building	Distance to Property Line (ft)	Date of Removal					
42.29	7975.15	4510.2	586.5	ED							
Emission Unit					-			Emission Point			
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section						
					Length (in)	Width (in)					
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (km)	NYTM (N) (km)	Building	Distance to Property Line (ft)	Date of Removal					
Emission Unit					-			Emission Point			
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section						
					Length (in)	Width (in)					
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (km)	NYTM (N) (km)	Building	Distance to Property Line (ft)	Date of Removal					
Emission Unit					-			Emission Point			
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section						
					Length (in)	Width (in)					
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (km)	NYTM (N) (km)	Building	Distance to Property Line (ft)	Date of Removal					
Emission Unit					-			Emission Point			
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section						
					Length (in)	Width (in)					
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (km)	NYTM (N) (km)	Building	Distance to Property Line (ft)	Date of Removal					

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Section IV - Emission Unit Information

Emission Source/Control (continuation)										
Emission Unit		U - 0 0 0 0 0 1								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
0S004	C	2008	2008				CATERPILLAR C27			
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
7.50	25	MILLION BTU PER HOUR								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
ER006	C	2017	2018				CATERPILLAR 3512C			
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
15.00	25	MILLION BTU PER HOUR								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
BS007	C	2006	2006				CUMMINS 3100			
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
9.00	25	MILLION BTU PER HOUR								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
BS006	C	2008	2008	2017			CATERPILLAR 3512C			
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
15.00	25	MILLION BTU PER HOUR								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		

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Emission Source/Control (continuation)										
Emission Unit		U - 0 0 0 0 0 2								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
0S007	C	2023	2024				Caterpillar / G3516H			
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
21.8	25	MILLION BTU PER HOUR								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
0S008	C	2023	2024				Caterpillar / G3516H			
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
21.8	25	MILLION BTU PER HOUR								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		

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Process Information														
Emission Unit										U - 0 0 0 0 0 1	Process	G	E	N
Process Description														
Generators located on the 13th floor firing diesel fuel oil. Emission Source/Control: 0S001 - Combustion, Design Capacity: 750 kilowatts Emission Source/Control: 0S002 - Combustion, Design Capacity: 750 kilowatts Emission Source/Control: 0S003 - Combustion, Design Capacity: 750 kilowatts Emission Source/Control: 0S004 - Combustion, Design Capacity: 750 kilowatts														
Source Classification Code (SCC)		Total Throughput		Throughput Quantity Units										
		Quantity/Hr	Quantity/Yr	Code	Description									
10300502		212.77	21277	0605	Gallons									
Confidential Operating at Maximum Capacity		Operating Schedule		Building	Floor/Location									
		Hours/Day	Days/Year		13th Floor									
		1	100	1										
Emission Point Identifier(s)														
00001														
Emission Source/Control Identifier(s)														
0S001		0S002		0S003		0S004								
Emission Unit										U - 0 0 0 0 0 1	Process	G	E	G
Process Description														
Generators located on the ER Roof and basement, respectively, both firing diesel fuel oil. Emission Source/Control: ER006 - Combustion, Design Capacity: 1500 kilowatts Emission Source/Control: BS007 - Combustion, Design Capacity: 900 kilowatts														
Source Classification Code (SCC)		Total Throughput		Throughput Quantity Units										
		Quantity/Hr	Quantity/Yr	Code	Description									
10300502		170.21	17021	0605	Gallons									
Confidential Operating at Maximum Capacity		Operating Schedule		Building	Floor/Location									
		Hours/Day	Days/Year		Basement									
		1	100	2										
Emission Point Identifier(s)														
00002		00003												
Emission Source/Control Identifier(s)														
ER006		BS007												

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Process Emissions Summary										x Continuation Sheet(s)				
Emission Unit	U - 0 0 0 0 1										Process		GEN	
CAS Number	Contaminant Name			% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY075-00-5	PARTICULATES-10						4.65	03						
Potential to Emit			Standard Units	Potential to Emit How Determined	Actual Emissions									
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)								
4.65	40734			03	4.65	465								
Emission Unit	U - 0 0 0 0 1										Process		GEN	
CAS Number	Contaminant Name			% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY750-02-5	PARTICULATES-2.5						4.65	03						
Potential to Emit			Standard Units	Potential to Emit How Determined	Actual Emissions									
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)								
4.65	40734			03	4.65	465								
Emission Unit	U - 0 0 0 0 1										Process		GEN	
CAS Number	Contaminant Name			% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
007446-09-5	SULFUR DIOXIDE						8.7	03						
Potential to Emit			Standard Units	Potential to Emit How Determined	Actual Emissions									
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)								
8.7	76212			03	8.7	870								

Emission Source Emissions Summary										Continuation Sheet(s)				
Emission Source											Process			
CAS Number	Contaminant Name			% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
Potential to Emit			Standard Units	Potential to Emit How Determined	Actual Emissions									
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)								
Emission Source											Process			
CAS Number	Contaminant Name			% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
Potential to Emit			Standard Units	Potential to Emit How Determined	Actual Emissions									
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)								
Emission Source											Process			
CAS Number	Contaminant Name			% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
Potential to Emit			Standard Units	Potential to Emit How Determined	Actual Emissions									
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)								

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Section IV - Emission Unit Information

Process Emissions Summary (continuation)															
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	N
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY210-00-0	OXIDES OF NITROGEN							132.3	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
132.3	1158948				03			132.3	13230						
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	N
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
000630-08-0	CARBON MONOXIDE							28.5	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
28.5	249660				03			28.5	2850						
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	N
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY988-00-0	TOTAL VOLATILE ORGANIC COMPOUNDS							10.8	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
10.8	94608				03			10.8	1080						
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	N
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY100-00-0	TOTAL HAZARDOUS AIR POLLUTANTS							0.1924	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
0.1924	1685.73				03			0.1924	19.24						
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	G
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY075-00-5	PARTICULATES-10							3.72	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
3.72	32587				03			3.72	372						

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Section IV - Emission Unit Information

Process Emissions Summary (continuation)															
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	G
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY210-00-0	OXIDES OF NITROGEN							105.84	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
105.84	927158				03			105.84	10584						
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	G
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
000630-08-0	CARBON MONOXIDE							22.8	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
22.8	199728				03			22.8	2280						
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	G
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY988-00-0	TOTAL VOLATILE ORGANIC COMPOUNDS							8.64	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
8.64	75686				03			8.64	864						
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	G
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY100-00-0	TOTAL HAZARDOUS AIR POLLUTANTS							0.1539	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
0.1539	1348.58				03			0.1539	15.39						
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	G
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY075-00-5	PARTICULATES-2.5							3.72	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
3.72	32587				03			3.72	372						



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Section IV - Emission Unit Information

Process Emissions Summary (continuation)															
Emission Unit		U - 0 0 0 0 0 1									Process		G	E	G
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
007446-09-5	SULFUR DIOXIDE							6.96	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
6.96	60970				03			6.96	696						
Emission Unit		U - 0 0 0 0 0 2									Process		C	H	P
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
000630-08-0	CARBON MONOXIDE							20.4264	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
7.29	63905				03			7.29	58361						
Emission Unit		U - 0 0 0 0 0 2									Process		C	H	P
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY988-00-0	TOTAL VOLATILE ORGANIC COMPOUNDS							5.107	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
5.107	44733.89				03			5.107	40852.86						
Emission Unit		U - 0 0 0 0 0 2									Process		C	H	P
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY100-00-0	TOTAL HAZARDOUS AIR POLLUTANTS							1.1131	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
1.1131	9750.48				03			1.1131	8904.55						
Emission Unit		U - 0 0 0 0 0 2									Process		C	H	P
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY075-00-5	PARTICULATES-2.5							0.567	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
0.567	4964				03			0.567	4533						

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Section IV - Emission Unit Information

Process Emissions Summary (continuation)															
Emission Unit		U - 0 0 0 0 0 2									Process		C	H	P
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY075-00-5	PARTICULATES-10							0.567	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
0.567	4964				03			0.567	4533						
Emission Unit		U - 0 0 0 0 0 2									Process		C	H	P
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
007446-09-5	SULFUR DIOXIDE							0.0231	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
0.0231	201.9				03			0.0231	184.4						
Emission Unit		U - 0 0 0 0 0 2									Process		C	H	P
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
0NY210-00-0	OXIDES OF NITROGEN							1.216	03						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
1.216	10650				03			1.216	9726.9						
Emission Unit		-									Process				
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						
Emission Unit		-									Process				
CAS No.	Contaminant Name				% Throughput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined						
PTE			Standard Units		PTE How Determined			Actual							
(lbs/hr)	(lbs/yr)	(standard units)						(lbs/hr)	(lbs/yr)						

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Emission Unit	Emission Point	Process	Emission Source	Emission Unit Applicable Federal Requirements							Continuation Sheet(s)		
				Title	Type	Part	Subpart	Section	Subdiv.	Parag.	Subparag.	Cl.	Subcl.

Emission Unit	Emission Point	Process	Emission Source	Emission Unit State Only Requirements							Continuation Sheet(s)		
				Title	Type	Part	Subpart	Section	Subdiv.	Parag.	Subparag.	Cl.	Subcl.
U-00002	00004	CHP	S0007	6	NYCRR	227	2	4	d				
U-00002	00004	CHP	S0007	6	NYCRR	227	1	3	a				
U-00002	00004	CHP	S0008	6	NYCRR	227	2	4	d				
U-00002	00004	CHP	S0008	6	NYCRR	227	1	3	a				

**Emission Unit Compliance Certification**  Continuation Sheet(s)

**Rule Citation**

Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause
6	NYCRR	227	2	4	d				

Applicable Federal Requirement      State Only Requirement      \* Capping

Emission Unit	Emission Point	Process	Emission Source	CAS Number	Contaminant Name
U-00003	00004	CHP	0S007,0S008	0NY210-00-0	OXIDES OF NITROGEN

**Monitoring Information**

Continuous Emission Monitoring      Monitoring of a Process or Control Device Parameters as a Surrogate  
 Intermittent Emission Testing      Work Practice Involving Specific Operations  
 Ambient Air Monitoring      \* Record Keeping/Maintenance Procedures

**Compliance Activity Description**

The total facility wide NOx emissions will be limited to 24.9 tons per year.

Work Practice Type Code	Process Material		Reference Test Method		
	Code	Description			
Monitored Parameter			Manufacturer's Name/Model Number		
Code	Description				
Limit		Limit Units			
Upper	Lower	Code	Description		
Averaging Method		Monitoring Frequency		Reporting Requirements	
Code	Description	Code	Description	Code	Description

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**Determination of Non-Applicability (Title V Applications Only)**  Continuation Sheet(s)

Rule Citation									
Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause
Emission Unit	Emission Point	Process	Emission Source	Applicable Federal Requirement					
				State Only Requirement					

**Non-Applicability Description**

**Rule Citation**

Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause
Emission Unit	Emission Point	Process	Emission Source	Applicable Federal Requirement					
				State Only Requirement					

**Non-Applicability Description**

**Compliance Plan**  Continuation Sheet(s)

For any emission units which are not in compliance at the time of permit application, the applicant shall complete the following:

Consent Order  Certified progress reports are to be submitted every 6 months beginning / /

Emission Unit	Process	Emission Source	Applicable Federal Requirement										
			Title	Type	Part	Subpart	Section	Subdiv.	Parag.	Subparag.	Clause	Subcl.	

Remedial Measures and Intermediate Milestones	R/I	Date Scheduled
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**Request for Emission Reduction Credits**  Continuation Sheet(s)

Emission Source

**Emission Reduction Description**

**Contaminant Emission Reduction Data**

Baseline Period ____/____/____ to ____/____/____		Reduction	
		Date	Method
CAS Number	Contaminant Name	ERC (lbs/yr)	
		Netting	Offset

**Facility to Use Future Reduction**

Name  Application ID

Location Address

City/ Town / Village  State  Zip

**Use of Emission Reduction Credits**  Continuation Sheet(s)

Emission Source

**Proposed Project Description**

**Contaminant Emissions Increase Data**

CAS Number	Contaminant Name	Project Emission Potential (lbs/yr)

**Statement of Compliance**

All facilities under the ownership of this "owner/firm" are operating in compliance with all applicable requirements and state regulations including any compliance certification requirements under Section 114(a)(3) of the Clean Air Act Amendments of 1990, or are meeting the schedule of a consent order.

**Source of Emission Reduction Credit - Facility**

Name  Permit ID

Location Address

City/ Town / Village  State  Zip

Emission Source	CAS Number	Contaminant Name	ERC (lbs/yr)	
			Netting	Offset

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Supporting Documentation and Attachments	
Required Supporting Documentation	Date of Document
<input checked="" type="checkbox"/> List of Exempt Activities (attach form)	01/11/2022
<input type="checkbox"/> Plot Plan	
<input type="checkbox"/> Process Flow Diagram	
<input checked="" type="checkbox"/> Methods Used to Determine Compliance (attach form)	01/11/2022
<input checked="" type="checkbox"/> Emissions Calculations	01/11/2022
Optional Supporting Documentation	Date of Document
<input type="checkbox"/> Air Quality Model	
<input type="checkbox"/> Confidentiality Justification	
<input type="checkbox"/> Ambient Air Quality Monitoring Plan or Reports	
<input type="checkbox"/> Stack Test Protocol	
<input type="checkbox"/> Stack Test Report	
<input type="checkbox"/> Continuous Emissions Monitoring Plan	
<input type="checkbox"/> Lowest Achievable Emission Rate (LAER) Demonstration	
<input type="checkbox"/> Best Available Control Technology (BACT) Demonstration	
<input type="checkbox"/> Reasonably Available Control Technology (RACT) Demonstration	
<input type="checkbox"/> Toxic Impact Assessment (TIA)	
<input type="checkbox"/> Environmental Rating Demonstration	
<input type="checkbox"/> Operational Flexibility Protocol/Description of Alternate Operating Scenarios	
<input type="checkbox"/> Title IV Permit Application	
<input type="checkbox"/> Emission Reduction Credit (ERC) Quantification (attach form)	
<input type="checkbox"/> Baseline Period Demonstration	
<input type="checkbox"/> Use of Emission Reduction Credits (attach form)	
<input type="checkbox"/> Analysis of Contemporaneous Emissions Increase/Decrease	
Other Supporting Documentation	Date of Document

## **List of Exempt Activities**

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Date of Form
01/11/2022

List of Exempt Activities

**Instructions**

Applicants for Title V facility permits must provide a listing of each exempt activity, as described in 6 NYCRR Part 201-3.2(c), that is currently operated at the facility. This form must be provided with each application for a new Title V facility permit and Title V facility permit renewal, or whenever changes are necessary. In order to complete this form, enter the number and building location of each exempt activity conducted. Building IDs used on this form should match those used in the Title V permit application. Provide all additional information where requested. If a listed activity is not operated at the facility, leave the corresponding information blank.

Rule Citation	Description	Number of Activities	Building Location
201-3.2(c)			
<b>Combustion</b>			
(1)	Stationary or portable combustion installations where the furnace has a maximum rated heat input capacity less than 10 MMBtu/hr burning liquid or gaseous fuels; or a maximum heat input capacity of less than 1 MMBtu/hr burning solid fuels. This activity does not include combustion installations burning any material classified as solid waste, as defined in 6 NYCRR Part 360, hazardous waste, as defined in 6 NYCRR Part 371, or waste oil, as defined in 6 NYCRR Subpart 225-2.  <b><u>For each activity listed, attach documentation indicating the date of construction, heat input (MMBtu/hr), and the type of fuel combusted.</u></b>		
(2)	Space heaters burning waste oil at eligible facilities, as defined in 6 NYCRR Subpart 225-2, generated on-site or at a facility under common control, alone or in conjunction with used oil generated by a do-it-yourself oil changer as described in 6 NYCRR Subpart 374-2.		
(3)(i)	Stationary or portable internal combustion engines that are liquid or gaseous fuel powered and located within the New York City metropolitan area or the Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, or Woodbury, and have a maximum mechanical power rating of less than 200 brake horsepower.  <b><u>For each activity listed, attach documentation indicating the date of construction, engine model year, engine rating (hp), displacement (L/cylinder), type of fuel combusted, and EPA issued certificate of conformity.</u></b>		



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Air Permit Application



Department of  
Environmental  
Conservation

DEC ID											
2	-	6	2	0	6	-	0	0	0	3	2

Date of Form
01/11/2022

Rule Citation	Description	Number of Activities	Building Location
201-3.2(c)			
(3)(ii)	Stationary or portable internal combustion engines that are liquid or gaseous fuel powered and located outside of the New York City metropolitan area or the Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, or Woodbury, and have a maximum mechanical power rating of less than 400 brake horsepower.  <b><u>For each activity listed, attach documentation indicating the date of construction, engine model year, engine rating (hp), displacement (L/cylinder), type of fuel combusted, and EPA issued certificate of conformity.</u></b>		
(3)(iii)	Stationary or portable internal combustion engines that are gasoline powered and have a maximum mechanical power rating of less than 50 brake horsepower.		
(4)	Reserved.		
(5)	Gas turbines with a heat input at peak load less then 10 MMBtu/hour		
(6)	Emergency power generating stationary internal combustion engines, as defined in 6 NYCRR Part 200.1(cq). Stationary internal combustion engines used for peak shaving and/or demand response programs are not exempt.  <b><u>For each activity listed, attach documentation indicating the date of construction, engine model year, engine rating (hp), displacement (L/cylinder), type of fuel combusted, and EPA issued certificate of conformity.</u></b>	3	Main Building
<b>Combustion Related</b>			
(7)	Non-contact water cooling towers and water treatment systems for process cooling water and other water containers designed to cool, store or otherwise handle water that has not been in direct contact with gaseous or liquid process streams.		
<b>Agricultural</b>			
(8)	Feed and grain milling, cleaning, conveying, drying and storage operations including grain storage silos, where such silos exhaust to an appropriate emissions control device, excluding grain terminal elevators with permanent storage capacities over 2.5 million U.S. bushels, and grain storage elevators with capacities above one million bushels.		

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Rule Citation	Description	Number of Activities	Building Location
201-3.2(c)			
(9)	Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.		
<b>Commercial - Food Service Industries</b>			
(10)	Flour silos at bakeries, provided all such silos are exhausted through an appropriate emission control device.		
(11)	Emissions from flavorings added to a food product where such flavors are manually added to the product.		
<b>Commercial - Graphic Arts</b>			
(12)	Screen printing inks/coatings or adhesives which are applied by a hand-held squeegee. A hand-held squeegee is one that is not propelled through the use of mechanical conveyance and is not an integral part of the screen printing process.		
(13)	Graphic arts processes at facilities located outside the New York City metropolitan area or the Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, or Woodbury whose facility-wide total emissions of volatile organic compounds from inks, coatings, adhesives, fountain solutions and cleaning solutions are less than three tons during any 12-month period.		
(14)	Graphic label and/or box labeling operations where the inks are applied by stamping or rolling.		
(15)	Graphic arts processes which are specifically exempted from regulation under 6 NYCRR Part 234, with respect to emissions of volatile organic compounds which are not given an A rating as described in 6 NYCRR Part 212.		
<b>Commercial - Other</b>			
(16)	Gasoline dispensing sites registered with the department pursuant to 6 NYCRR Part 613.		

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Rule Citation	Description	Number of Activities	Building Location
201-3.2(c)			
(17)	<p>Surface coating and related activities at facilities which use less than 25 gallons per month of total coating materials, or with actual volatile organic compound emissions of 1,000 pounds or less from coating materials in any 12-month period. Coating materials include all paints and paint components, other materials mixed with paints prior to application, and cleaning solvents, combined. This exemption is subject to the following:</p> <p>(i) The facility is located outside of the New York City metropolitan area or the Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, or Woodbury; and</p> <p>(ii) All abrasive cleaning and surface coating operations are performed in an enclosed building where such operations are exhausted into appropriate emission control devices.</p>		
(18)	Abrasive cleaning operations which exhaust to an appropriate emission control device.		
(19)	Ultraviolet curing operations.		
<b>Municipal/Public Health Related</b>			
(20)	Landfill gas ventilating systems at landfills with design capacities less than 2.5 million megagrams (3.3 million tons) and 2.5 million cubic meters (2.75 million cubic yards), where the systems are vented directly to the atmosphere, and the ventilating system has been required by, and is operating under, the conditions of a valid 6 NYCRR Part 360 permit, or order on consent.		
<b>Storage Vessels</b>			
(21)	Distillate fuel oil, residual fuel oil, and biodiesel storage tanks with storage capacities below 300,000 barrels.		
(22)	Pressurized fixed roof tanks which are capable of maintaining a working pressure at all times to prevent emissions of volatile organic compounds to the outdoor atmosphere.		
(23)	External floating roof tanks which are of welded construction and are equipped with a metallic-type shoe primary seal and a secondary seal from the top of the shoe seal to the tank wall.		

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Rule Citation	Description	Number of Activities	Building Location
201-3.2(c)			
(24)	External floating roof tanks which are used for the storage of a petroleum or volatile organic liquid with a true vapor pressure less than 4.0 psi (27.6 kPa), are of welded construction and are equipped with one of the following:  (i) a metallic-type shoe seal;  (ii) a liquid-mounted foam seal;  (iii) a liquid-mounted liquid-filled type seal; or  (iv) equivalent control equipment or device.		
(25)	Storage tanks, including petroleum liquid storage tanks as defined in 6 NYCRR Part 229, and liquid asphalt storage tanks with capacities less than 10,000 gallons, except those subject to 6 NYCRR Part 229 or Part 233.		
(26)	Horizontal petroleum or volatile organic liquid storage tanks.		
(27)	Storage of solid materials, provided all such storage is exhausted through an appropriate emission control device. This exemption does not include raw material, clinker, or finished product storage at Portland cement plants.		
<b>Industrial</b>			
(28)	Processing equipment at existing sand and gravel and stone crushing plants which were installed or constructed before August 31, 1983, where water is used for operations such as wet conveying, separating, and washing. This exemption does not include processing equipment at existing sand and gravel and stone crushing plants where water is used for dust suppression.		
(29)(i)	Sand and gravel, crushed stone, concrete, or recycled asphalt processing lines at non-metallic mineral processing facilities that are a permanent or fixed installation with a maximum rated processing capacity of 25 tons of minerals per hour or less.		
(29)(ii)	Sand and gravel, crushed stone, concrete, or recycled asphalt processing lines at non-metallic mineral processing facilities that are a portable emission source with a maximum rated processing capacity of 150 tons of minerals per hour or less.		

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Rule Citation 201-3.2(c)	Description	Number of Activities	Building Location
(29)(iii)	Sand and gravel, crushed stone, concrete, or recycled asphalt processing lines at non-metallic mineral processing facilities that are used exclusively to screen minerals at a facility where no crushing or grinding takes place.		
(30)	Reserved.		
(31)	Surface coating operations which are specifically exempted from regulation under 6 NYCRR Subparts 228-1 and 228-2, with respect to emissions of volatile organic compounds which are not given an A rating pursuant to 6 NYCRR Part 212.		
(32)	Pharmaceutical tablet branding operations.		
(33)	Thermal packaging operations, including, but not limited to, thermage labeling, blister packing, shrink wrapping, shrink banding, and carton gluing.		
(34)	Powder coating operations.		
(35)	All tumblers used for the cleaning and/or deburring of metal products without abrasive blasting.		
(36)	Presses used exclusively for molding or extruding plastics except where halogenated polymers are used or where halogenated carbon compounds or hydrocarbon solvents are used as foaming agents.		
(37)	Concrete batch plants where the cement weigh hopper and all bulk storage silos are exhausted through fabric filters, and the batch drop point is controlled by a shroud or other emission control device.		
(38)	Cement storage operations not located at Portland cement plants where materials are transported by screw or bucket conveyors.		
(39)(i)	Cold cleaning degreasers with an open surface area of 11 square feet or less and an internal volume of 93 gallons or less or, having an organic solvent loss of 3 gallons per day or less.		
39(ii)	Conveyorized degreasers with an air/vapor interface smaller than 22 square feet (2 square meters), unless subject to the requirements of 40 CFR 63 Subpart T.		
(39)(iii)	Open-top vapor degreasers with an open-top area smaller than 11 square feet (1.0 square meter), unless subject to the requirements in 40 CFR 63, Subpart T.		
<b>Miscellaneous</b>			
(40)	Ventilating and exhaust systems for laboratory operations. This exemption does not include laboratory operations used to produce products for sale except in a de minimis manner.		

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Rule Citation 201-3.2(c)	Description	Number of Activities	Building Location
(41)	Exhaust or ventilating systems for the melting of gold, silver, platinum and other precious metals.		
(42)	Exhaust systems for paint mixing, transfer, filling or sampling and/or paint storage rooms or cabinets, provided the paints stored within these locations are stored in closed containers when not in use.		
(43)	Exhaust systems for solvent transfer, filling or sampling, and/or solvent storage rooms provided the solvents are stored in closed containers when not in use.		
(44)	Reserved		
(45)	The application of odor counteractants and/or neutralizers.		
(46)	Hydrogen, natural gas, and methane fuel cells.		
(47)	Dry cleaning equipment that uses only water-based cleaning processes or those using liquid carbon dioxide.		
(48)	Manure spreading, handling and storage at farms and agricultural facilities.		
(49)	Covered manure storage at farms that exhausts to a flare or other appropriate emission control device. This activity does not include anaerobic digestion processes operating with or without stationary or portable combustion installations.		
(50)	Coffee roasting processes which have a maximum operating capacity of 3 kilograms or less of green coffee beans per batch and no greater than 25 tons of green coffee beans per year, that are vented through an unobstructed, vertical stack that ensures proper dispersion of air contaminants.		
(51)	Process emission sources at breweries with total combined beer and/or malt liquor production of 60,000 barrels per year or less.		
(52)	Process emission sources at wineries with total combined wine and/or brandy production of 700,000 gallons per year or less.		
(53)	Process emission sources at distilleries with 10,000 distiller's bushels of grain input per year or less.		
(54)	Process emission sources at wood and lumber drying kilns with an annual throughput of untreated wood of 275,000 board feet or less.		

## **Methods Used to Determine Compliance**

**New York State Department of Environmental Conservation**  
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Methods Used to Determine Compliance			
Emission Unit ID	Applicable Requirement	Method Used to Determine Compliance	Compliance Date
Facility	6 NYCRR 201.5.a.1 6 NYCRR 201.4	The facility will submit compliance reports to DEC	
Facility	6 NYCRR 202-2.1	The facility's total 12 month rolling NOx will be capped under 24.9 tpy to maintain state facility permit status	
U-00002	6 NYCRR 227-1.3(a)	Opacity of stack emissions are below 20%	



# **Emissions Calculations**

# EXHIBIT 1

NYC-HH - New Bellevue Hospital  
462 First Avenue, New York, NY 10016

## Section 1: MAXIMUM ANNUAL (ACTUAL & POTENTIAL) FUEL CONSUMPTION FOR the 2 Cogen Engines

Number	Equipment	Year Manufactured	Location	Serial #	Rating (kW)	Maximum Heat Input (million BTU/hr)	Fuel Type		Maximum Hourly Capacity (CFH)	Actual Annual Usage (CFY)	Maximum Annual (Potential to Emit) Capacity (CFY)
							Primary	Secondary			
1	Caterpillar / G3516H				1982	21.80	Natural Gas	None	21374.51	170,996,078	187,240,706
2	Caterpillar / G3516H				1982	21.80	Natural Gas	None	21374.51	170,996,078	187,240,706
<b>2 Cogen Engines</b>					<b>TOTAL</b>	<b>3964.00</b>	<b>43.60</b>		<b>42749.0</b>	<b>341,992,157</b>	<b>374,481,412</b>

1. Rating in KW, MMBTU/Hr provided by the facility, otherwise the equivalent KW was calculated (1 KW = 1.25 KVA, 1 KW = 1.34 HP)

2) Maximum Hourly Capacity in cubic foot per hour = (The Maximum Heat Input) / 1020 Btu/scf / 1000000

3. Maximum Annual (Potential to Emit) Capacity = Maximum Hourly Capacity x Maximum Operating Hours per Year

Heating Value of Natural Gas

1020 Btu/SCF

## EXHIBIT 2

**NYC-HH - New Bellevue Hospital**  
462 First Avenue, New York, NY 10016

### Section 1: MAXIMUM ANNUAL (ACTUAL & POTENTIAL) FUEL CONSUMPTION FOR the 6 Demand Response GENERATORS

Number	Equipment	Year Manufactured	Location	Serial #	Rating (kW)	Maximum Heat Input (million BTU/hr)	Fuel Type		Maximum Hourly Capacity (GPH)	Actual Annual Usage (GPY)	Maximum Annual (Potential to Emit) Capacity (GPY)
							Primary	Secondary			
1	Cat C27	2008	13th Floor/Main Building	AFN03262	750	7.50	Diesel	None	53.19	5,319	465,957
2	Cat C27	2008	13th Floor/Main Building	AFN03263	750	7.50	Diesel	None	53.19	5,319	465,957
3	Cat C27	2008	13th Floor/Main Building	AFN03264	750	7.50	Diesel	None	53.19	5,319	465,957
4	Cat C27	2008	13th Floor/Main Building	AFN03265	750	7.50	Diesel	None	53.19	5,319	465,957
5	Caterpillar 3512C	2017	ER Roof	G4W00628	1500	15.00	Diesel	None	106.38	10,638	931,915
6	Cummins 3100	2006	Basmenet		900	9.00	Diesel	None	63.83	6,383	559,149
<b>6 PLM/CDRP GENERATORS</b>						<b>54.00</b>			<b>383.0</b>	<b>38,298</b>	<b>3,354,894</b>

Total NOx tpy: 8.425531915

1. Rating in KVA provided by the facility , the equivalent KW was calculated (1 KW = 1.25 KVA, 1 KW = 1.34 HP)
2. The Maximum Heat Input for Diesel = (Maximum Hourly Capacity in gallons per hour) x 141,000 Btu/gallon
3. Maximum Annual (Potential to Emit) Capacity = Maximum Hourly Capacity x Maximum Operating Hours per Year

### Other Emergency Generators

Number	Equipment	Year Manufactured	Location	Serial #	Rating (kW)	Maximum Heat Input (million BTU/hr)	Fuel Type		Maximum Hourly Capacity (GPH)	Actual Annual Usage (GPY)	Maximum Annual (Potential to Emit) Capacity (GPY)
							Primary	Secondary			
1	Rudox RM900S/Engine: Mitsubishi S12N	1993	13th Floor/Main Building	11026	600	6.00	Diesel	None	42.55	2,213	372,766
2	Cat D399	1996	Ground	35B262	600	6.00	Diesel	None	42.55	2,213	372,766
3	Cat D399	1996	Ground	35B263	600	6.00	Diesel	None	42.55	2,213	372,766
<b>3 Emergency GENERATORS</b>						<b>18.00</b>			<b>127.7</b>	<b>6,638</b>	<b>1,118,298</b>

**EXHIBIT 3**  
**NYC-HH - New Bellevue Hospital**  
**462 First Avenue, New York, NY 10016**

**ESTIMATION OF EMISSIONS OF REGULATED AIR CONTAMINANTS FROM THE TWO NEW CHP UNITS**

Hazardous Air Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual Emission Rate from CHP Unit (TONS PER YEAR)	
	Natural Gas	Natural Gas	Natural Gas	Natural Gas	ACTUAL	POTENTIAL
	lb/(million BTU)	lb/hr	lb/yr	lb/yr		
		42,749.0 39	341,992,156.9 313,607	374,481,411.8 343,399		
Benzene	1.58E-03	0.0619	495.4988	542.5711	0.2477	0.2713
Toulene	5.58E-04	0.0219	174.9926	191.6169	0.0875	0.0958
Xylene	1.95E-04	0.0076	61.1533	66.9629	0.0306	0.0335
Formaldehyde	2.05E-02	0.8036	6428.9396	7039.6888	3.2145	3.5198
Acetaldehyde	2.79E-03	0.1094	874.9630	958.0845	0.4375	0.4790
Acrolein	2.63E-03	0.1031	824.7859	903.1406	0.4124	0.4516
Total Poly Aromatic Hydrocarbons	1.41E-04	0.0055	44.2186	48.4193	0.0221	0.0242
<b>Total Hazardous Air Pollutants from Two (2) CHP Units</b>		<b>1.1131</b>	<b>8904.5517</b>	<b>9750.4841</b>	<b>4.4523</b>	<b>4.8752</b>

Criteria Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual Emission Rate from CHP Unit (TONS PER YEAR)	
	Natural Gas	Natural Gas	Natural Gas	Natural Gas	ACTUAL	POTENTIAL
	lb/(million BTU.)	lb/hr	lb/yr	lb/yr		
		42,749.0 39	341,992,157 313,607	374,481,412 343,399		
Particulates	0.0289	1.1333	9066.37	9927.68	4.5332	4.9638
Sulfur Dioxide	0.0006	0.0231	184.40	201.92	0.0922	0.1010
Oxides of Nitrogen <sup>7</sup>	0.10 g/bhp-hr	1.2159	9726.87	10650.93	4.8634	5.3255
Carbon Monoxide <sup>7</sup>	0.60 g/bhp-hr	7.2952	58361.23	63905.55	29.1806	31.9528
Volatile Organic Compounds (VOCs) <sup>7</sup>	0.42 g/bhp-hr	5.1066	40852.86	44733.89	20.4264	22.3669
<b>Total Criteria Pollutants from Two (2) CHP Units</b>					<b>59.0959</b>	<b>64.7100</b>

Pollutants GHG Emissions	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Annual Emission Rate from CHP Unit (TONS PER YEAR)	
	lb/(million BTU.)	lb/hr	lb/yr	lb/yr	ACTUAL	POTENTIAL
		42,749 39	341,992,157 313,607	374,481,412 343,399		
Carbon Dioxide (CO <sub>2</sub> )	116.98	4585.60	36,684,826.59	40,169,885.11	1.83E+04	2.01E+04
Methane (CH <sub>4</sub> )	0.0022	0.08642	691.38	757.07	3.46E-01	3.79E-01
Nitrous Oxide (N <sub>2</sub> O)	0.00022	0.008642	69.14	75.71	3.46E-02	3.79E-02
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e)</b>					<b>18361.36</b>	<b>20105.69</b>

- 1 U.S. EPA Air Pollution Engineering Manual (AP-42), Chapter 3.2, table 3.2-3.
2. Emission Factors are for uncontrolled natural gas fired 4-stroke rich-burn reciprocating engines
3. Annual Emission Rate for NO<sub>x</sub> and CO (lb/yr) = (Emission Factor (g/bhp-hr) x bhp(max) x (1 lb/454 g)) x 8760 hours. - Based on Emissions guarantee from the Manufacturer with 90% SCR NO<sub>x</sub> reduction
4. Annual Emission Rate for other criteria pollutants = Emission Factor (lb/million BTU) x Fuel Consumption (BTU/yr).
5. Total Emission Rate (ton/yr) = Annual Emission Rate (lb/yr) / 2000 (lb/ton).
6. Global Warming Potentials (GWPs) for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O are 1, 25, and 298 respectively (40 CFR 98 Subpart A).
7. Emission factors for NO<sub>x</sub>, CO, and VOCs provided by manufacturer's specifications

# STEULER

- Specification Sheet -

## SCR/Oxidation Catalyst System - For NOx/CO/VOC Reduction

Customer: H.O. Penn Machinery Company

Attention: Mike Thibault

Job Ref: Bellevue Hospital CHP

Notes: Rev. 2

Ref. No: C00429-1

Date: 09/30/21

Engine Mfg: Caterpillar

eKW: 1,982

Fuel Type: Pipeline Natural Gas

BTU/EKW-Hr: \_\_\_\_\_

Load: 100%

Model No: G3516H (EM1338-02)

RPM: 1500

Hours/Year: 8,040

SCR Model DeNOx-G3516H/2785

Nbr Units: 2

SCR Controls: In-Situ

Item Description	English	Units	Metric	Units
Engine Output	2,785	bHP	2,078	KWm
Exhaust Gas Mass Flow	22,792	lbs/hour	10,172	kg/hour
Exhaust Gas Temperature	758.0	°F	403.3	°C
Exhaust Flow - Standard Units	295,745	SCFH	8,374	SCMH
Pre-Catalyst NOx Emissions	1.18	g/bHP-hr	1.58	g/KWm-hr
Pre-Catalyst NOx Emissions	3.7	lbs/MWe/hr	1.7	kg/MWe/hr
Pre-Catalyst NOx Emissions	89	ppm@15% O2	89	ppm@15% O2
Post-Catalyst NOx Emissions	0.10	g/bHP-hr	0.13	g/KWm-hr
Post-Catalyst NOx Emissions	0.31	lbs/MWe/hr	0.14	kg/MWe/hr
Post-Catalyst NOx Emissions	8	ppm@15% O2	8	ppm@15% O2
Percentage NOx Reduction	91.5	%	91.5	%
Pre-Catalyst CO Emissions	1.66	g/bHP-hr	2.23	g/KWm-hr
Pre-Catalyst CO Emissions	5.1	lbs/MWe/hr	2.3	kg/MWe/hr
Pre-Catalyst CO Emissions	199	ppm@15% O2	199	ppm@15% O2
Post-Catalyst CO Emissions	0.60	g/bHP-hr	0.80	g/KWm-hr
Post-Catalyst CO Emissions	1.86	lbs/MWe/hr	0.84	kg/MWe/hr
Post-Catalyst CO Emissions	72	ppm@15% O2	72	ppm@15% O2
Percentage CO Reduction	63.9	%	63.9	%
Pre-Catalyst NMNEHC Emissions	0.42	g/bHP-hr	0.56	g/KWm-hr
Pre-Catalyst NMNEHC Emissions	1.3	lbs/MWe/hr	0.6	kg/MWe/hr
Pre-Catalyst NMNEHC Emissions	32	ppm@15% O2	32	ppm@15% O2
Post-Catalyst NMNEHC Emissions	0.10	g/bHP-hr	0.13	g/KWm-hr
Post-Catalyst NMNEHC Emissions	0.31	lbs/MWe/hr	0.14	kg/MWe/hr
Post-Catalyst NMNEHC Emissions	8	ppm@15% O2	8	ppm@15% O2
Percentage NMNEHC Reduction	76.2	%	76.2	%
Exhaust Gas Nozzle Size, Nominal	24	Inches, ASA	n/a	
Exhaust Gas Nozzle Velocity	3884.2	FPM	19.7	m/sec
Pressure Drop Across Catalyst/Mixer	8.0	In. WC	20.0	mbar
Urea Consumption Rate (40% Conc.)	1.60	Gal/Hr	6.1	Liter/Hr
Urea Tank Size (60 Day Refill Interval)	4835.7	Gallons	18305.0	Liters
Maximum Ammonia Slip	10	PPM@15% O <sub>2</sub>	10	PPM@15% O <sub>2</sub>
SCR Catalyst Volume	32.00	Cu.Ft	0.906	Cu.Meter
SCR Catalyst Configuration	8x8x2x12	(H, H, S)	8x8x2x300	(H, H, S)
SCR Catalyst Space Velocity	9,242	SCFH/FT <sup>3</sup>	9,242	SCMH/M <sup>3</sup>
Oxidation Catalyst Volume	5.33	Cu.Ft	0.151	Cu.Meter
Oxidation Catalyst Configuration	8x8x1x4		8x8x1x100	
Oxidation Catalyst Space Velocity	55,452	SCFH/FT <sup>3</sup>	55,452	SCMH/m <sup>3</sup>

\* NMNEHC PPM Values Shown calculated as with Mol. Weight of 15.84

**EXHIBIT 4**  
**NYC-HH - New Bellevue Hospital**  
**462 First Avenue, New York, NY 10016**

**ESTIMATION OF EMISSIONS OF REGULATED AIR CONTAMINANTS FROM 6 PLM Generators**

Hazardous Air Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual Emission Rate From Large PLM Generators (TONS PER YEAR)	
	Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	ACTUAL	POTENTIAL
	lb/(million BTU)	lb/hr	lb/yr	lb/yr		
Benzene	0.0009	0.0504	5.0382	441.3463	0.002519	0.2207
Toluene	0.0004	0.0221	2.2086	193.4734	0.0011	0.0967
Xylene	0.0003	0.0154	1.5390	134.8164	0.0008	0.0674
Propylene	0.0026	0.1393	13.9320	1220.4432	0.0070	0.6102
Formaldehyde	0.0012	0.0637	6.3720	558.1872	0.0032	0.2791
Acetaldehyde	0.0008	0.0414	4.1418	362.8217	0.0021	0.1814
Acrolein	0.0001	0.0050	0.4995	43.7562	0.0002	0.0219
Total PolyAromatic Hydrocarbons	0.0002	0.0091	0.9072	79.4707	0.0005	0.0397
		0.3464				
<b>Total Hazardous Air Pollutants from 6 PLM Generators</b>					<b>0.0173</b>	<b>1.5172</b>

Criteria Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual Emission Rate From Large PLM Generators (TONS PER YEAR)	
	Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	ACTUAL	POTENTIAL
	lb/(million BTU.)	lb/hr	lb/yr	lb/yr		
Particulates	0.3100	16.7400	1674	146642	0.8370	73.3212
Sulfur Dioxide	0.2900	15.6600	1566	137182	0.7830	68.5908
Oxides of Nitrogen	4.4100	238.1400	23814	2086106	11.9070	1043.0532
Carbon Monoxide	0.9500	51.3000	5130	449388	2.5650	224.6940
Volatile Organic Compounds (VOCs)	0.3600	19.4400	1944	170294	0.9720	85.1472
<b>Total Criteria Pollutants from 6 PLM Generators</b>					<b>17.0640</b>	<b>1494.8064</b>

1. U.S. EPA Air Pollution Engineering Manual (AP-42), dated 4/93, Chapter 3.4, tables 3.4.1-3.4.5, downloaded from SCRAM BBS.

Actual Hours for PLM Generators are maximum of 100 hours

2. Annual Emission Rate (lb/yr) = Emission Factor (lb/million BTU) x Fuel Consumption (BTU/yr)

3. Total Emission Rate (ton/yr) = Annual Emission Rate (lb/yr) / 2000 (lb/ton)

Pollutants GHG Emissions	Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	Annual Emission Rate From Large PLM Generators (TONS PER YEAR)		
		lb/(million BTU.)	lb/hr	lb/yr	lb/yr	ACTUAL	POTENTIAL
Carbon Dioxide (CO <sub>2</sub> )	163.05	8804.90	880,489.95	77,130,919.98	4.40E+02	3.86E+04	
Methane (CH <sub>4</sub> )	6.61	357.15	35,714.84	3128620.33	1.79E+01	1.56E+03	
Nitrous Oxide (N <sub>2</sub> O)	1.32	71.43	7,142.97	625724.07	3.57E+00	3.13E+02	
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e)</b>					<b>1950.98</b>	<b>170906.10</b>	

1 U.S. EPA Air Pollution Engineering Manual (AP-42), Chapter 3.2, table 3.2-3.

2. Emission Factors are for uncontrolled natural gas fired 4-stroke rich-burn reciprocating engines

3. Annual Emission Rate for NOx and CO (lb/yr) = (Emission Factor (g/bhp-hr) x bhp(max) x (1 lb/454 g)) x 8760 hours. - Based on Emissions guarantee from the Manufacturer with 90% SCR Nox reduction

4. Annual Emission Rate for other criteria pollutants = Emission Factor (lb/million BTU) x Fuel Consumption (BTU/yr).

5. Total Emission Rate (ton/yr) = Annual Emission Rate (lb/yr) / 2000 (lb/ton).

6. Global Warming Potentials (GWPs) for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O are 1, 25, and 298 respectively (40 CFR 98 Subpart A).

**EXHIBIT 5**  
**NYC-HH - New Bellevue Hospital**  
**462 First Avenue, New York, NY 10016**

**ESTIMATION OF EMISSIONS OF REGULATED AIR CONTAMINANTS FROM 3 Emergency Generators**

Hazardous Air Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual Emission Rate From Large EM Generators (TONS PER YEAR)	
	Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	ACTUAL	POTENTIAL
	lb/(million BTU)	lb/hr	lb/yr	lb/yr		
		<b>18.000</b>	<b>6,638</b>	<b>1,118,298</b>		
			<b>936</b>	<b>157,680</b>		
Benzene	0.0009	0.0168	0.8733	147.1154	0.000437	0.0736
Toluene	0.0004	0.0074	0.3828	64.4911	0.0002	0.0322
Xylene	0.0003	0.0051	0.2668	44.9388	0.0001	0.0225
Propylene	0.0026	0.0464	2.4149	406.8144	0.0012	0.2034
Formaldehyde	0.0012	0.0212	1.1045	186.0624	0.0006	0.0930
Acetaldehyde	0.0008	0.0138	0.7179	120.9406	0.0004	0.0605
Acrolein	0.0001	0.0017	0.0866	14.5854	0.0000	0.0073
Total PolyAromatic Hydrocarbons	0.0002	0.0030	0.1572	26.4902	0.0001	0.0132
<b>Total Hazardous Air Pollutants from 4 Emergency Generators</b>					<b>0.0030</b>	<b>0.5057</b>

Criteria Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual Emission Rate From Large EM Generators (TONS PER YEAR)	
	Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	ACTUAL	POTENTIAL
	lb/(million BTU.)	lb/hr	lb/yr	lb/yr		
		<b>18.000</b>	<b>6,638</b>	<b>1,118,298</b>		
			<b>936</b>	<b>157,680</b>		
Particulates	0.3100	5.5800	290	48881	0.1451	24.4404
Sulfur Dioxide	0.2900	5.2200	271	45727	0.1357	22.8636
Oxides of Nitrogen	4.4100	79.3800	4128	695369	2.0639	347.6844
Carbon Monoxide	0.9500	17.1000	889	149796	0.4446	74.8980
Volatile Organic Compounds (VOCs)	0.3600	6.4800	337	56765	0.1685	28.3824
<b>Total Criteria Pollutants from 4 Emergency Generators</b>					<b>2.9578</b>	<b>498.2688</b>

1. U.S. EPA Air Pollution Engineering Manual (AP-42), dated 4/93, Chapter 3.4, tables 3.4.1-3.4.5, downloaded from SCRAM BBS.

Actual Hours for PLM Generators are maximum of 100 hours

2. Annual Emission Rate (lb/yr) = Emission Factor (lb/million BTU) x Fuel Consumption (BTU/yr)

3. Total Emission Rate (ton/yr) = Annual Emission Rate (lb/yr) / 2000 (lb/ton)

Pollutants GHG Emissions	Emission Factor	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	Annual Emission Rate From Large EM Generators (TONS PER YEAR)	
	Diesel Oil	18	6,638	1,118,298	ACTUAL	POTENTIAL
	lb/(million BTU.)	lb/hr	lb/yr	lb/yr		
			<b>936</b>	<b>157,680</b>		
Carbon Dioxide (CO <sub>2</sub> )	163.05	2934.97	152,618.26	25,710,306.66	7.63E+01	1.29E+04
Methane (CH <sub>4</sub> )	6.61	119.05	6,190.57	1042873.44	3.10E+00	5.21E+02
Nitrous Oxide (N <sub>2</sub> O)	1.32	23.81	1,238.11	208574.69	6.19E-01	1.04E+02
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e)</b>					<b>338.17</b>	<b>56968.70</b>

1. U.S. EPA Air Pollution Engineering Manual (AP-42), Chapter 3.2, table 3.2-3.

2. Emission Factors are for uncontrolled natural gas fired 4-stroke rich-burn reciprocating engines

3. Annual Emission Rate for NOx and CO (lb/yr) = (Emission Factor (g/bhp-hr) x bhp(max) x (1 lb/454 g)) x 8760 hours. - Based on Emissions guarantee from the Manufacturer with 90% SCR Nox reduction

4. Annual Emission Rate for other criteria pollutants = Emission Factor (lb/million BTU) x Fuel Consumption (BTU/yr).

5. Total Emission Rate (ton/yr) = Annual Emission Rate (lb/yr) / 2000 (lb/ton).

6. Global Warming Potentials (GWPs) for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O are 1, 25, and 298 respectively (40 CFR 98 Subpart A).

**EXHIBIT 6**  
**NYC-HH - New Bellevue Hospital**  
**462 First Avenue, New York, NY 10016**

**TOTAL FACILITY-WIDE EMISSIONS INVENTORY - ACTUALUSAGE (TONS PER YEAR)**

HAZARDOUS AIR POLLUTANTS	EMISSIONS FROM STATIONARY SOURCES OF AIR POLLUTION (TPY)				TOTAL Facility-Wide EMISSIONS TPY
	CAS REGISTRY #	Two Cogen Engines	6 PLM Gens	3 Em. Generator	
Acetaldehyde	000075-07-0	0.43748	0.002	0.00036	0.43991
Acrolein	000107-02-8	0.41239	0.000	0.00004	0.41269
Benzene	000071-43-2	0.24775	0.003	0.00044	0.25071
Formaldehyde	000050-00-0	3.21447	0.003	0.00055	3.21821
Total PolyAromatic Hydrocarbons	#N/A	0.00000	0.000	0.00008	0.00053
Propylene	000115-07-1	0.00000	0.007	0.00121	0.00817
Toluene	000108-88-3	0.00000	0.001	0.00019	0.00130
XYLENE, M, O & P MIXT.	001330-20-7	0.00000	0.000	0.00000	0.00000
Arsenic	007440-38-2	0.00000	0.000	0.00000	0.00000
Beryllium	007440-41-7	0.00000	0.000	0.00000	0.00000
Cadmium	007440-43-9	0.00000	0.000	0.00000	0.00000
Chromium	007440-47-3	0.00000	0.000	0.00000	0.00000
Lead	007439-92-1	0.00000	0.000	0.00000	0.00000
Manganese	007439-96-5	0.00000	0.000	0.00000	0.00000
Mercury	007439-97-6	0.00000	0.000	0.00000	0.00000
NICKEL METAL AND INSOLUBLE COMPOUNDS	007440-02-0	0.00000	0.000	0.00000	0.00000
<b>Total</b>		<b>4.31209</b>	<b>0.01730</b>	<b>0.00287</b>	<b>4.33151</b>

CRITERIA POLLUTANTS	EMISSIONS FROM STATIONARY SOURCES OF AIR POLLUTION (TPY)				TOTAL
	CAS REGISTRY #	Two Cogen Engines	6 PLM Gens TPY	3 Em. Generator	Facility-Wide
					EMISSIONS
					TPY
Particulates	0ny075-00-0	4.53319	0.837	0.14508	5.5153
Sulfur Dioxide	007446-09-5	0.09220	0.783	0.13572	1.0109
Oxides of Nitrogen	0NY210-00-0	4.86344	11.907	2.06388	18.8343
Carbon Monoxide	000630-08-0	29.18062	2.565	0.44460	32.1902
Volatile Organic Compounds (VOCs)	0NY998 - 00 - 0	20.42643	0.972	0.16848	21.5669
Carbon Dioxide Equivalents (CO2e)	0NY750 - 00 - 0	18361.35721	1950.983	338.17037	20650.5105
<b>Total</b>		<b>59.0959</b>	<b>17.0640</b>	<b>2.9578</b>	<b>79.1176</b>



**EXHIBIT 7**  
**NYC-HH - New Bellevue Hospital**  
**462 First Avenue, New York, NY 10016**

**TOTAL FACILITY-WIDE EMISSIONS INVENTORY - POTENTIAL USAGE (TONS PER YEAR)**

HAZARDOUS AIR POLLUTANTS	EMISSIONS FROM STATIONARY SOURCES OF AIR POLLUTION (TPY)				TOTAL Facility-Wide EMISSIONS TPY
	CAS REGISTRY #	Two Cogen Engines	6 PLM Gens	3 Em. Generator	
Acetaldehyde	000075-07-0	0.47904	0.181	0.06047	0.72092
Acrolein	000107-02-8	0.45157	0.022	0.00729	0.48074
Benzene	000071-43-2	0.27129	0.221	0.07356	0.56552
Formaldehyde	000050-00-0	3.51984	0.279	0.09303	3.89197
Total PolyAromatic Hydrocarbons	#N/A	0.00000	0.040	0.01325	0.05298
Propylene	000115-07-1	0.00000	0.610	0.20341	0.81363
Toluene	000108-88-3	0.00000	0.097	0.03225	0.12898
XYLENE, M, O & P MIXT.	001330-20-7	0.00000	0.000	0.00000	0.00000
Arsenic	007440-38-2	0.00000	0.000	0.00000	0.00000
Beryllium	007440-41-7	0.00000	0.000	0.00000	0.00000
Cadmium	007440-43-9	0.00000	0.000	0.00000	0.00000
Chromium	007440-47-3	0.00000	0.000	0.00000	0.00000
Lead	007439-92-1	0.00000	0.000	0.00000	0.00000
Manganese	007439-96-5	0.00000	0.000	0.00000	0.00000
Mercury	007439-97-6	0.00000	0.000	0.00000	0.00000
NICKEL METAL AND INSOLUBLE COMPOUNDS	007440-02-0	0.00000	0.000	0.00000	0.00000
<b>Total</b>		<b>4.72174</b>	<b>1.44975</b>	<b>0.48325</b>	<b>6.65474</b>

CRITERIA POLLUTANTS	EMISSIONS FROM STATIONARY SOURCES OF AIR POLLUTION (TPY)				TOTAL
	CAS REGISTRY #	Two Cogen Engines	6 PLM Gens	3 Em. Generator	Facility-Wide EMISSIONS
		TPY	TPY	TPY	TPY
Particulates	0ny075-00-0	4.9638	73.321	24.44040	102.7254
Sulfur Dioxide	007446-09-5	0.1010	68.591	22.86360	91.5554
Oxides of Nitrogen	0NY210-00-0	5.3255	1043.053	347.68440	1396.0631
Carbon Monoxide	000630-08-0	31.9528	224.694	74.89800	331.5448
Volatile Organic Compounds (VOCs)	0NY998 - 00 - 0	22.3669	85.147	28.38240	135.8965
Carbon Dioxide Equivalent (CO2e)	0NY750 - 00 - 0	20105.68615	170906.100	56968.70004	247980.4863
<b>Total</b>		<b>64.7100</b>	<b>1494.8064</b>	<b>498.2688</b>	<b>250038.2715</b>

**EXHIBIT 8**  
**NYC-HH - New Bellevue Hospital**  
**462 First Avenue, New York, NY 10016**

**ESTIMATION OF EMISSIONS OF REGULATED AIR CONTAMINANTS FROM 4 PLM Generators - Process GEN**

Hazardous Air Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual Emission Rate From Large PLM Generators (TONS PER YEAR)	
	Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	ACTUAL	POTENTIAL
	lb/(million BTU)	lb/hr	lb/yr	lb/yr		
		30.000	21,277 3,000	1,863,830 262,800		
Benzene	0.0009	0.0280	2.7990	245.1924	0.001400	0.1226
Toluene	0.0004	0.0123	1.2270	107.4852	0.0006	0.0537
Xylene	0.0003	0.0086	0.8550	74.8980	0.0004	0.0374
Propylene	0.0026	0.0774	7.7400	678.0240	0.0039	0.3390
Formaldehyde	0.0012	0.0354	3.5400	310.1040	0.0018	0.1551
Acetaldehyde	0.0008	0.0230	2.3010	201.5676	0.0012	0.1008
Acrolein	0.0001	0.0028	0.2775	24.3090	0.0001	0.0122
Total PolyAromatic Hydrocarbons	0.0002	0.0050	0.5040	44.1504	0.0003	0.0221
		0.1924				
<b>Total Hazardous Air Pollutants from 4 PLM Generators</b>					<b>0.0096</b>	<b>0.8429</b>

Criteria Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual Emission Rate From Large PLM Generators (TONS PER YEAR)	
	Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	ACTUAL	POTENTIAL
	lb/(million BTU.)	lb/hr	lb/yr	lb/yr		
		30.000	21,277 3,000	1,863,830 262,800		
Particulates	0.3100	9.3000	930	81468	0.4650	40.7340
Sulfur Dioxide	0.2900	8.7000	870	76212	0.4350	38.1060
Oxides of Nitrogen	4.4100	132.3000	13230	1158948	6.6150	579.4740
Carbon Monoxide	0.9500	28.5000	2850	249660	1.4250	124.8300
Volatile Organic Compounds (VOCs)	0.3600	10.8000	1080	94608	0.5400	47.3040
<b>Total Criteria Pollutants from 4 PLM Generators</b>					<b>9.4800</b>	<b>830.4480</b>

1. U.S. EPA Air Pollution Engineering Manual (AP-42), dated 4/93, Chapter 3.4, tables 3.4.1-3.4.5, downloaded from SCRAM BBS.

Actual Hours for PLM Generators are maximum of 100 hours

2. Annual Emission Rate (lb/yr) = Emission Factor (lb/million BTU) x Fuel Consumption (BTU/yr)

3. Total Emission Rate (ton/yr) = Annual Emission Rate (lb/yr) / 2000 (lb/ton)

Pollutants GHG Emissions	Emission Factor	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	Annual Emission Rate From Large PLM Generators (TONS PER YEAR)	
	Diesel Oil	30	21,277 3,000	1,863,830 262,800	ACTUAL	POTENTIAL
	lb/(million BTU.)	lb/hr	lb/yr	lb/yr		
Carbon Dioxide (CO <sub>2</sub> )	163.05	4891.61	489,161.09	42,850,511.10	2.45E+02	2.14E+04
Methane (CH <sub>4</sub> )	6.61	198.42	19,841.58	1738122.41	9.92E+00	8.69E+02
Nitrous Oxide (N <sub>2</sub> O)	1.32	39.68	3,968.32	347624.48	1.98E+00	1.74E+02
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e)</b>					<b>1083.88</b>	<b>94947.83</b>

1. U.S. EPA Air Pollution Engineering Manual (AP-42), Chapter 3.2, table 3.2-3.

2. Emission Factors are for uncontrolled natural gas fired 4-stroke rich-burn reciprocating engines

3. Annual Emission Rate for NOx and CO (lb/yr) = (Emission Factor (g/bhp-hr) x bhp(max) x (1 lb/454 g)) x 8760 hours. - Based on Emissions guarantee from the Manufacturer with 90% SCR Nox reduction

4. Annual Emission Rate for other criteria pollutants = Emission Factor (lb/million BTU) x Fuel Consumption (BTU/yr).

5. Total Emission Rate (ton/yr) = Annual Emission Rate (lb/yr) / 2000 (lb/ton).

6. Global Warming Potentials (GWPs) for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O are 1, 25, and 298 respectively (40 CFR 98 Subpart A).

**EXHIBIT 9**  
**NYC-HH - New Bellevue Hospital**  
**462 First Avenue, New York, NY 10016**

**ESTIMATION OF EMISSIONS OF REGULATED AIR CONTAMINANTS FROM 2 PLM Generators - Process GEG**

Hazardous Air Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual Emission Rate From Large PLM Generators (TONS PER YEAR)	
	Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	ACTUAL	POTENTIAL
	lb/(million BTU)	lb/hr	lb/yr	lb/yr		
		24.000	17,021	1,491,064		
			2,400	210,240		
Benzene	0.0009	0.0224	2.2392	196.1539	0.001120	0.0981
Toluene	0.0004	0.0098	0.9816	85.9882	0.0005	0.0430
Xylene	0.0003	0.0068	0.6840	59.9184	0.0003	0.0300
Propylene	0.0026	0.0619	6.1920	542.4192	0.0031	0.2712
Formaldehyde	0.0012	0.0283	2.8320	248.0832	0.0014	0.1240
Acetaldehyde	0.0008	0.0184	1.8408	161.2541	0.0009	0.0806
Acrolein	0.0001	0.0022	0.2220	19.4472	0.0001	0.0097
Total PolyAromatic Hydrocarbons	0.0002	0.0040	0.4032	35.3203	0.0002	0.0177
		0.1539				
<b>Total Hazardous Air Pollutants from 2 PLM Generators</b>					<b>0.0077</b>	<b>0.6743</b>

Criteria Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual Emission Rate From Large PLM Generators (TONS PER YEAR)	
	Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	ACTUAL	POTENTIAL
	lb/(million BTU.)	lb/hr	lb/yr	lb/yr		
		24.000	17,021	1,491,064		
			2,400	210,240		
Particulates	0.3100	7.4400	744	65174	0.3720	32.5872
Sulfur Dioxide	0.2900	6.9600	696	60970	0.3480	30.4848
Oxides of Nitrogen	4.4100	105.8400	10584	927158	5.2920	463.5792
Carbon Monoxide	0.9500	22.8000	2280	199728	1.1400	99.8640
Volatile Organic Compounds (VOCs)	0.3600	8.6400	864	75686	0.4320	37.8432
<b>Total Criteria Pollutants from 2 PLM Generators</b>					<b>7.5840</b>	<b>664.3584</b>

1. U.S. EPA Air Pollution Engineering Manual (AP-42), dated 4/93, Chapter 3.4, tables 3.4.1-3.4.5, downloaded from SCRAM BBS.

Actual Hours for PLM Generators are maximum of 100 hours

2. Annual Emission Rate (lb/yr) = Emission Factor (lb/million BTU) x Fuel Consumption (BTU/yr)

3. Total Emission Rate (ton/yr) = Annual Emission Rate (lb/yr) / 2000 (lb/ton)

Pollutants GHG Emissions	Emission Factor	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	Annual Emission Rate From Large PLM Generators (TONS PER YEAR)	
	Diesel Oil	24	17,021	1,491,064	ACTUAL	POTENTIAL
	lb/(million BTU.)	lb/hr	lb/yr	lb/yr		
			2,400	210,240		
Carbon Dioxide (CO <sub>2</sub> )	163.05	3913.29	391,328.87	34,280,408.88	1.96E+02	1.71E+04
Methane (CH <sub>4</sub> )	6.61	158.73	15,873.26	1390497.93	7.94E+00	6.95E+02
Nitrous Oxide (N <sub>2</sub> O)	1.32	31.75	3,174.65	278099.59	1.59E+00	1.39E+02
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e)</b>					<b>867.10</b>	<b>75958.27</b>

1. U.S. EPA Air Pollution Engineering Manual (AP-42), Chapter 3.2, table 3.2-3.

2. Emission Factors are for uncontrolled natural gas fired 4-stroke rich-burn reciprocating engines

3. Annual Emission Rate for NOx and CO (lb/yr) = (Emission Factor (g/bhp-hr) x bhp(max) x (1 lb/454 g)) x 8760 hours. - Based on Emissions guarantee from the Manufacturer with 90% SCR Nox reduction

4. Annual Emission Rate for other criteria pollutants = Emission Factor (lb/million BTU) x Fuel Consumption (BTU/yr).

5. Total Emission Rate (ton/yr) = Annual Emission Rate (lb/yr) / 2000 (lb/ton).

6. Global Warming Potentials (GWPs) for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O are 1, 25, and 298 respectively (40 CFR 98 Subpart A).

# **EPA Certificate of Conformity**

**Certificate 1: S0007 and S0008**

**Certificate 2: ER006**

**Certificate 3: BS007**

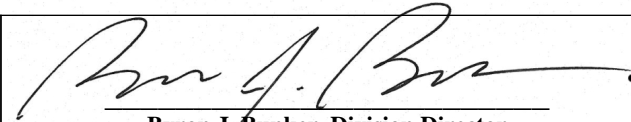


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
2022 MODEL YEAR  
CERTIFICATE OF CONFORMITY  
WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION  
AND AIR QUALITY  
ANN ARBOR, MICHIGAN 48105

**Certificate Issued To:** Caterpillar Inc.  
(U.S. Manufacturer or Importer)  
**Certificate Number:** NCPXB78.1CWL-010

**Effective Date:**  
12/23/2021  
**Expiration Date:**  
12/31/2022

  
Byron J. Bunker, Division Director  
Compliance Division

**Issue Date:**  
12/23/2021  
**Revision Date:**  
N/A

**Manufacturer:** Caterpillar Inc.  
**Engine Family:** NCPXB78.1CWL  
**Mobile/Stationary Certification Type:** Stationary  
**Fuel :** Natural Gas (CNG/LNG)  
**Emission Standards :**  
Part 60 Subpart JJJJ Table 1  
VOC ( g/Hp-hr ) : 0.7  
NOx ( g/Hp-hr ) : 1.0  
CO ( g/Hp-hr ) : 2.0  
**Emergency Use Only :** N

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR Part 60, 1065, 1068, and 60 ( stationary only and combined stationary and mobile ) and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new nonroad spark-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60. This certificate of conformity does not cover nonroad engines imported prior to the effective date of the certificate.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068.20 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

This certificate does not cover large nonroad engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.



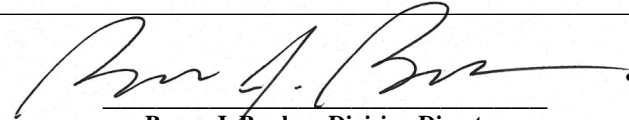
**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
2017 MODEL YEAR  
CERTIFICATE OF CONFORMITY  
WITH THE CLEAN AIR ACT**

**OFFICE OF TRANSPORTATION  
AND AIR QUALITY  
ANN ARBOR, MICHIGAN 48105**

**Certificate Issued To:** Caterpillar Inc.  
(U.S. Manufacturer or Importer)  
**Certificate Number:** HCPXL78.1NZS-016

**Effective Date:**  
07/29/2016

**Expiration Date:**  
12/31/2017

  
Byron J. Bunker, Division Director  
Compliance Division

**Issue Date:**  
07/29/2016

**Revision Date:**  
N/A

**Model Year:** 2017  
**Manufacturer Type:** Original Engine Manufacturer  
**Engine Family:** HCPXL78.1NZS

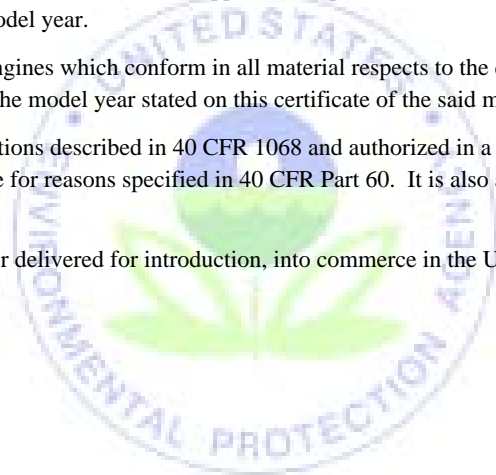
**Mobile/Stationary Indicator:** Stationary  
**Emissions Power Category:** kW>560  
**Fuel Type:** Diesel  
**After Treatment Devices:** No After Treatment Devices Installed  
**Non-after Treatment Devices:** Electronic Control, Engine Design Modification

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Part 60, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

2003 Model Year Certificate of Conformity

Manufacturer: **Cummins Inc.**  
Certificate Number: **CEX-NR9-03-29**  
Effective Date: **11/18/02**  
Date Issued: **11/18/02**



Gregory A. Green, Director  
Certification and Compliance Division  
Office of Transportation and Air Quality

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR 89, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 89 and produced in the stated model year.

**Nonroad Diesel Engine Family:                      3CEXL030.ABA    B573**

This certificate of conformity covers only those new nonroad compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 89 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 89. This certificate of conformity does not cover nonroad engines imported prior to the effective date of the certificate.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 89.129-96 and 89.506-96 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 89. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void ab initio for other reasons specified in 40 CFR Part 89.

This certificate does not cover nonroad engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

# Full Environmental Assessment Form Part 1



**Full Environmental Assessment Form  
Part 1 - Project and Setting**

**Instructions for Completing Part 1**

**Part 1 is to be completed by the applicant or project sponsor.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

**A. Project and Applicant/Sponsor Information.**

Name of Action or Project: NYC-HH - New Bellevue Hospital		
Project Location (describe, and attach a general location map): 462 First Ave. New York, NY 10016		
Brief Description of Proposed Action (include purpose or need): The purpose of this application is to renew the current state facility air permit for NYC-HHC Bellevue Hospital. The hospital is in the process of installing two (2) new natural gas fired co-generation engines - Caterpillar model G3516H, each with 1982 kW rating. Also in order to meet NYSDEC's part 222 requirements, the following generators are participating in Demand Response (DR) Program: - Four (4) Cat C27 generators on 13th floor - One (1) Caterpillar 3512C - One (1) Cummins 3100 located in basement.  Rest of the generators (three) are for emergency purpose only		
Name of Applicant/Sponsor: New York City Health & Hospitals Corporation	Telephone:	E-Mail:
Address: 125 Worth St		
City/PO: New York	State: NY	Zip Code: 10013
Project Contact (if not same as sponsor; give name and title/role): Patrick Benn, Chief Engineer	Telephone: (212) 562-7111	E-Mail: bennp4@nychhc.org
Address: 462 First Ave.		
City/PO: New York	State: New York	Zip Code: 10016
Property Owner (if not same as sponsor):	Telephone:	E-Mail:
Address:		
City/PO:	State:	Zip Code:

**B. Government Approvals**

<b>B. Government Approvals, Funding, or Sponsorship.</b> (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)		
<b>Government Entity</b>	<b>If Yes: Identify Agency and Approval(s) Required</b>	<b>Application Date (Actual or projected)</b>
a. City Counsel, Town Board, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No or Village Board of Trustees	n/a	n/a
b. City, Town or Village Planning Board or Commission <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	n/a	n/a
c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	n/a	n/a
d. Other local agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	New York City Department of Environmental Protection (NYCDEP)	projected in 2022
e. County agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	n/a	n/a
f. Regional agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	New York City Department of Buildings (NYCDOB)	projected in 2022
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	New York State Department of Environmental Conservation (NYSDEC) - State Facility Permit	1/12/2022
h. Federal agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	United States Environmental Protection Agency (USEPA) - State Facility Permit	1/12/2022 - Application submitted to NYDEC
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**C. Planning and Zoning**

<b>C.1. Planning and zoning actions.</b>	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<ul style="list-style-type: none"> <li>• If Yes, complete sections C, F and G.</li> <li>• If No, proceed to question C.2 and complete all remaining sections and questions in Part 1</li> </ul>	
<b>C.2. Adopted land use plans.</b>	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes, identify the plan(s):	n/a _____
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes, identify the plan(s):	n/a _____

**C.3. Zoning**

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance.  Yes  No  
If Yes, what is the zoning classification(s) including any applicable overlay district?

R8 and C2-5

b. Is the use permitted or allowed by a special or conditional use permit?  Yes  No

c. Is a zoning change requested as part of the proposed action?  Yes  No  
If Yes,

i. What is the proposed new zoning for the site? n/a

**C.4. Existing community services.**

a. In what school district is the project site located? New York City Department of Education, Manhattan District 2

b. What police or other public protection forces serve the project site?

New York City Police Department, 13th Precinct

c. Which fire protection and emergency medical services serve the project site?

New York City Fire Department, Company E016

d. What parks serve the project site?

Bellevue South Park

**D. Project Details**

**D.1. Proposed and Potential Development**

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Commercial - Installation of two (2) new natural gas fired co-generation engines.

b. a. Total acreage of the site of the proposed action? 0.5 acres

b. Total acreage to be physically disturbed? 0.2 acres

c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 10 acres

c. Is the proposed action an expansion of an existing project or use?  Yes  No

i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % n/a Units: n/a

d. Is the proposed action a subdivision, or does it include a subdivision?  Yes  No

If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

n/a

ii. Is a cluster/conservation layout proposed?  Yes  No

iii. Number of lots proposed? n/a

iv. Minimum and maximum proposed lot sizes? Minimum n/a Maximum n/a

e. Will the proposed action be constructed in multiple phases?  Yes  No

i. If No, anticipated period of construction: 6 months

ii. If Yes:

- Total number of phases anticipated n/a
- Anticipated commencement date of phase 1 (including demolition) n/a month n/a year
- Anticipated completion date of final phase n/a month n/a year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

n/a

f. Does the project include new residential uses?  Yes  No

If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
At completion of all phases	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>

g. Does the proposed action include new non-residential construction (including expansions)?  Yes  No

If Yes,

- i. Total number of structures 1
- ii. Dimensions (in feet) of largest proposed structure: 25 height; 45 width; and 78 length
- iii. Approximate extent of building space to be heated or cooled: 0 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage?  Yes  No

If Yes,

- i. Purpose of the impoundment: n/a
- ii. If a water impoundment, the principal source of the water:  Ground water  Surface water streams  Other specify: n/a
- iii. If other than water, identify the type of impounded/contained liquids and their source. n/a
- iv. Approximate size of the proposed impoundment. Volume: n/a million gallons; surface area: n/a acres
- v. Dimensions of the proposed dam or impounding structure: n/a height; n/a length
- vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): n/a

## D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)  Yes  No

If Yes:

- i. What is the purpose of the excavation or dredging? n/a
- ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
  - Volume (specify tons or cubic yards): n/a
  - Over what duration of time? n/a
- iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. n/a
- iv. Will there be onsite dewatering or processing of excavated materials?  Yes  No  
If yes, describe. n/a
- v. What is the total area to be dredged or excavated? n/a acres
- vi. What is the maximum area to be worked at any one time? n/a acres
- vii. What would be the maximum depth of excavation or dredging? n/a feet
- viii. Will the excavation require blasting?  Yes  No
- ix. Summarize site reclamation goals and plan: n/a

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area?  Yes  No

If Yes:

- i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): n/a

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

n/a

iii. Will the proposed action cause or result in disturbance to bottom sediments?

Yes  No

If Yes, describe: n/a

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation?

Yes  No

If Yes:

- acres of aquatic vegetation proposed to be removed: n/a
- expected acreage of aquatic vegetation remaining after project completion: n/a
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): n/a
- proposed method of plant removal: n/a
- if chemical/herbicide treatment will be used, specify product(s): n/a

v. Describe any proposed reclamation/mitigation following disturbance:

n/a

c. Will the proposed action use, or create a new demand for water?

Yes  No

If Yes:

i. Total anticipated water usage/demand per day: n/a gallons/day

ii. Will the proposed action obtain water from an existing public water supply?

Yes  No

If Yes:

• Name of district or service area: n/a

• Does the existing public water supply have capacity to serve the proposal?

Yes  No

• Is the project site in the existing district?

Yes  No

• Is expansion of the district needed?

Yes  No

• Do existing lines serve the project site?

Yes  No

iii. Will line extension within an existing district be necessary to supply the project?

Yes  No

If Yes:

• Describe extensions or capacity expansions proposed to serve this project:

n/a

• Source(s) of supply for the district: n/a

iv. Is a new water supply district or service area proposed to be formed to serve the project site?

Yes  No

If Yes:

• Applicant/sponsor for new district: n/a

• Date application submitted or anticipated: n/a

• Proposed source(s) of supply for new district: n/a

v. If a public water supply will not be used, describe plans to provide water supply for the project:

n/a

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: n/a gallons/minute.

d. Will the proposed action generate liquid wastes?

Yes  No

If Yes:

i. Total anticipated liquid waste generation per day: n/a gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):

n/a

iii. Will the proposed action use any existing public wastewater treatment facilities?

Yes  No

If Yes:

• Name of wastewater treatment plant to be used: n/a

• Name of district: n/a

• Does the existing wastewater treatment plant have capacity to serve the project?

Yes  No

• Is the project site in the existing district?

Yes  No

• Is expansion of the district needed?

Yes  No

• Do existing sewer lines serve the project site?  Yes  No  
 • Will a line extension within an existing district be necessary to serve the project?  Yes  No  
 If Yes:  
 • Describe extensions or capacity expansions proposed to serve this project: \_\_\_\_\_  
 n/a \_\_\_\_\_

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site?  Yes  No  
 If Yes:  
 • Applicant/sponsor for new district: n/a \_\_\_\_\_  
 • Date application submitted or anticipated: n/a \_\_\_\_\_  
 • What is the receiving water for the wastewater discharge? n/a \_\_\_\_\_  
 v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):  
 n/a \_\_\_\_\_  
 \_\_\_\_\_  
 vi. Describe any plans or designs to capture, recycle or reuse liquid waste: \_\_\_\_\_  
 n/a \_\_\_\_\_

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction?  Yes  No  
 If Yes:  
 i. How much impervious surface will the project create in relation to total size of project parcel?  
 \_\_\_\_\_ n/a Square feet or \_\_\_\_\_ n/a acres (impervious surface)  
 \_\_\_\_\_ n/a Square feet or \_\_\_\_\_ n/a acres (parcel size)  
 ii. Describe types of new point sources. n/a \_\_\_\_\_  
 \_\_\_\_\_  
 iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?  
 n/a \_\_\_\_\_  
 \_\_\_\_\_  
 • If to surface waters, identify receiving water bodies or wetlands: \_\_\_\_\_  
 n/a \_\_\_\_\_  
 • Will stormwater runoff flow to adjacent properties?  Yes  No  
 iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?  Yes  No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations?  Yes  No  
 If Yes, identify:  
 i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)  
 None \_\_\_\_\_  
 ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)  
 None \_\_\_\_\_  
 iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)  
 Two (2) new natural gas fired co-generation engines - Caterpillar model G3516H, each with 1982 kW rating.

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit?  Yes  No  
 If Yes:  
 i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year)  Yes  No  
 ii. In addition to emissions as calculated in the application, the project will generate:  
 • \_\_\_\_\_ 14,126 Tons/year (short tons) of Carbon Dioxide (CO<sub>2</sub>)  
 • \_\_\_\_\_ 0.27 Tons/year (short tons) of Nitrous Oxide (N<sub>2</sub>O)  
 • \_\_\_\_\_ 0 Tons/year (short tons) of Perfluorocarbons (PFCs)  
 • \_\_\_\_\_ 0 Tons/year (short tons) of Sulfur Hexafluoride (SF<sub>6</sub>)  
 • \_\_\_\_\_ 0 Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)  
 • \_\_\_\_\_ 3.43 Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)?  Yes  No

If Yes:

i. Estimate methane generation in tons/year (metric): n/a

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): n/a

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations?  Yes  No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

n/a

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services?  Yes  No

If Yes:

i. When is the peak traffic expected (Check all that apply):  Morning  Evening  Weekend

Randomly between hours of n/a to n/a.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): n/a

iii. Parking spaces: Existing n/a Proposed n/a Net increase/decrease n/a

iv. Does the proposed action include any shared use parking?  Yes  No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

n/a

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site?  Yes  No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles?  Yes  No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes?  Yes  No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy?  Yes  No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: n/a

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): n/a

iii. Will the proposed action require a new, or an upgrade, to an existing substation?  Yes  No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 0
- Saturday: 0
- Sunday: 0
- Holidays: 0

ii. During Operations:

- Monday - Friday: 24 hours
- Saturday: 24 hours
- Sunday: 24 hours
- Holidays: 24 hours

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?  Yes  No

If yes:  
i. Provide details including sources, time of day and duration:  
n/a \_\_\_\_\_

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen?  Yes  No  
Describe: n/a \_\_\_\_\_

---

n. Will the proposed action have outdoor lighting?  Yes  No

If yes:  
i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:  
n/a \_\_\_\_\_

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen?  Yes  No  
Describe: n/a \_\_\_\_\_

---

o. Does the proposed action have the potential to produce odors for more than one hour per day?  Yes  No  
If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:  
n/a \_\_\_\_\_

---

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage?  Yes  No

If Yes:  
i. Product(s) to be stored n/a \_\_\_\_\_  
ii. Volume(s) n/a per unit time n/a (e.g., month, year) \_\_\_\_\_  
iii. Generally, describe the proposed storage facilities: \_\_\_\_\_  
n/a \_\_\_\_\_

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q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation?  Yes  No

If Yes:  
i. Describe proposed treatment(s):  
n/a \_\_\_\_\_

ii. Will the proposed action use Integrated Pest Management Practices?  Yes  No

---

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?  Yes  No

If Yes:  
i. Describe any solid waste(s) to be generated during construction or operation of the facility:  
• Construction: n/a tons per n/a (unit of time)  
• Operation : n/a tons per n/a (unit of time)  
ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:  
• Construction: n/a \_\_\_\_\_  
• Operation: n/a \_\_\_\_\_  
iii. Proposed disposal methods/facilities for solid waste generated on-site:  
• Construction: n/a \_\_\_\_\_  
• Operation: n/a \_\_\_\_\_



s. Does the proposed action include construction or modification of a solid waste management facility?  Yes  No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): n/a

ii. Anticipated rate of disposal/processing:

- n/a Tons/month, if transfer or other non-combustion/thermal treatment, or
- n/a Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: n/a years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste?  Yes  No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: n/a

ii. Generally describe processes or activities involving hazardous wastes or constituents: n/a

iii. Specify amount to be handled or generated n/a tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: n/a

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility?  Yes  No

If Yes: provide name and location of facility: n/a

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: n/a

### E. Site and Setting of Proposed Action

#### E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

- Urban  Industrial  Commercial  Residential (suburban)  Rural (non-farm)  
 Forest  Agriculture  Aquatic  Other (specify): \_\_\_\_\_

ii. If mix of uses, generally describe:

Bellevue Hospital is in New York City located at 462 First Avenue in the Kips Bay neighborhood of Manhattan. The neighborhood encompasses hospitals, office buildings, residential units and schools.

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	10	10	0
• Forested	0	0	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0	0	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
• Wetlands (freshwater or tidal)	0	0	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: <u>n/a</u>	0	0	0

c. Is the project site presently used by members of the community for public recreation?  Yes  No  
 i. If Yes: explain: n/a

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d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site?  Yes  No  
 If Yes,  
 i. Identify Facilities:  
 VA NY Harbor Healthcare System, NYU Langone Medical Center, NYU College of Dentistry, NYU Rory Meyers College of Nursing, United Nations International School, The British International School of New York, HRA Men's Shelter, Hunter-Bellevue School of Nursing

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e. Does the project site contain an existing dam?  Yes  No  
 If Yes:  
 i. Dimensions of the dam and impoundment:  
 • Dam height: \_\_\_\_\_ n/a feet  
 • Dam length: \_\_\_\_\_ n/a feet  
 • Surface area: \_\_\_\_\_ n/a acres  
 • Volume impounded: \_\_\_\_\_ n/a gallons OR acre-feet  
 ii. Dam's existing hazard classification: n/a  
 iii. Provide date and summarize results of last inspection:  
 n/a \_\_\_\_\_

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f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility?  Yes  No  
 If Yes:  
 i. Has the facility been formally closed?  Yes  No  
 • If yes, cite sources/documentation: n/a  
 ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:  
 n/a \_\_\_\_\_  
 iii. Describe any development constraints due to the prior solid waste activities:  
 n/a \_\_\_\_\_

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g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste?  Yes  No  
 If Yes:  
 i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:  
 n/a \_\_\_\_\_

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h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site?  Yes  No  
 If Yes:  
 i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply:  Yes  No  
 Yes – Spills Incidents database Provide DEC ID number(s): n/a  
 Yes – Environmental Site Remediation database Provide DEC ID number(s): n/a  
 Neither database  
 ii. If site has been subject of RCRA corrective activities, describe control measures:  
 n/a \_\_\_\_\_  
 iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database?  Yes  No  
 If yes, provide DEC ID number(s): 23119, V00542, V00536, 231112, V00430, V00543  
 iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):  
 n/a \_\_\_\_\_

- v. Is the project site subject to an institutional control limiting property uses?  Yes  No
- If yes, DEC site ID number: n/a
  - Describe the type of institutional control (e.g., deed restriction or easement): n/a
  - Describe any use limitations: n/a
  - Describe any engineering controls: n/a
  - Will the project affect the institutional or engineering controls in place?  Yes  No
  - Explain: \_\_\_\_\_

n/a

**E.2. Natural Resources On or Near Project Site**

a. What is the average depth to bedrock on the project site? \_\_\_\_\_ around 30 feet  Yes  No

b. Are there bedrock outcroppings on the project site?  Yes  No  
 If Yes, what proportion of the site is comprised of bedrock outcroppings? \_\_\_\_\_ n/a %

c. Predominant soil type(s) present on project site:

Gravelly Sandy Loam	_____	20 %
Sandy Loam	_____	60 %
Loam	_____	20 %

d. What is the average depth to the water table on the project site? Average: \_\_\_\_\_ 25 feet

e. Drainage status of project site soils:  Well Drained: \_\_\_\_\_ 100 % of site  
 Moderately Well Drained: \_\_\_\_\_ % of site  
 Poorly Drained \_\_\_\_\_ % of site

f. Approximate proportion of proposed action site with slopes:  0-10%: \_\_\_\_\_ 100 % of site  
 10-15%: \_\_\_\_\_ % of site  
 15% or greater: \_\_\_\_\_ % of site

g. Are there any unique geologic features on the project site?  Yes  No  
 If Yes, describe: n/a

h. Surface water features.  Yes  No

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)?  Yes  No

ii. Do any wetlands or other waterbodies adjoin the project site?  Yes  No

If Yes to either i or ii, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency?  Yes  No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name East River Classification I \_\_\_\_\_
- Lakes or Ponds: Name n/a Classification n/a
- Wetlands: Name n/a Approximate Size n/a
- Wetland No. (if regulated by DEC) n/a

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies?  Yes  No

If yes, name of impaired water body/bodies and basis for listing as impaired: \_\_\_\_\_

i. Is the project site in a designated Floodway?  Yes  No

j. Is the project site in the 100-year Floodplain?  Yes  No

k. Is the project site in the 500-year Floodplain?  Yes  No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer?  Yes  No

If Yes:  
 i. Name of aquifer: n/a



m. Identify the predominant wildlife species that occupy or use the project site:

Sciurus carolinensis

n. Does the project site contain a designated significant natural community?

If Yes:

Yes  No

i. Describe the habitat/community (composition, function, and basis for designation):

n/a

ii. Source(s) of description or evaluation:

iii. Extent of community/habitat:

- Currently: \_\_\_\_\_ acres
- Following completion of project as proposed: \_\_\_\_\_ acres
- Gain or loss (indicate + or -): \_\_\_\_\_ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species?

Yes  No

If Yes:

i. Species and listing (endangered or threatened):

n/a

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern?

Yes  No

If Yes:

i. Species and listing:

n/a

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? If yes, give a brief description of how the proposed action may affect that use:

Yes  No

n/a

**E.3. Designated Public Resources On or Near Project Site**

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304?

Yes  No

If Yes, provide county plus district name/number: n/a

b. Are agricultural lands consisting of highly productive soils present?

Yes  No

i. If Yes: acreage(s) on project site? n/a

ii. Source(s) of soil rating(s): n/a

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark?

Yes  No

If Yes:

i. Nature of the natural landmark:  Biological Community  Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

n/a

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area?

Yes  No

If Yes:

i. CEA name: Long Island Tidal Wetlands

ii. Basis for designation: Protect the shoreline habitat and ensure its protection from filling and dredging.

iii. Designating agency and date: NYS DEC 1973

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?  Yes  No

If Yes:

i. Nature of historic/archaeological resource:  Archaeological Site  Historic Building or District

ii. Name: Buildings C & D and Administration are eligible property

iii. Brief description of attributes on which listing is based:  
1938; Italian Renaissance Revival

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f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?  Yes  No

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g. Have additional archaeological or historic site(s) or resources been identified on the project site?  Yes  No

If Yes:

i. Describe possible resource(s): n/a

ii. Basis for identification: n/a

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h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?  Yes  No

If Yes:

i. Identify resource: n/a

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): n/a

iii. Distance between project and resource: n/a miles.

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i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?  Yes  No

If Yes:

i. Identify the name of the river and its designation: n/a

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666?  Yes  No

**F. Additional Information**


Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

**G. Verification**

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Patrick Benn Date 9/27/22

Signature  Title Chief Engineer

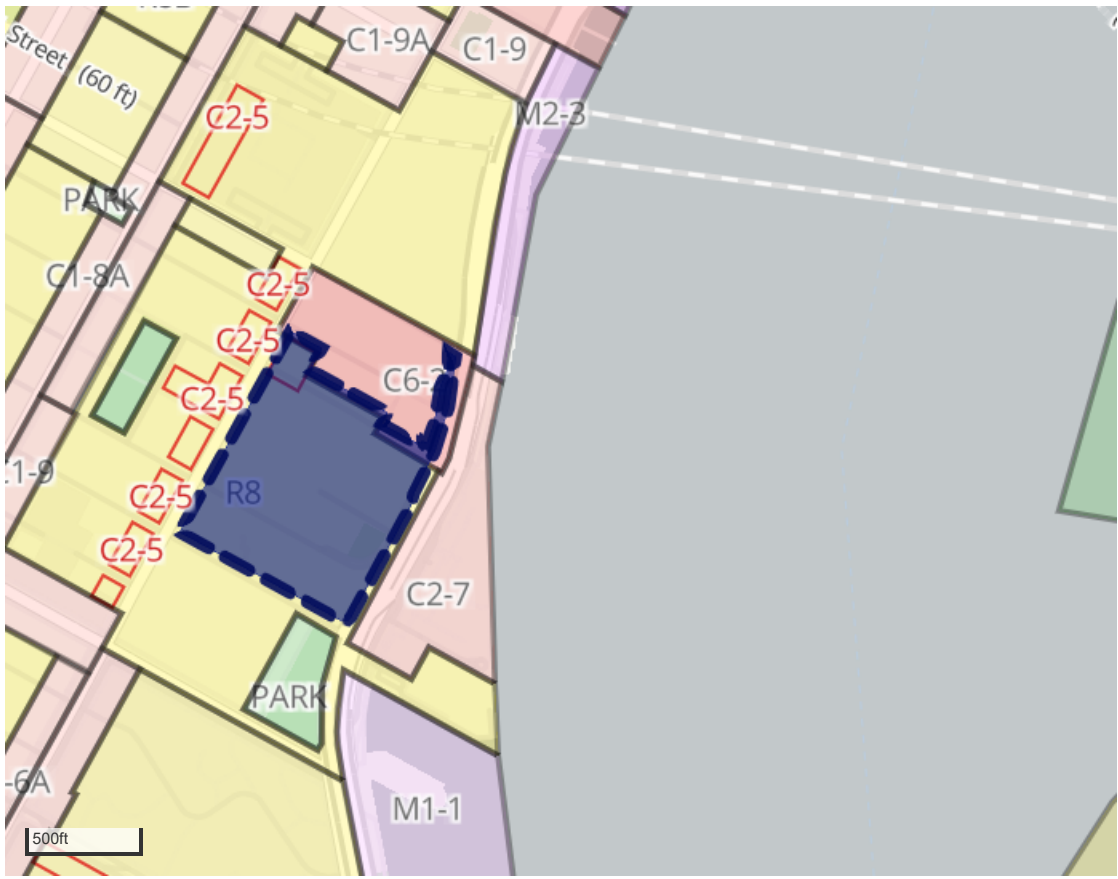


**Disclaimer:** The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



B.i.i [Coastal or Waterfront Area]	Yes
B.i.ii [Local Waterfront Revitalization Area]	Yes
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	231119, V00542, V00536, 231112, V00430, V00543, C231014
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	Yes
E.2.k. [500 Year Floodplain]	Yes
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No

E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Eligible property:C & D Building (1938; Italian Renaissance Rev.), Eligible property:Administration Building (aka Building E or Main Bu, Eligible property:Psychiatric Building at Bellevue Hospital, Public Baths, R & S Building
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No



**Zoning and Land Use**

- Tax Lots
- Zoning Districts
  - Commercial Districts ■
  - Manufacturing Districts ■
  - Residence Districts ■
  - Parks ■
  - Battery Park City ■
- Commercial Overlays 
  - C1-1 through C1-5
  - C2-1 through C2-5

**Basemaps**

- Subways —
- Building Footprints

**462 1 AVENUE, 10016**

TAX LOT | BBL 1009620100

Manhattan (Borough 1) | Block 962 | Lot 100

**Zoning District:** R8 C2-5

INTERSECTING MAP LAYERS :

- [Coastal Zone](#)
- [Flood Zone](#) Effective Flood Insurance Rate Maps 2007
- [Flood Zone](#) Preliminary Flood Insurance Rate Maps 2015

ZONING DETAILS:

- [Digital Tax Map](#)
- [Zoning Map: 8d \(PDF\)](#)
- [Historical Zoning Maps \(PDF\)](#)

Owner Type	City
Owner	NYC HEALTH AND HOSPITALS CORPORATION
Land Use	Public Facilities & Institutions
Lot Area	753,175 sq ft
Lot Frontage	1287.6 ft
Lot Depth	779.58 ft
Year Built	1910
Building Class	Hospitals and Health - Hospitals, Sanitariums, Mental Institutions ( 11 )
Number of Buildings	6
Number of Floors	17
Gross Floor Area	2,124,441 sq ft
Total # of Units	1
Building Info	<a href="#">BISWEB</a>
Property Records	<a href="#">View ACRIS</a>
Housing Info	<a href="#">View HPD's Building, Registration &amp; Violation Records</a>
Community District	<a href="#">Manhattan Community District 6</a>
City Council District	<a href="#">Council District 4</a>
School District	02
Police Precinct	13
Fire Company	E016
Sanitation Borough	1
Sanitation District	06
Sanitation Subsection	1B



## NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the New York City Waterfront Revitalization Program (WRP) which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

### A. APPLICANT INFORMATION

Name of Applicant: NYC-HH - Bellevue Hospital

Name of Applicant Representative: Patrick Benn

Address: 462 First Ave. New York, NY 10016

Telephone: (212) 562-6295 Email: bennp4@nychhc.org

Project site owner (if different than above): The New York City Health & Hospitals Corporation

### B. PROPOSED ACTIVITY

*If more space is needed, include as an attachment.*

#### 1. Brief description of activity

The purpose of this application is to renew the current state facility air permit for NYC-HHC Bellevue Hospital. The hospital is in the process of installing two (2) new natural gas fired co-generation engines - Caterpillar model G3516H, each with 1982 kW rating. Also in order to meet NYSDEC's part 222 requirements, the following generators are participating in Demand Response (DR) Program:

- Four (4) Caterpillar C27 generators on 13th floor
- One (1) Caterpillar 3512C
- One (1) Cummins 3100 located in basement.

Rest of the generators (three) are for emergency purpose only

#### 2. Purpose of activity

To generate power for the hospital

**C. PROJECT LOCATION**

Borough: Manhattan Tax Block/Lot(s): 962/100

Street Address: 462 1 Avenue, New York, NY 10016

Name of water body (if located on the waterfront): East River

**D. REQUIRED ACTIONS OR APPROVALS**

*Check all that apply.*

**City Actions/Approvals/Funding**

**City Planning Commission**

Yes  No

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> City Map Amendment               | <input type="checkbox"/> Zoning Certification        | <input type="checkbox"/> Concession        |
| <input type="checkbox"/> Zoning Map Amendment             | <input type="checkbox"/> Zoning Authorizations       | <input type="checkbox"/> UDAAP             |
| <input type="checkbox"/> Zoning Text Amendment            | <input type="checkbox"/> Acquisition – Real Property | <input type="checkbox"/> Revocable Consent |
| <input type="checkbox"/> Site Selection – Public Facility | <input type="checkbox"/> Disposition – Real Property | <input type="checkbox"/> Franchise         |
| <input type="checkbox"/> Housing Plan & Project           | <input type="checkbox"/> Other, explain: _____       |  |
| <input type="checkbox"/> Special Permit                   |  |  |
- (if appropriate, specify type:  Modification  Renewal  other) Expiration Date: \_\_\_\_\_

**Board of Standards and Appeals**

Yes  No

- Variance (use)
- Variance (bulk)
- Special Permit
- (if appropriate, specify type:  Modification  Renewal  other) Expiration Date: \_\_\_\_\_

**Other City Approvals**

- |  |   |
|--|---|
| <input type="checkbox"/> Legislation                       | <input type="checkbox"/> Funding for Construction, specify: _____           |
| <input type="checkbox"/> Rulemaking                        | <input type="checkbox"/> Policy or Plan, specify: _____                     |
| <input type="checkbox"/> Construction of Public Facilities | <input type="checkbox"/> Funding of Program, specify: _____                 |
| <input type="checkbox"/> 384 (b) (4) Approval              | <input checked="" type="checkbox"/> Permits, specify: <u>NYCDEP, NYCDOB</u> |
| <input type="checkbox"/> Other, explain: _____             |   |

**State Actions/Approvals/Funding**

- State permit or license, specify Agency: NYSDEC Permit type and number: \_\_\_\_\_
- Funding for Construction, specify: NYPA
- Funding of a Program, specify: \_\_\_\_\_
- Other, explain: \_\_\_\_\_

**Federal Actions/Approvals/Funding**

- Federal permit or license, specify Agency: \_\_\_\_\_ Permit type and number: \_\_\_\_\_
- Funding for Construction, specify: \_\_\_\_\_
- Funding of a Program, specify: \_\_\_\_\_
- Other, explain: \_\_\_\_\_

Is this being reviewed in conjunction with a Joint Application for Permits?  Yes  No

**E. LOCATION QUESTIONS**

- 1. Does the project require a waterfront site?  Yes  No
- 2. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters?  Yes  No
- 3. Is the project located on publicly owned land or receiving public assistance?  Yes  No
- 4. Is the project located within a FEMA 1% annual chance floodplain? (6.2)  Yes  No
- 5. Is the project located within a FEMA 0.2% annual chance floodplain? (6.2)  Yes  No
- 6. Is the project located adjacent to or within a special area designation? See *Maps – Part III* of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).  Yes  No
  - Significant Maritime and Industrial Area (SMIA) (2.1)
  - Special Natural Waterfront Area (SNWA) (4.1)
  - Priority Maritime Activity Zone (PMAZ) (3.5)
  - Recognized Ecological Complex (REC) (4.4)
  - West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (2.2, 4.2)

**F. WRP POLICY ASSESSMENT**

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder or Not Applicable (N/A). For more information about consistency review process and determination, see **Part I** of the *NYC Waterfront Revitalization Program*. When assessing each policy, review the full policy language, including all sub-policies, contained within **Part II** of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).

For those policies checked Promote or Hinder, provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.

		Promote	Hinder	N/A
1	<b>Support and facilitate commercial and residential redevelopment in areas well-suited to such development.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.4	In areas adjacent to SMIA's, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Promote	Hinder	N/A
<b>2</b>	<b>Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>3</b>	<b>Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.1.	Support and encourage in-water recreational activities in suitable locations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.3	Minimize conflicts between recreational boating and commercial ship operations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>4</b>	<b>Protect and restore the quality and function of ecological systems within the New York City coastal area.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.5	Protect and restore tidal and freshwater wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.8	Maintain and protect living aquatic resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Promote	Hinder	N/A
<b>5</b>	<b>Protect and improve water quality in the New York City coastal area.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.1	Manage direct or indirect discharges to waterbodies.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>6</b>	<b>Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in <i>New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms</i> ) into the planning and design of projects in the city's Coastal Zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>7</b>	<b>Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7.2	Prevent and remediate discharge of petroleum products.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>8</b>	<b>Provide public access to, from, and along New York City's coastal waters.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.3	Provide visual access to the waterfront where physically practical.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>9</b>	<b>Protect scenic resources that contribute to the visual quality of the New York City coastal area.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.2	Protect and enhance scenic values associated with natural resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>10</b>	<b>Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.2	Protect and preserve archaeological resources and artifacts.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Patrick Benn

Address: 462 First Ave. New York, NY 10016

Telephone: (212) 562-6295

Email: bennp4@nychhc.org

Applicant/Agent's Signature: 

Date: 5/20/22

## Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the [NYS Department of State Office of Planning and Development](#) and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

**New York City Department of City Planning**  
Waterfront and Open Space Division  
120 Broadway, 31<sup>st</sup> Floor  
New York, New York 10271  
212-720-3696  
[wrp@planning.nyc.gov](mailto:wrp@planning.nyc.gov)  
[www.nyc.gov/wrp](http://www.nyc.gov/wrp)

**New York State Department of State**  
Office of Planning and Development  
Suite 1010  
One Commerce Place, 99 Washington Avenue  
Albany, New York 12231-0001  
518-474-6000  
[www.dos.ny.gov/opd/programs/consistency](http://www.dos.ny.gov/opd/programs/consistency)

## Applicant Checklist

- Copy of original signed NYC Consistency Assessment Form
- Attachment with consistency assessment statements for all relevant policies
- For Joint Applications for Permits, one (1) copy of the complete application package
- Environmental Review documents
- Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at [www.nyc.gov/wrp](http://www.nyc.gov/wrp)



**Parks, Recreation,  
and Historic Preservation**

**ANDREW M. CUOMO**  
Governor

**ERIK KULLESEID**  
Commissioner

February 25, 2020

Sarah Salem  
Associate Cultural Resources Specialist  
New York Power Authority  
123 Main Street-5E  
White Plains, NY 10601

Re: NYPA  
Bellevue Hospital Combined Heat and Power Gas Engines  
462 1<sup>st</sup> Ave, New York, NY 10016  
20PR00628

Dear Ms. Salem:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6NYCRR Part 617).

We note that the Administration Building and Buildings C and D of the Bellevue Hospital complex are eligible for listing in the State and National Registers of Historic Places. We have reviewed the project description and supporting documentation that was provided to our office on January 29<sup>th</sup>, 2020. Based upon our review, it is OPRHP's opinion that the proposed work will have No Adverse Impact on historic resources.

If additional information or correspondence is required regarding this project it should be provided via our Cultural Resource Information System (CRIS) at <https://cris.parks.ny.gov/>. Once on the CRIS site, you can log in as a guest and choose "submit" at the very top menu. Next choose "submit new information for an existing project" at the very bottom of the page. You will need this project number and your e-mail address. If you have any questions, I can be reached at (518) 268-2182.

Sincerely,

Olivia Brazee  
Historic Site Restoration Coordinator  
olivia.brazee@parks.ny.gov

via e-mail only

cc: Robert Panepinto, NYPA

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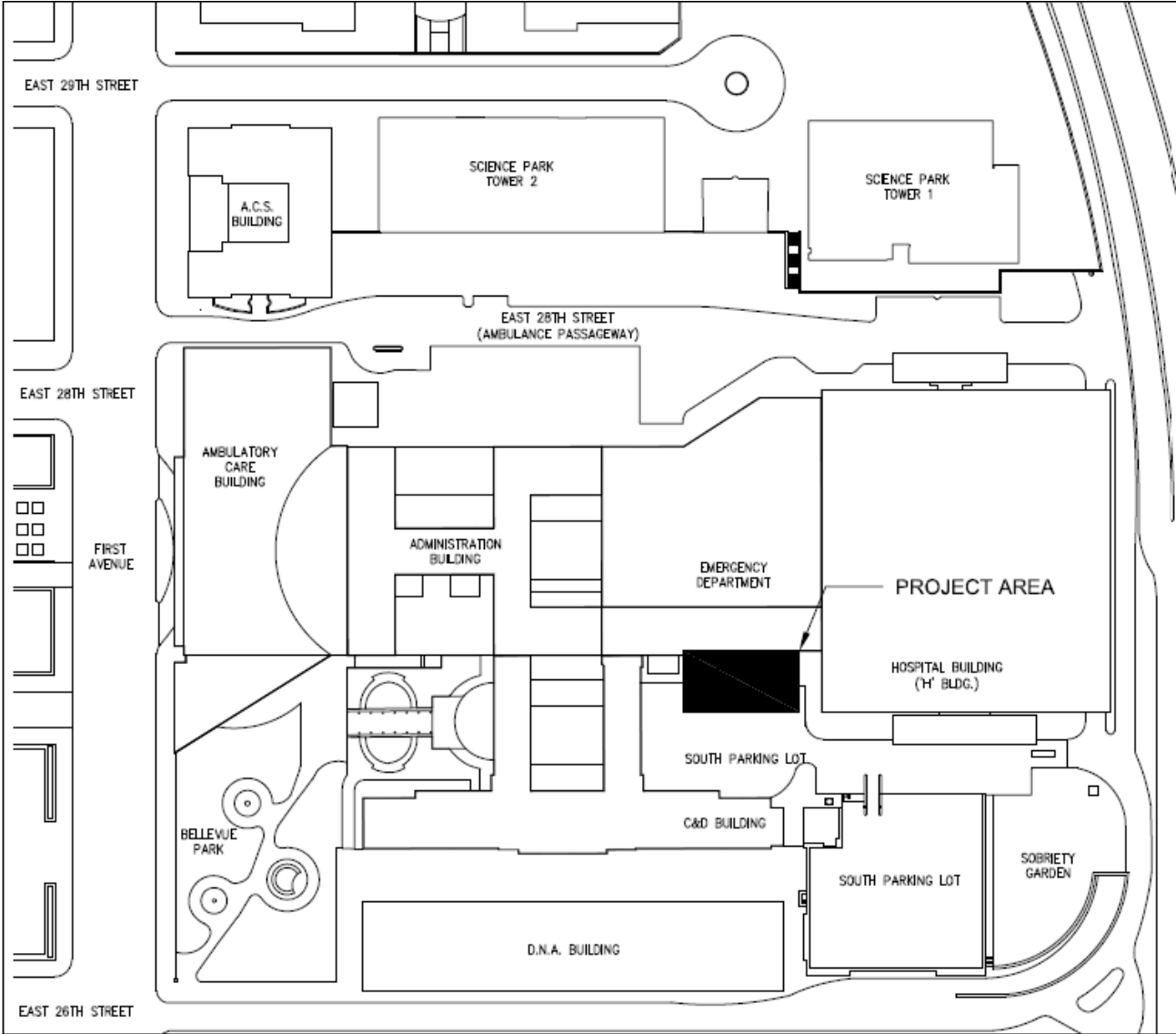
**Division for Historic Preservation**

P.O. Box 189, Waterford, New York 12188-0189 • (518) 237-8643 • parks.ny.gov

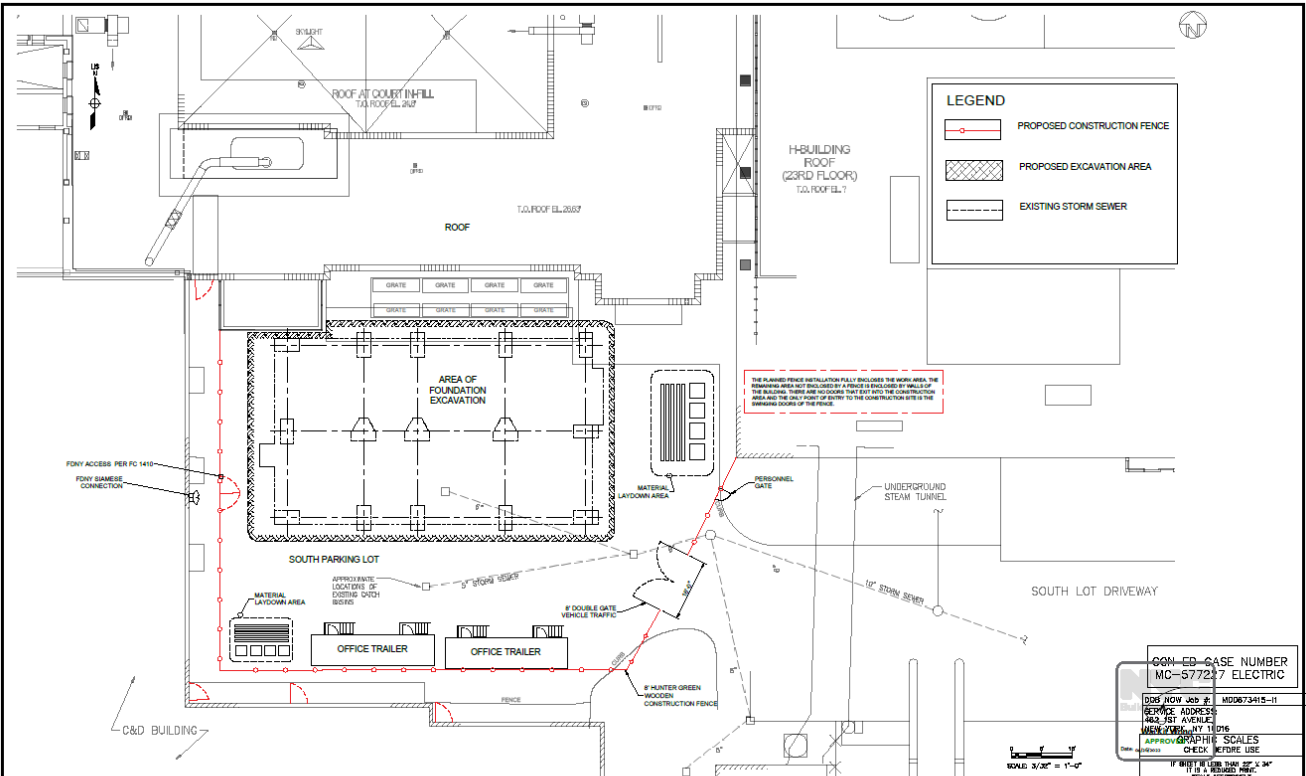


# BELLEVUE HOSPITAL 4MW CHP PLANT

462 1ST AVENUE, NEW YORK, NY 10016



SITE PLAN



GOM-ED-GASE NUMBER  
 MC-577237 ELECTRIC  
 DDB NOW Job #: M00873415-H  
 SERVICE ADDRESS  
 1401 35th AVENUE  
 BELLEVUE, NY 11016  
 APPROVED GRAPHIC SCALES  
 CHECK BEFORE USE  
 IF BUILT IN LINES THEN 32" X 34"  
 IF IN A REDUCED AREA  
 SCALE ACCORDINGLY

DESIGN: J. J. MURPHY CHECKED: J. J. MURPHY DATE: 11/11/16 PROJECT: BELLEVUE HOSPITAL 4MW CHP PLANT DRAWING NO. EQ-100.00	REVIEWED BY: J. J. MURPHY DATE: 11/11/16 PROJECT: BELLEVUE HOSPITAL 4MW CHP PLANT DRAWING NO. EQ-100.00			BELLEVUE HOSPITAL 4MW CHP PLANT CIVIL MATERIAL LAY DOWN, OFFICE TRAILERS & CONSTRUCTION FENCE PLAN	DATE: 5/2013 SHEET NO. 10 1 OF 3 DRAWING NO. EQ-100.00
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# CLCPA Analysis



September 13th, 2023

NYSDEC Region 2  
Division of Environmental  
Permits 1 Hunter's Point Plaza  
47-40 21<sup>st</sup> Street  
Long Island City, New York 11101-5407  
**Attn: Ms. Denise Grattan**

- Re:
- **NYC HHC Bellevue Hospital- 462 First Ave, New York, NY 10016**
  - **DEC ID: 2-6206-00032/00004**
  - Climate Leadership and Community Protection Act (CLCPA) Emissions Reduction Letter

Dear Ms. Grattan,

In response to the DEC's request for information regarding future reductions of GHG levels, this letter outlines the impact on emissions by adding two (2) new Caterpillar engines as part of the ongoing Combined Heat & Power (CHP) project at this site along with the Bellevue Hospital's efforts to reduce its overall GHG emissions.

**Caterpillar Engines**

The GHG emissions from the two (2) reciprocating engines used in the CHP system are calculated to be 35,857 tons/yr CO<sub>2</sub>e. The total Hazardous Air Pollutant emissions these engines generate will be 4.88 tons/year. Calculations supporting the emissions from this project are attached to this letter. These units are a new addition to the emission sources present at the facility. They have the following exhaust gas emission rates based on the manufacturer's guarantee:

- NO<sub>x</sub> – 1.0 g/bhp-hr.
- CO < 2 g/bhp-hr.
- VOC – 0.4 bhp/hr.

To further reduce the emissions being added by the CHP engines at the site, we included in our design the installation of a Selective Catalytic Reduction (SCR) and Oxidation Catalyst (OXICAT) urea system. This is the Best Available Control Technology (BACT) for reciprocating natural gas engines as regulated by EPA National Emission Standards for Hazardous Air Pollutants (NESHAPS). The below chart shows the emission reduction provided by the emission controls being implemented.

	<b>Pre-Catalyst Emissions (g/bhp-hr)</b>	<b>Post-Catalyst Emissions (g/bhp-hr)</b>	<b>Percent Reduction (%)</b>
<b>NOx</b>	1.18	0.1	91.5
<b>CO</b>	1.66	0.6	63.9
<b>NMNEHC</b>	0.42	0.1	76.2

Regarding Hazardous Air pollutants, these new engines are required to meet EPA NESHAP standards and have an EPA Certificate of Conformity. Furthermore, the Hospital is preparing an Environmental Justice Plan, in which members of the affected community will be able to provide input on this project. HHC will consider all feedback and concerns brought from the community regarding this project and implement any feasible project adjustments based on these comments.

### **CHP Project Benefits**

[As per the EPA](#), on-site heating plants are 75-85 percent efficient and off-site power generating power plants have an average of 36 percent total system efficiency. Overall, separate heat and grid power is 50-55 percent fuel efficient. By recovering and using heat from on-site electricity production, reciprocating-type CHP systems typically achieve total system efficiencies of 75 to 80 percent. The specific [CHP system](#) being installed at Bellevue Hospital, will achieve total system efficiency more than that range, closer to 86 percent as per the manufacturer's cut sheet.

Annually, the CHP system at Bellevue Hospital is anticipated to consume 2,926,460 therms of natural gas while generating 32.5 million kwh of electricity and producing ~90,000 MMBTU of thermal energy equivalent to 74,427 mlbs of steam. This energy generation represents approximately 50% of Bellevue's annual electricity consumption and 30% of steam use. Since the CHP system would be 25-30 percent more efficient than obtaining separate utilities from CONED's grid electric and district steam systems, annual GHG emissions reduction is anticipated to be **3,438 metric tons of CO<sub>2</sub>e**. Additionally, the [14<sup>th</sup> street CONED power plant](#), which is only twelve blocks from the Bellevue Hospital, where CONED produces some of its electricity and steam being supplied to midtown buildings, should anticipate a reduction in its GHG emissions resulting from the hospital's reduced energy needs.

In addition to reducing costs and meeting their sustainability and emissions reduction goals, CHP will serve as a reliable and redundant energy source, making them more resilient during grid outages or natural disasters.

### **Energy Efficiency Projects**

As part of Local Law 97, NYC Health and Hospitals(H+H) is committed to reducing its operational GHG emissions by 80 percent by 2050, with an interim goal of 50 percent GHG emissions reduction by 2030. In addition, in May 2022, H+H also signed the Climate Pledge with the U.S. Department of Human and Health Services, where H+H has also committed to reducing its organizational emissions by 50% by 2030 and achieving net zero by 2050, publicly accounting for this goal every year starting in 2024. Both goals align with NY State's CLCPA goals for 2030-2050. We strongly believe that reducing our greenhouse gas (GHG) emissions offers benefits such as improving air quality in our communities, increasing our resiliency, and making our buildings healthier and more comfortable for our patients and staff.

Bellevue Hospital is the 2nd largest acute care hospital in our system, and therefore, we try to implement as many decarbonization projects as possible since this facility represents 12% of our operational GHG Emissions and any large emissions reductions will positively impact our entire emissions portfolio.

As part of complying with [Local Law 97](#), several energy efficiency projects were recently implemented at the Bellevue Hospital. They include:

- Replacement and retrofit of over 30,000 fluorescent fixtures with LED fixtures. This has reduced **1,006 metric tons CO2e** annually.
- Installation of an air-cooled chiller for Operating Rooms so that the Large Chiller Plant and Cooling Towers can be shut down in the winter, which resulted in an annual reduction of **377 metric tons CO2e**.

Bellevue Hospital is also planning several other energy projects that are underway or are in the planning phase, which will be advanced to design and then construction within the next few years. Some of these projects are:

- Replace, inefficient, outdated, deteriorated cooling towers, which include more efficient motors with VFDs. This project is underway and is expected to reduce **43.5 metric tons of CO2e** annually.
- Update and replace Bellevue's obsolete Building Automation System (BAS) to control its HVAC equipment more efficiently and effectively. This project is expected to be implemented in the next 2-3 years and is estimated to reduce 1,372 metric tons of CO2e annually.
- Optimize chiller plant controls. This project is underway and is estimated to reduce **96.9 metric tons of CO2e annually**
- Conduct hydraulic balancing of the secondary chilled water distribution system to optimize flow requirements. The project will be implemented in the next 2-3 years and is estimated to reduce **113 metric tons CO2e** annually.

For the longer term projects, beyond 2030, Bellevue Hospital is currently conducting an ASHRAE Level 3 Energy Audit and Retro-CX study with a NYPA Consultant. Upon completion, HHC plans to implement energy conservation measures identified in this report. Some of the potential measures include but are not limited to:

1. Electrification of the domestic hot water needs, humidification systems, and space heating equipment.
2. Refurbishing/replacing AHUs with more efficient units that include VFD drives and/or fan walls
3. Converting dual duct constant air volume systems to Chilled Beams, Fan Coiled Units and VAV systems where feasible
4. Install water-side & air-side economizer systems where practical.

In conclusion, Bellevue Hospital is actively working to offset the emissions expected by the installation of the new CHP system in the Medical City district. However, despite the on-site emission increase, the CHP system will be reducing overall emissions at the source where electricity and steam are being generated to serve NYC buildings.



**Yunjung Lee**

Director of Capital Design

[NYC Health + Hospitals/ Bellevue](#)

**EXHIBIT 1**  
**NYC HHC - BELLEVUE HOSPITAL**  
**462 FIRST AVE, NEW YORK, NY 10016**

**Section 1: Maximum annual (actual & potential) Fuel consumption by 2 New Cogen Units**

#	Manufacturer/ Model	Location	Maximum Heat Input (million BTU/hr)	Fuel Type		Maximum Hourly Capacity		Actual Annual Consumption		Maximum Annual (Potential to Emit) Capacity	
						Oil	Natural Gas	Oil	Natural Gas	Oil	Natural Gas
				(GPH)	(CFH)	(GPY)	(CFY)	(GPY)	(CFY)		
1	Caterpillar / G3516H	Main Building	21.80	Natural Gas	None	0.00	21374.51	0	170,996,078	0	187,240,706
2	Caterpillar / G3516H	Main Building	21.80	Natural Gas	None	0.00	21374.51	0	170,996,078	0	187,240,706
<b>2 COGEN ENGINES</b>		<b>TOTAL</b>	<b>43.60</b>			<b>0</b>	<b>42,749</b>	<b>0</b>	<b>341,992,157</b>	<b>0</b>	<b>374,481,412</b>

Heating Value of Oil (Btu/gal): 145000  
 Heating Value of Natural Gas (Btu/cu. ft.): 1026

1. Per information obtained from the facility
2. Hours of operation are not limited by permit conditions
3. Maximum Annual Actual usage = 365 days per year x 24 hours per day x 50% load
4. Maximum Annual (Potential to Emit) Capacity of Oil = [(Maximum Hourly Capacity) in gallons per hour] x 8760 hours per year
5. Maximum Annual (Potential to Emit) Capacity of Gas = [(Maximum Hourly Capacity) in cubic foot per hour] x 8760 hours per year

**Section 2: Maximum annual (actual & potential) Fuel consumption by Six (6) Demand Response Generators**

Number	Equipment	Year Manufactured	Serial Number	Location	Rating <sup>1</sup> kW	Maximum Heat	Fuel	Maximum Hourly	Actual Annual	Maximum Annual
						Input <sup>2</sup>	Type	Capacity	Usage <sup>3</sup>	(Potential to Emit)
						(million BTU/hr)	Primary	(GPH)	(GPY)	Capacity <sup>4</sup> (GPY)
1	Cat C27	2008	AFN03262	13th Floor/Main Building	750	7.50	Diesel	53.19	5319	465957
2	Cat C27	2008	AFN03263	13th Floor/Main Building	750	7.50	Diesel	53.19	5319	465957
1	Cat C27	2008	AFN03264	13th Floor/Main Building	750	7.50	Diesel	53.19	5319	465957
2	Cat C27	2008	AFN03265	13th Floor/Main Building	750	7.50	Diesel	53.19	5319	465957
1	Caterpillar 3512C	2008	G4W00628	Basement	1500	15.00	Diesel	106.38	10638	931915
2	Cummins 3100	2006		Basement	900	9.00	Diesel	63.83	6383	559149
<b>6 PLM/CDRP GENERATORS</b>				<b>Total</b>	<b>5400</b>	<b>54</b>	<b>0</b>	<b>382.9787234</b>	<b>38297.87234</b>	<b>3354893.617</b>

Total Nox TPY 8.4 Heating Value of Diesel (Btu/gal): 138000

- 1 Rating in KW provided by the facility, the equivalent KVA was calculated (1 KW = 1.25 KVA, 1 KW = 1.34 HP)
- 2 The Maximum Heat Input for Diesel = (Maximum Hourly Capacity in gallons per hour) x 137,000 Btu/gallon/1000000
- 3 Actual Annual Usage calculated on worst case scenario bases - 500 hours, as per 6 NYCRR 200.1(cc)
- 4 Maximum Annual (Potential to Emit) Capacity = Maximum Hourly Capacity x Maximum Operating Hours per Year

**EXHIBIT 1 (Contd')**

**Section 3: Maximum annual (actual & potential) fuel consumption by Three Generators - For Emergency Use Only (Exempt Sources)**

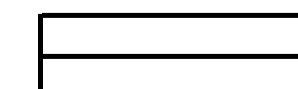
Number	Equipment	Year Manufactured	Serial Number	Location	Rating <sup>1</sup> kW	Maximum Heat	Fuel	Maximum Hourly	Actual Annual	Maximum Annual
						Input <sup>2</sup>	Type	Capacity	Usage <sup>3</sup>	(Emit)
						(million BTU/hr)	Primary	(GPH)	(GPY)	Capacity <sup>4</sup> (GPY)
1	Rudox RM900S/Engine: Mitsubishi S12N	1993	11026	13th Floor/Main Building	600	6.00	Diesel	42.55	2213	372,766
2	Cat D399	1996	35B262	Ground	600	6.00	Diesel	42.55	2213	372,766
3	Cat D399	1996	35B263	Ground	600	6.00	Diesel	42.55	2213	372,766
<b>3 EMERGENCY GENERATORS</b>			<b>Total</b>	<b>0</b>	<b>1800.00</b>	<b>18.00</b>	<b>0</b>	<b>127.66</b>	<b>6638</b>	<b>1,118,298</b>

138000

Heating Value of Diesel (Btu/gal):

- 1 Rating in KW provided by the facility, the equivalent KVA was calculated (1 KW = 1.25 KVA, 1 KW = 1.34 HP)
- 2 The Maximum Heat Input for these engines are based on last stack test results - 11/10/2017
- 3 Actual Annual Usage calculated on estimated based on = 2 x actual fuel usage per year
- 4 Maximum Annual (Potential to Emit) Capacity = Maximum Hourly Capacity x Maximum Operating Hours per Year

- 4 Maximum Annual (Potential to Emit) Capacity = Maximum Hourly Capacity x Maximum Operating Hours per Year  
 A generator may be classified as "emergency" if used for back-up power generation only, and operated at most up to 500 hours per year - per U.S. EPA definition



**EXHIBIT 2 - 1a**  
**NYC HHC - BELLEVUE HOSPITAL**  
**462 FIRST AVE, NEW YORK, NY 10016**

**Baseline - DR GENERATORS**

**ESTIMATION OF GHG EMISSIONS FROM SIX (6) DEMAND RESPONSE GENERATORS**

CLCPA 7.2 Criteria Pollutants  Pollutants GHG Emissions	Upstream Emission Factor <sup>1</sup>	Diesel <b>54</b>  lb/hr	Actual Emissions	Potential Emissions	Annual	
	Diesel  lb/mmbtu		Diesel <b>38,298</b> <b>5,400</b> lb/yr	Diesel <b>3,354,894</b> <b>473,040</b> lb/yr	Emission Rate From Nordberg Engines (TONS PER YEAR)	
					ACTUAL	POTENTIAL
Carbon Dioxide (CO <sub>2</sub> )	32.18	1737.98	173,797.62	15,224,671.43	86.90	7612.34
Methane (CH <sub>4</sub> )	0.26	14.17	1416.67	124100.00	0.71	62.05
Nitrous Oxide (N <sub>2</sub> O)	0.001	0.03	2.98	260.71	0.001	0.13
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e) <sup>6</sup></b>					<b>146.79</b>	<b>12858.95</b>
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e 20yr GWP+) in lb</b>	55.94	3020.83	163125.00	8808750.00	81.56	4404.38

1. NYSDEC Appendix A: Emission Factors for Use by State Agencies and Applicants - Table A1
2. Annual Emission Rate (lb/yr) = Emission Factor (lb/million CF) x Fuel Consumption (CF/yr)
3. Total ACTUAL Emission Rate (lb/yr) = Annual emissions from natural gas combustions (ACTUAL OPERATION)
4. Total POTENTIAL Emission Rate (lb/yr) = Annual emissions from natural gas combustion (WORSE CASE COMBUSTION)
5. Annual Emission Rate (lb/yr) = Emission Factor (lb/1000 gal) x Fuel Consumption (gal/yr)
6. Global Warming Potentials (GWPs) for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O are 1, 84, and 264 respectively (6 NYCRR Section 496.5).

CLCPA 7.2 Criteria Pollutants  Pollutants GHG Emissions	Direct Emission Factor <sup>1</sup>	Diesel <b>54</b>  lb/hr	Actual Emissions	Potential Emissions	Annual	
	Diesel  lb/mmbtu		Diesel <b>38,298</b> <b>5,400</b> lb/yr	Diesel <b>3,354,894</b> <b>473,040</b> lb/yr	Emission Rate From Nordberg Engines (TONS PER YEAR)	
					ACTUAL	POTENTIAL
Carbon Dioxide (CO <sub>2</sub> )	162.71	8786.45	878,644.80	76,969,284.48	439.32	38484.64
Methane (CH <sub>4</sub> )	0.0066	0.36	35.64	3,122.06	0.02	1.56
Nitrous Oxide (N <sub>2</sub> O)	0.0013	0.07	7.13	624.41	0.004	0.31
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e) <sup>6</sup></b>					<b>441.76</b>	<b>38698.19</b>

1. Direct emission factors for GHG Pollutants follow U.S. EPA GHG Emission Factor Hub - Table 1 (April 2023) - <https://www.epa.gov/climateleadership/ghg-emission-factors-hub>

CLCPA 7.3 Hazardous Air Pollutants  Co-Pollutants Emissions	Direct Emission Factor <sup>2</sup>	Diesel <b>54</b>  lb/hr	Actual Emissions	Potential Emissions	Annual	
	Diesel  lb/mmbtu		Diesel <b>38,298</b> <b>5,400</b> lb/yr	Diesel <b>3,354,894</b> <b>473,040</b> lb/yr	Emission Rate From Nordberg Engines (TONS PER YEAR)	
					ACTUAL	POTENTIAL
Benzene	9.33E-04	0.0504	5.0382	441.3463	0.002519	0.2207
Toluene	4.09E-04	0.0221	2.2086	193.4734	0.0011	0.0967
Xylene	2.85E-04	0.0154	1.5390	134.8164	0.0008	0.0674
Propylene	2.58E-03	0.1393	13.9320	1220.4432	0.0070	0.6102
Formaldehyde	1.18E-03	0.0637	6.3720	558.1872	0.0032	0.2791
Acetaldehyde	7.67E-04	0.0414	4.1418	362.8217	0.0021	0.1814
Acrolein	9.25E-05	0.0050	0.4995	43.7562	0.0002	0.0219
Total PolyAromatic Hydrocarbons	0.0002	0.0091	0.9072	79.4707	0.0005	0.0397
<b>Total Hazardous Air Pollutants from 6 PLM Generators</b>		0.3464			<b>0.0173</b>	<b>1.5172</b>

1. Direct emission factors for Hazardous Air Pollutants from U.S. EPA Air Pollution Engineering Manual (AP-42), Chapter 3.1, table 3.3-2.



**EXHIBIT 2 - 1b**  
**NYC HH - NEW BELLEVUE HOSPITAL**  
**462 FIRST AVE, NEW YORK, NY 10016**

**Baseline - Emergency Generators**

**ESTIMATION OF GHG EMISSIONS FROM THREE (3) EMERGENCY GENERATORS**

Pollutants GHG Emissions	Upstream Emission Factor <sup>1</sup>	Diesel <b>18</b> lb/hr	Actual Emissions	Potential Emissions	Annual	
	Diesel		Diesel	Diesel	Emission Rate From Nordberg Engines (TONS PER YEAR)	
	lb/mmbtu		lb/yr	lb/yr	ACTUAL	POTENTIAL
Carbon Dioxide (CO <sub>2</sub> )	32.18	579.33	30,124.92	5,074,890.48	15.06	2537.45
Methane (CH <sub>4</sub> )	0.26	4.72	245.56	41,366.67	0.12	20.68
Nitrous Oxide (N <sub>2</sub> O)	0.001	0.01	0.52	86.90	0.0003	0.04
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e) <sup>6</sup></b>					<b>25.44</b>	<b>4286.32</b>
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e 20yr GWP+) in lb</b>	55.94	1006.94	18125.00	326250.00	9.06	163.13

1. NYSDEC Appendix A: Emission Factors for Use by State Agencies and Applicants - Table A1
2. Annual Emission Rate (lb/yr) = Emission Factor (lb/million CF) x Fuel Consumption (CF/yr)
3. Total ACTUAL Emission Rate (lb/yr) = Annual emissions from natural gas combustions (ACTUAL OPERATION)
4. Total POTENTIAL Emission Rate (lb/yr) = Annual emissions from natural gas combustion (WORSE CASE COMBUSTION)
5. Annual Emission Rate (lb/yr) = Emission Factor (lb/1000 gal) x Fuel Consumption (gal/yr)
6. Global Warming Potentials (GWPs) for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O are 1, 84, and 264 respectively (6 NYCRR Section 496.5).

Pollutants GHG Emissions	Direct Emission Factor <sup>1</sup>	Diesel <b>18</b> lb/hr	Actual Emissions	Potential Emissions	Annual	
	Diesel		Diesel	Diesel	Emission Rate From Nordberg Engines (TONS PER YEAR)	
	lb/mmbtu		lb/yr	lb/yr	ACTUAL	POTENTIAL
Carbon Dioxide (CO <sub>2</sub> )	162.71	2928.82	152,298.43	25,656,428.16	76.15	12828.21
Methane (CH <sub>4</sub> )	0.0066	0.12	6.18	1,040.69	0.003	0.52
Nitrous Oxide (N <sub>2</sub> O)	0.0013	0.02	1.24	208.14	0.001	0.10
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e) <sup>6</sup></b>					<b>76.57</b>	<b>12899.40</b>

1. Direct emission factors follow U.S. EPA GHG Emission Factor Hub - Table 1 (April 2023) - <https://www.epa.gov/climateleadership/ghg-emission-factors-hub>

Hazardous Air Pollutants	Direct Emission Factor <sup>2</sup>	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual	
	Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	No.2 Diesel Oil	Emission Rate From Large EM Generators (TONS PER YEAR)	
	lb/(million BTU)	lb/hr	lb/yr	lb/yr	ACTUAL	POTENTIAL
Benzene	9.33E-04	0.0168	0.8733	147.1154	0.0004	0.0736
Toulene	4.09E-04	0.0074	0.3828	64.4911	0.0002	0.0322
Xylene	2.85E-04	0.0051	0.2668	44.9388	0.0001	0.0225
Formaldehyde	2.58E-03	0.0464	2.4149	406.8144	0.0012	0.2034
Acetaldehyde	1.18E-03	0.0212	1.1045	186.0624	0.0006	0.0930
Acrolein	7.67E-04	0.0138	0.7179	120.9406	0.0004	0.0605
Total Poly Aromatic Hydrocarbons	9.25E-05	0.0017	0.0866	14.5854	0.0000	0.0073
<b>Total Hazardous Air Pollutants from Two (2) CHP Units</b>					0.003001986	0.50571918

1. Direct emission factors for Hazardous Air Pollutants from U.S. EPA Air Pollution Engineering Manual (AP-42), Chapter 3.1, table 3.3-2.

**EXHIBIT 2 - 1c**  
**NYC HH - BELLEVUE HOSPITAL**  
**462 FIRST AVE, NEW YORK, NY 10016**

**Project Scenario - 2 NEW COGENERATION ENGINES**

**ESTIMATION OF GHG EMISSIONS FROM TWO (2) COGENERATION ENGINES**

Pollutants GHG Emissions	Upstream Emission Factor <sup>1</sup>		Actual Emissions	Potential Emissions	Annual	
	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Emission Rate From Cogen Engines (TONS PER YEAR)	
	lb/mmbtu	lb/hr	lb/yr	lb/yr	ACTUAL	POTENTIAL
Carbon Dioxide (CO <sub>2</sub> )	26.85	1052.67	8,421,346.33	9,221,374.23	4210.67	4610.69
Methane (CH <sub>4</sub> )	0.77	30.18	241477.24	264417.58	120.74	132.21
Nitrous Oxide (N <sub>2</sub> O)	0.0003	0.01	96.59	105.77	0.048	0.05
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e)<sup>6</sup></b>					<b>14365.47</b>	<b>15730.19</b>

1. NYSDEC Appendix A: Emission Factors for Use by State Agencies and Applicants - Table A1
2. Annual Emission Rate (lb/yr) = Emission Factor (lb/million CF) x Fuel Consumption (CF/yr)
3. Total ACTUAL Emission Rate (lb/yr) = Annual emissions from natural gas combustions (ACTUAL OPERATION)
4. Total POTENTIAL Emission Rate (lb/yr) = Annual emissions from natural gas combustion (WORSE CASE COMBUSTION)
5. Annual Emission Rate (lb/yr) = Emission Factor (lb/1000 gal) x Fuel Consumption (gal/yr)
6. Global Warming Potentials (GWPs) for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O are 1, 84, and 264 respectively (6 NYCRR Section 496.5).
7. Actual and Potential Usage calculated on worst case scenario bases - 500 hours, as per 6 NYCRR 200.1(cc)

Pollutants GHG Emissions	Direct Emission Factor <sup>1</sup>		Actual Emissions	Potential Emissions	Annual	
	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Emission Rate From Cogen Engines (TONS PER YEAR)	
	lb/mmbtu	lb/hr	lb/yr	lb/yr	ACTUAL	POTENTIAL
Carbon Dioxide (CO <sub>2</sub> )	116.98	4585.60	36,684,826.59	40,169,885.11	18342.41	20084.94
Methane (CH <sub>4</sub> )	0.0022	0.09	691.38	757.07	0.35	0.38
Nitrous Oxide (N <sub>2</sub> O)	0.00022	0.01	69.14	75.71	0.035	0.04
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e)<sup>6</sup></b>					<b>18380.58</b>	<b>20126.73</b>

1. Direct emission factors follow U.S. EPA GHG Emission Factor Hub - Table 1 (April 2023) - <https://www.epa.gov/climateleadership/ghg-emission-factors-hub>

Hazardous Air Pollutants	Emission Factor	Hourly Emission Rate	Actual Emissions	Potential Emissions	Annual	
	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Emission Rate From Cogen Engines (TONS PER YEAR)	
	lb/(million BTU)	lb/hr	lb/yr	lb/yr	ACTUAL	POTENTIAL
Benzene	1.58E-03	0.0619	495.4988	542.5711	0.2477	0.2713
Toulene	5.58E-04	0.0219	174.9926	191.6169	0.0875	0.0958
Xylene	1.95E-04	0.0076	61.1533	66.9629	0.0306	0.0335
Formaldehyde	2.05E-02	0.8036	6428.9396	7039.6888	3.2145	3.5198
Acetaldehyde	2.79E-03	0.1094	874.9630	958.0845	0.4375	0.4790
Acrolein	2.63E-03	0.1031	824.7859	903.1406	0.4124	0.4516
Total Poly Aromatic Hydrocarbons	1.41E-04	0.0055	44.2186	48.4193	0.0221	0.0242
<b>Total Hazardous Air Pollutants from Two (2) CHP Units</b>		<b>1.1131</b>	<b>8904.5517</b>	<b>9750.4841</b>	<b>4.4523</b>	<b>4.8752</b>

1. Direct emission factors for Hazardous Air Pollutants from U.S. EPA Air Pollution Engineering Manual (AP-42), Chapter 3.2, table 3.2-3.

**EXHIBIT 2 - 1d**  
**NYC HH - BELLEVUE HOSPITAL**  
**462 FIRST AVE, NEW YORK, NY 10016**

**Project Scenario - 2 NEW COGENERATION ENGINES**

**ESTIMATION OF GHG EMISSIONS FROM PURCHASED CON ED ENERGY BEFORE COGEN**

\*Based on Energy Model performed for this project

Usage	Energy Consumption (mmBTU/year)	NYC Local Law 97 GHG Intensity (kg CO2e/mmBTU)	Annual GHG Emissions (Tons CO2e)	Total Annual GHG Emissions (Tons CO2e)
<b>With Action (Cogen)</b>				
Electricity	200895	35.902	7948.221742	25106.76156
Natural Gas	313544	53.196	18380.57386	
<b>No Action (No Cogen)</b>				
Electricity	559273	35.902	22127.07529	28424.65635
Steam	88867	64.306	6297.581062	
<b>Reduction</b>	105555			

Upstream Emission Factor <sup>1</sup> for No Action Scenario (No Cogen)			Actual Emissions	Potential Emissions	Annual Emission Rate From Cogen Engines (TONS PER YEAR)	
Pollutants GHG Emissions	Natural Gas lb/mmmbtu	ConEd Energy 648,140 mmBTU lb/hr	ConEd Energy 648,140 mmBTU lb/yr	ConEd Energy 648,140 mmBTU lb/yr	ACTUAL	POTENTIAL
Carbon Dioxide (CO <sub>2</sub> )	26.85	1986.83	17,404,631.25	17,404,631.25	8702.32	8702.32
Methane (CH <sub>4</sub> )	0.77	56.97	499,067.75	499,067.75	249.53	249.53
Nitrous Oxide (N <sub>2</sub> O)	0.0003	0.02	199.63	199.63	0.100	0.10
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e) <sup>6</sup></b>					<b>29689.51</b>	<b>29689.51</b>

1. NYSDEC Appendix A: Emission Factors for Use by State Agencies and Applicants - Table A1

2. Emission factor for natural gas used to estimate emission from using ConEd-generated energy

Upstream Emission Factor <sup>1</sup> for With Action Scenario (Cogen)			Actual Emissions	Potential Emissions	Annual Emission Rate From Cogen Engines (TONS PER YEAR)	
Pollutants GHG Emissions	Natural Gas lb/mmmbtu	ConEd Energy 200,895 mmBTU lb/hr	ConEd Energy 200,895 mmBTU lb/yr	ConEd Energy 200,895 mmBTU lb/yr	ACTUAL	POTENTIAL
Carbon Dioxide (CO <sub>2</sub> )	26.85	615.83	5,394,673.61	5,394,673.61	2697.34	2697.34
Methane (CH <sub>4</sub> )	0.77	17.66	154,689.15	154,689.15	77.34	77.34
Nitrous Oxide (N <sub>2</sub> O)	0.0003	0.01	61.88	61.88	0.031	0.03
<b>Carbon Dioxide Equivalents (CO<sub>2</sub>e) <sup>6</sup></b>					<b>9202.45</b>	<b>9202.45</b>

1. NYSDEC Appendix A: Emission Factors for Use by State Agencies and Applicants - Table A1

**EXHIBIT 3**  
**NYC HHC - BELLEVUE HOSPITAL**  
**462 FIRST AVE, NEW YORK, NY 10016**

**GHG Emissions Reduction Summary**

	Upstream Carbon Dioxide Equivalents (CO2e) TPY		Change
	Baseline	Project Scenario	
ESTIMATION OF GHG EMISSIONS FROM DEMAND RESPONSE GENERATORS	146.79	146.79	-
ESTIMATION OF GHG EMISSIONS FROM EMERGENCY GENERATORS	25.44	25.44	-
ESTIMATION OF GHG EMISSIONS FROM TWO (2) NEW CATERPILLAR ENGINES	0.00	14365.47	14,365.47
	29689.51	9202.45	-20487.06
<b>Total Carbon Dioxide Equivalents [CO2e] (TPY)</b>	<b>29861.74</b>	<b>23740.15</b>	<b>-6121.59</b>

	Direct Carbon Dioxide Equivalents (CO2e)		Change
	Baseline	Project Scenario	
ESTIMATION OF GHG EMISSIONS FROM DEMAND RESPONSE GENERATORS	441.76	441.76	-
ESTIMATION OF GHG EMISSIONS FROM EMERGENCY GENERATORS	76.57	76.57	-
ESTIMATION OF GHG EMISSIONS FROM TWO (2) NEW CATERPILLAR ENGINES	0.00	18380.58	18,380.58
ESTIMATION OF GHG EMISSIONS FROM PURCHASE OF CONED ENERGY	28424.66	7948.00	-20476.66
<b>Total Carbon Dioxide Equivalents [CO2e] (TPY)</b>	<b>28,942.99</b>	<b>26,846.91</b>	<b>-2096.08</b>

	Direct Hazardous Air Pollutants		Change
	Baseline	Project Scenario	
ESTIMATION OF GHG EMISSIONS FROM DEMAND RESPONSE GENERATORS	0.02	0.02	-
ESTIMATION OF GHG EMISSIONS FROM EMERGENCY GENERATORS	0.00	0.00	-
ESTIMATION OF GHG EMISSIONS FROM TWO (2) NEW CATERPILLAR ENGINES	0.00	4.45	4.45
<b>Total Hazardous Air Pollutants (TPY)</b>	<b>0.02</b>	<b>4.47</b>	<b>4.45</b>

Note: Annual emission estimations for these units are expected to remain consistent through years 2030 and 2050, to be offset by emission reduction projects mentioned in accompanying cover letter. Emission reductions comparative to baseline emissions are also expected to remain consistent.

# Public Participation Plan

# PUBLIC PARTICIPATION PLAN

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**Applicant:**

New York City Health and Hospitals

**Facility:**

NYC Health + Hospital / Bellevue

**NYSDEC Application Number:**

2-6206-00032/00004

**As Required by:**

NYSDEC Commissioner's Policy Guidance CP-29

**Submitted to:**

New York State Department of Environmental Conservation  
NYSDEC Region 2  
47-40 21st Street  
Long Island City, NY 11101-5401

**Date:**

July 25, 2023

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### **List of Acronyms**

<b>Acronym</b>	<b>Definition</b>
CP-29	Commissioner Policy 29, Environmental Justice and Permitting
NOCA	Notice of Complete Application
NYSDEC	New York State Department of Environmental Conservation
PEJA	Potential Environmental Justice Area
PPP	Public Participation Plan
NYC HHC	New York City Health and Hospitals Corporation
CHP	Combined Heat and Power
CDRP	Coordinated Demand Response
NOx	Nitrogen oxides

## **I. INTRODUCTION AND OBJECTIVE**

This Public Participation Plan (PPP) has been prepared by New York City Health and Hospitals Corporation (hereinafter referred to as “applicant”) to fulfill and comply with the requirements of New York State Department of Environmental Conservation **Commissioner Policy 29, Environmental Justice and Permitting (CP-29)** for their proposed installation of two (2) new natural gas fired co-generation Engines – Caterpillar G3516H, each with 1982 kW rating, that requires an Air State Facility Permit application renewal with modifications and which has been determined by NYSDEC to potentially impact one or more potential environmental justice area (PEJA) (See Figure 1).

This PPP has been developed in accordance with the procedures established in CP-29 Section V.D and it aims to help ensure meaningful and effective public participation throughout the NYSDEC environmental permit review process. Public participation in the NYSDEC environmental permit review process means a program of activities that provides opportunities for stakeholders to be informed about and involved during the review of a proposed action.

The objective of this PPP is to outline and describe the program of activities that the applicant will implement to actively seek and enhance public participation during the application review process.

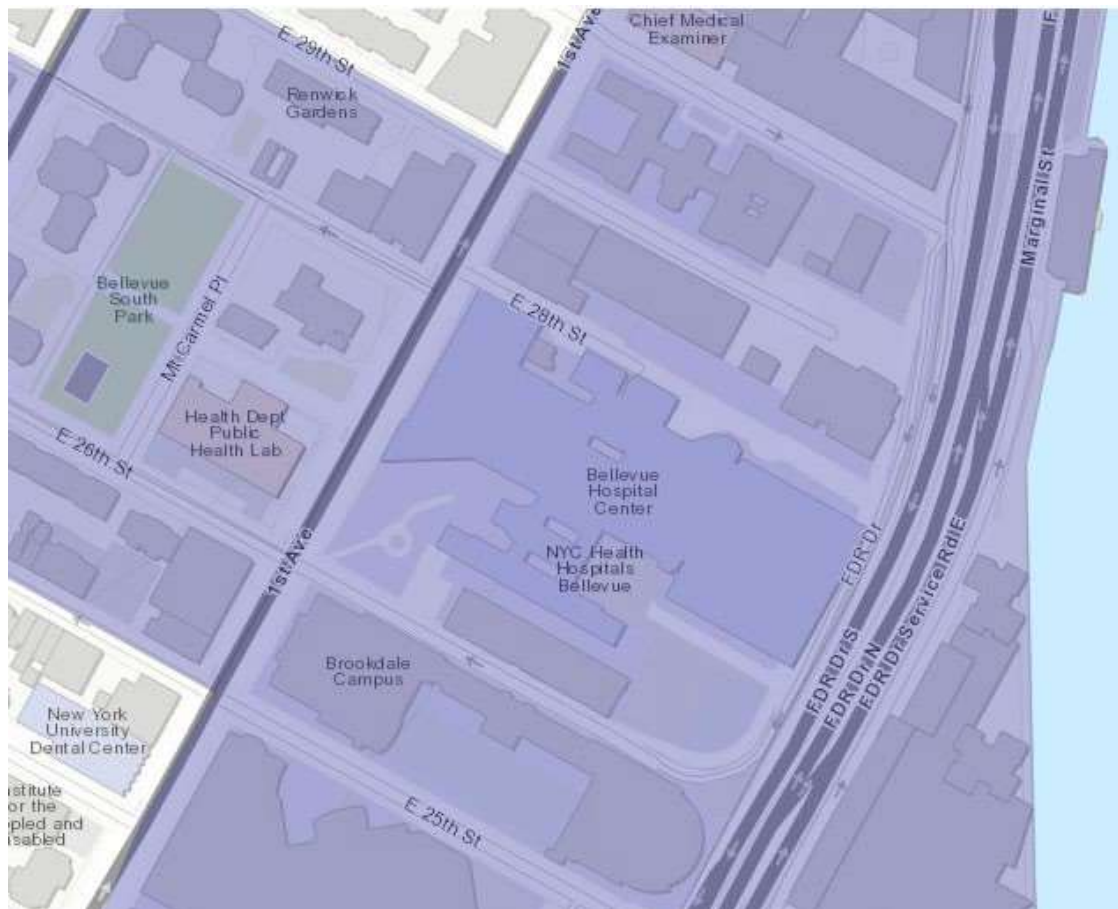


Figure 1. Project Location and Potential Environmental Justice Area(s)



## **II. PROJECT DESCRIPTION AND PROPOSED ACTION**

### **Project Overview**

The applicant proposes to install two (2) new cogeneration engines that would allow the hospital to generate its own heat and electricity thus becoming less reliant on utility services. To implement the proposed project, the applicant has submitted an application to the New York State Department of Environmental Conservation (NYSDEC) to renew and modify their existing Air State Facility permit to construct and operate two new cogeneration engines with nitrogen oxide (NOx) emissions under 25 tons per year. The engines will be installed outside of the main building in the South Lot. The application also includes an update to the facility's emergency engines for participation of six (6) generators in the Coordinated Demand Response Program (CDRP). The facility's address is 462 First Avenue, New York, NY 10016.

### **Nature of Proposed Project/Action and Purpose**

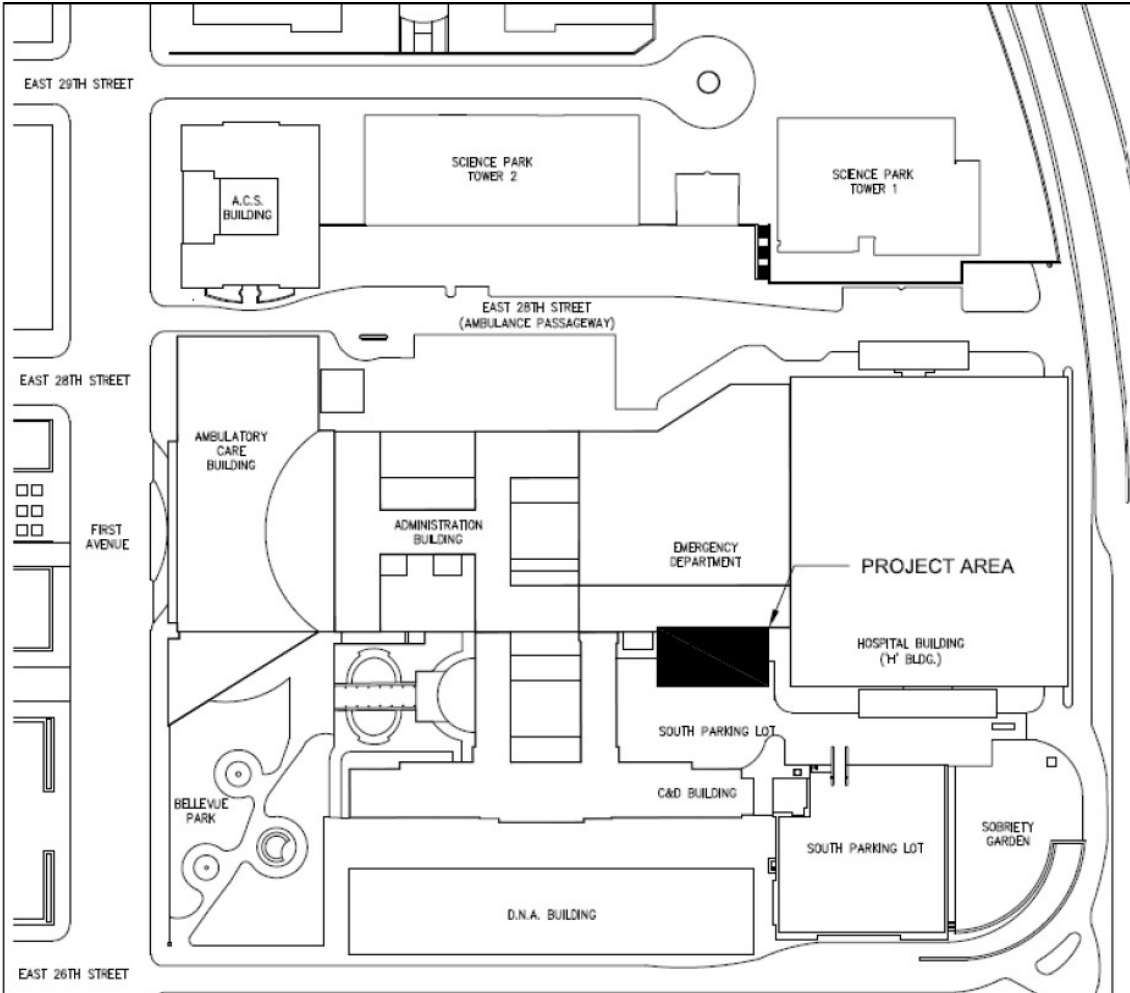
The proposed Combined Heat and Power (CHP) system would consist of two (2) 1982 kW (approximately 2 MW) natural-gas fired engines anticipated to operate continuously to provide electrical and thermal energy to the facility 24 hours per day. Both engines will be equipped with a Selective Catalytic Reduction (SCR) and Oxidation Catalyst System for reduction of NOx, CO, and VOC emissions. The engines will be housed on a newly built platform in a lot owned by Bellevue Hospital next to the Emergency Department. The CHP engine enclosure will sit on the platform approximately 25 feet above grade. Each engine will have an individual stack that will be routed up the adjacent A-Building exterior wall to a height of 180 ft above the Emergency Department roof and (CHP) enclosure (approximately 200 ft above grade). The stacks will extend 10 feet above the A-Building façade and 30 feet above the A-Building Roof/Penthouse. Six (6) existing emergency generators will also participate in CDRP.

### **Purpose/Need**

The primary goal of this project is to provide Bellevue Hospital with a 4MW CHP system capable of meeting two tasks: (1) Delivering on-site power to the facility in the event of an electrical utility outage for an extended amount of time, and (2) Reducing energy costs and increasing energy efficiency for the facility.

The purpose of the CHP is to operate a 'base load' manner producing both electric and thermal energy 24-hours per day throughout the year. Electrical power will be generated within two separated, identical CHP enclosures each rated at 2MW. Thermal 'waste' energy will be simultaneously recovered from both engines' cooling water systems and exhaust gas streams to produce hot water. This heated water will then be used to offset steam purchased from Con Edison.

Bellevue Hospital Public Participation Plan



SITE PLAN

Figure 2. Site Plan

**Potential Impacts**

**Emission Impact**

In the proposed project, the facility’s annual emissions will remain below 24.9 tons per year of NOx due to the reduced emissions of the new cogeneration engines by SCR/Oxidation Catalyst systems. The increased emissions from the cogeneration engines, assuming operation 24 hours per day and 7 days per week, increases NOx emissions by 4.8 tons per year, for a total of 18.8 tons per year. While the facility’s emissions will increase due to producing electricity and steam on site, the facility’s energy production will actually be more efficient (in kWh per year) and reduce the amount of energy that is used to power the facility when compared to the energy purchased annually from Con Edison, for an annual reduction of 134,422 mmBTU of electricity.

## **Community Impact**

The cogeneration units will be constructed on the property's South Lot, which is surrounded on all sides by hospital property. No public community spaces will be impacted. While this expansion of usage will cause a minor increase in emissions, the installation of these engines are critical to hospital functions. Bellevue Hospital serves a large community of residents in Manhattan. In the event of power grid failures or other losses of heat and electricity, the hospital's ability to produce its own energy is crucial to enable continuation of hospital operations and support those at the hospital relying on power and electricity for important medical procedures and for survival.

To address the Climate Leadership and Community Protection Act (CLCPA) the applicant is required to provide a CLCPA 7(2) and 7(3) analysis to NYSDEC, which will be posted to the document repository (see Section VI).

## **III. STAKEHOLDER IDENTIFICATION & CONTACT LIST**

A contact list consisting of the names, addresses, phone numbers, or email addresses of stakeholders to the proposed action is provided in Appendix A. The contact list includes individuals and organizations with a direct stake in the proposed action and people and individuals and organizations that have expressed interest in the proposed project or similar projects affecting the same neighborhood or community.

To develop a draft contact list, the applicant reached out to neighborhood groups who are near or adjacent to the proposed project and that will be or potentially will be affected by the operation; community boards, community leaders, local community, civic and recreational organizations, and business groups to help identify stakeholders and develop an initial contact list.

The current contact list has been developed in consultation with NYSDEC by identifying stakeholders from the following categories: local government and elected officials; business owners, residents, and occupants; local civic, community, religious organizations; local news media; administrator/operator of any school or day care that live, work and/or represent a neighborhood or community within a 0.3-mile radius of the project area (see Figure 3).

The applicant will utilize this contact list to communicate and disseminate information about the proposed project/action and permit application review process to the affected community and stakeholders. At minimum, this includes distribution of the written

# Bellevue Hospital Public Participation Plan

information and outreach materials described in Section V to inform the community about upcoming public meetings and opportunities for public participation.

The contact list will be reviewed periodically and updated as appropriate throughout the permit application review process. The applicant will update the contact list with any new stakeholders identified during the public meeting or execution of other PPP components. In addition, individuals and organizations will be added to the contact list upon request. Such requests should be submitted to the project liaison identified in Section IV. Other additions to the contact list may be made at the discretion of the applicant or, at the request of the NYSDEC project manager, in consultation with other NYSDEC staff, as appropriate.

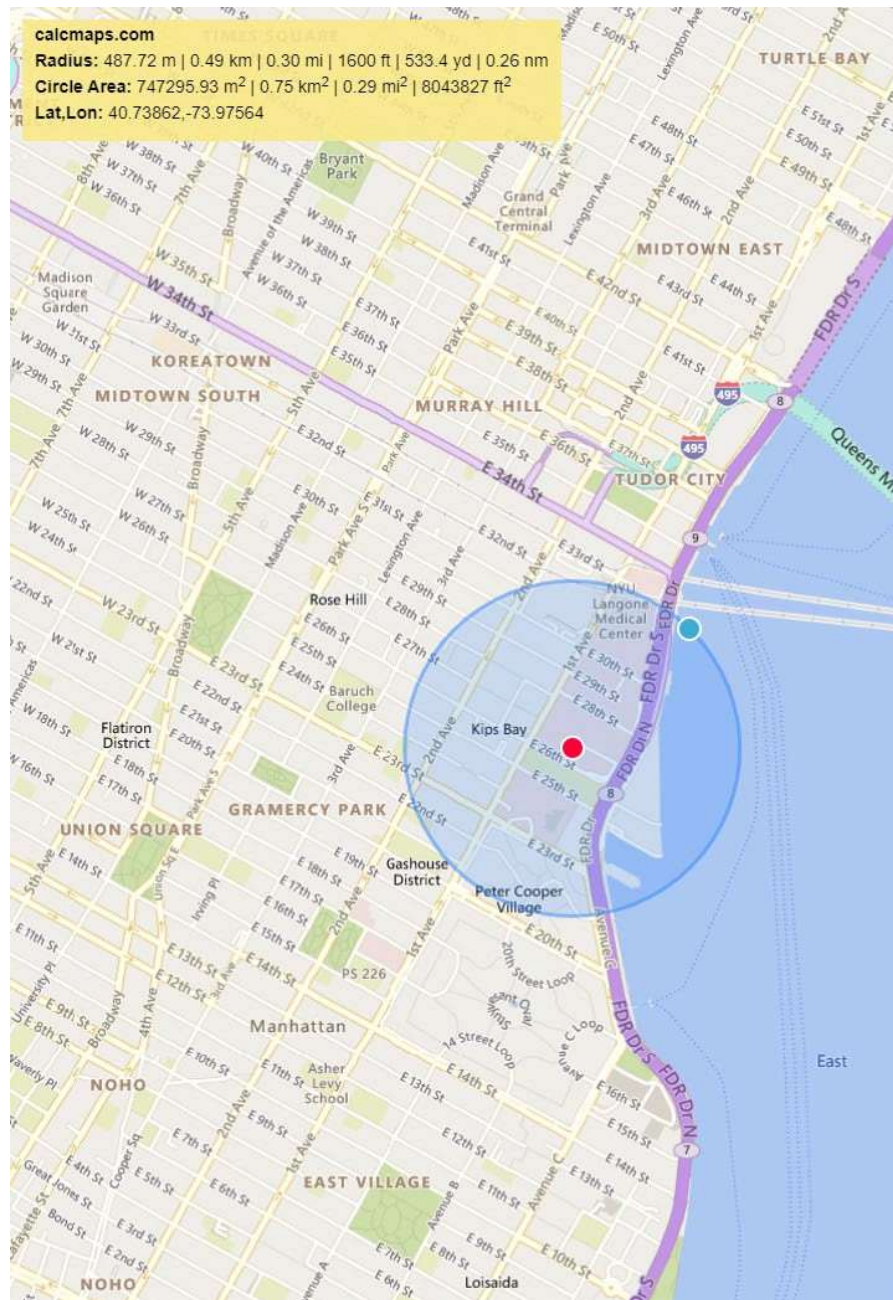


Figure 3. Outreach Radius Map

#### **IV. PROJECT LIAISON**

A representative from the project team will be available during business hours at:

- Anthony Muhlig, Construction Manager
- 516-974-9712
- [amuhlig@guthdeconzo.com](mailto:amuhlig@guthdeconzo.com)
- 1983 Marcus Ave., Suite 103, Lake Success, NY 11042

Impacted residents and interested stakeholders can contact the project liaison listed above to provide input to the project team, discuss any issues or concerns and/or to ask questions or request information. The project liaison shall respond in a timely manner and in the manner appropriate to question or information request received. The project liaison will be responsible for tracking and documenting public input, inquiries, questions, and information requests received, along with responses provided.

#### **V. PUBLIC OUTREACH ACTIVITIES**

The applicant will utilize a range of engagement strategies and conduct various public outreach activities to facilitate participation, involvement, and direct communication with the affected community during the permit application review process. The applicant will implement the public outreach activities outlined below upon finalization and approval of this PPP by NYSDEC.

In compliance with the requirements of CP-29, the applicant will hold public information meeting(s) to keep the public informed about the proposed action and the environmental permit review process. At minimum, the applicant will prepare, distribute and post written information and materials, including a meeting notice and fact sheet, to encourage dialogue and solicit input from interested stakeholders during the permit application review process. All public outreach materials and information will be prepared and presented in an easy-to-read, understandable format, using plain language free of legal terminology, and geared towards a non-technical audience.

The public meeting notice and fact sheet will be made available and disseminated in both English and Spanish. In addition, the public can contact the project liaison regarding the availability of language assistance and to request that the notice and fact sheet are translated into another language for comprehension by non-English speaking or limited proficiency stakeholders.

##### **Public Meeting(s)**

At the discretion of NYSDEC and, depending on the scale and nature of a project, one or more virtual public meeting(s) must be conducted to satisfy the intent of CP-29.

A meeting is typically required near the end of the permit application review process to inform the public about: the status of, or, if applicable, the availability of, final application materials and draft permits for review; the pending NYSDEC public comment period, and deadline to submit written comments to NYSDEC, if established; and eventual final decision.

Bellevue Hospital Public Participation Plan  
Public Meeting: At or Near Completeness

Applicant will facilitate a virtual public meeting on September 28, 2023 at 6:30pm to:

- Inform the public about the proposed project/action and permit application review status.
- Provide the opportunity to for stakeholders to ask questions and express concerns about the project and identify how to obtain information or answers to questions after the meeting has concluded.
- Inform attendees how they may submit written comments on the permit application to the NYSDEC during the public comment period and, if available, identify any applicable deadlines.

Necessary Meeting Discussion Points and Requirements

All meetings will be facilitated by the applicant and/or representatives from their project team via WebEx. The project contact will be Anthony Muhlig, the project's construction manager. During the meeting, the applicant and representatives from their project team will present a brief overview of the project, including any relevant background information, details on the permitting action, scope of work, schedule, and community impacts. The second part of the meeting will include a question-and answer-portion where the floor will be open for attendees to ask questions, make remarks, and/or express concerns. In addition, the following discussion points will be addressed:

- Provide an update on the permit application review process and identify outstanding application requirements and future milestones in the application review process.
- Make it clear that the meeting is being held prior to NYSDEC's permitting decision for the project/action.
- Identify the location of the online document repository and provide directions on how attendees may obtain and review materials relevant to the application, documents related to the meeting and other public participation plan components.
- Identify and provide contact information for the project liaison and announce procedures for how attendees may obtain answers to questions after the meeting has concluded and interested stakeholders can submit questions, express concerns, or request additional information by telephone, email, and in writing.
- Announce any future outreach, opportunities for public participation, and /or required follow-up with attendees including, but not limited to: additional meetings and future mailings, including, but not limited to the Notice of Complete Application.

Attendance will be recorded during the virtual meeting by obtaining an attendance report generated by WebEx. For those calling in to the meeting, the WebEx attendance report will generate their partial phone numbers. The project team conducting the meeting will provide an opportunity during the meeting for those calling in to identify themselves for attendance purposes. The applicant will track the number of attendees for all meetings held during implementation of this PPP and, where feasible and applicable, identify any affiliation of participants and interests represented at the meeting. In addition, the applicant will be responsible for documenting meeting notes or minutes, along with a record of comments and questions raised in the meeting and respective responses and answers provided. Attendees not identified on the contact list will have the option to be added in the event of future meetings or information sharing.

### **Virtual Public Meeting Notice Preparation and Distribution**

Information regarding the details of the virtual public meeting(s) and how to participate via computer and/or telephone is contained in the reader-friendly meeting notice(s) shown in Appendix B. The notice has been prepared in English and will be translated into Spanish by a certified translator. Through this notice, the public will be invited and encouraged to attend the public virtual meeting scheduled on Thursday, September 28, 2023 at 6:30pm.

Once the PPP has been approved by NYSDEC the public meeting notice will be posted and available in the online document repository described in Section VI of this document. At least two weeks in advance of the public virtual meeting, the notice will be published in the Manhattan Express and El Diario. Manhattan Express is a weekly newspaper printed, published, and circulated daily in Lower Manhattan near the project site. El Diario is a daily Spanish language newspaper circulated in Manhattan. In addition, the public meeting notice will be emailed, mailed and/or hand delivered (door-to-door) to the stakeholders identified in the contact list in Appendix A at least two weeks prior to the public virtual meeting.

### **Fact Sheet Preparation and Distribution**

Factual information on the proposed project/action, including an overview, purpose statement, and potential impacts, is outlined in the reader-friendly fact sheet shown in Appendix C. In addition, the fact sheet outlines how interested stakeholders can: participate in the permit application review process; access the online document repository to review relevant application materials prior to the public meeting; and contact the project team to obtain additional information. The fact sheet has been prepared in English and will be translated into Spanish by a certified translator.

Once the PPP has been approved by NYSDEC the fact sheet will be posted and available in the online document repository described in Section VI of this document. No later than 2 weeks prior to the public meeting, the applicant will distribute the fact sheet to provide stakeholders with relevant background on the proposed project/action and facilitate meaningful participation during the meeting. The fact sheet will be distributed together with the public meeting notice via email, mail and/ hand delivery (door-to-door).

The fact sheet(s) will also be posted within the vicinity of the project site and visible to the public. For example, they may be posted on some streetlight lampposts or bulletin boards located in the lobby of residential complex buildings or public facilities such as libraries, schools, or community centers within the project site.

### **Distribution of Notice of Complete Application**

Once NYSDEC determines the application(s) for the proposed action/project is complete and provides the Notice of Complete Application (NOCA) to the applicant, the applicant will distribute the NOCA and draft permit, if applicable, to the meeting attendees and any identified interested parties, to provide notification regarding the start of the NYSDEC public comment period and to announce the deadline for submission of written comments to NYSDEC. If the NOCA is available at the time of the meeting, the applicant will distribute the NOCA at the public meeting. If the NOCA is not available at the time of the meeting, the applicant will provide explicit instructions on how to access the online repository and inform the attendees that, once available, the NOCA will be posted to the

Bellevue Hospital Public Participation Plan  
online document repository and will be distributed to attendees via email or mail as soon as possible, but no later than the date that the NOCA is published by the applicant in the print edition of a paid local newspaper that is circulated at least weekly and available in the municipality in which the project is located.

## **VI. DOCUMENT REPOSITORY**

An online document repository has been established for the community and interested stakeholders to access and review information about the project. The online repository available at <https://www.nychealthandhospitals.org/cogen-energy-system/> will provide information and documents relating to the project and permit application.

The repository will be updated throughout the application process with project-related information and written materials (i.e., application forms and supporting materials, draft permit, fact sheet, statement of basis (where applicable), the Notice of Complete Application provided by the NYSDEC, etc.).

## **VII. SUBMISSIONS**

### **Final Summary Report and Written Certification**

Upon completion of the enhanced public participation plan, the applicant will submit written certification to NYSDEC to certify that it has fully executed and complied with the approved PPP. The certification shall be signed by the applicant, or the applicant's agent, and submitted to NYSDEC prior to a final decision on the application.

As part of the certification, the applicant shall submit a final summary report documenting the implementation of this PPP. The report will summarize the activities that occurred in accordance with the PPP and will identify any substantive concerns raised by stakeholders during the public meeting, or, at any time throughout the permitting process and detail the applicant's response(s) to any such concerns or questions. The applicant will include, or append, any documentation that supports the final summary report, such as: the meeting sign-in sheet(s), record of attendees/participants, meeting presentation, notes or minutes, summary of questions and answers, and copy of newspaper notice or other proof of publication. In addition, the report will identify any changes or modifications to the proposed project that were made or considered by the applicant to address or reduce concerns surrounding the permit application.

The final summary report and written certification will become part of the application record and will be posted to the online document repository so that it is readily available to the public.



**APPENDIX A**  
**Contact List**

## Bellevue Hospital Public Participation Plan

NYSDEC Application #: 2-6206-00032/00004						
Facility Name: NYC-H+H – New Bellevue Hospital			List Last Updated: 06/27/2023			
Entity Type	Name, Title	Address 1	Address 2	City	State	Zip
Federal, State, Local Officials	Keith Powers, NYC Council Member	211 East 43rd Street, Suite 1205	kpowers@council.nyc.gov	New York	NY	10017
	Legislative Office	250 Broadway, Suite 1815		New York	NY	10007
	Harvey Epstein, NYS Assemblyman	107 & 109 Avenue B	epsteinh@nyassembly.gov.	New York	NY	10009
	Brad Hoylman, NYS Senator	322 Eighth Avenue, Suite 1700	hoylman@nysenate.gov	New York	NY	10001
		Legislative Office Building, Room 310		Albany	NY	12247
	Kristen Gillibrand, US State Senate	780 Third Avenue, Suite 2601	<a href="https://www.gillibrand.senate.gov/contact/email-me/">https://www.gillibrand.senate.gov/contact/email-me/</a>	New York	NY	10017
	Chuck Schumer, US State Senate	780 Third Avenue, Suite 2301	<a href="https://www.schumer.senate.gov/contact/email-chuck">https://www.schumer.senate.gov/contact/email-chuck</a>	New York	NY	10017
	Eric Adams, Mayor	City Hall	<a href="https://www.nyc.gov/office-of-the-mayor/mayor-contact.page">https://www.nyc.gov/office-of-the-mayor/mayor-contact.page</a>	New York	NY	10007
	Jerrold Nadler, US House of Representatives	201 Varick Street, Suite 669	<a href="https://nadler.house.gov/forms/writeyourrep/default.aspx">https://nadler.house.gov/forms/writeyourrep/default.aspx</a>	New York	NY	10014
	Hon. Kristen Gonzalez, NYS Senator	801 2nd Ave, Suite 303	gonzalez@nysenate.gov	New York	NY	10017
	Hon. Carlina Rivera, NYC Councilmember	254 East 4th Street	district2@council.nyc.gov	New York	NY	10009
	Hon. Jumaane Williams, Public Advocate	1 Centre Street	reception@advocate.nyc.gov	New York	NY	10007
	Hon. Brad Lander, NYC Comptroller	1 Centre Street		New York	NY	10007
	Hon. Mark Levine, Manhattan Borough President	1 Centre Street, 19th floor	info@manhattanbp.nyc.gov	New York	NY	10007
	Rohit Aggarwala	59-17 Junction Boulevard	<a href="https://www.nyc.gov/nyc-resources/mail/dep-email-the-commissioner.page">https://www.nyc.gov/nyc-resources/mail/dep-email-the-commissioner.page</a>	Flushin g	NY	11373

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	David Gold, Esq., Commissioner, NYC Dept of Planning	120 Broadway, 31st Floor		New York	NY	10271
	Manhattan Community Board 6	211 East 43rd Street, Suite 1404	info@cbsix.org	New York	NY	10017
	Alexandria Ocasio-Cortez, US House of Representatives	216 Cannon HOB	http://ocasio- cortez.house.gov/contact	Washin gton	DC	20515
Local News Media	Daily News, Local News Media	220 E 42nd St	voicers@nydailynews.com	New York	NY	10017
	Manhattan Times, Local News Media	5030 Broadway	editor@manhattantimesnews.c om	New York	NY	10034
	El Diario NY	41 Flatbush Avenue 1st Floor	redaccion@impremedia.com	Brookly n	NY	11217
	Schneps Media	1 Metrotech Center	tcimino@schnepsmedia.com	Brookly n	NY	11201
Local Schools and Daycare Centers	The British International School of New York, School	20 Waterside Plaza	info@bis-ny.org	New York	NY	10010
	United Nations International School, School	24-50 FDR Dr		New York	NY	10010
	Acorn Preschool	330 E 26th St	hdaub@acornschoollny.com	New York	NY	10010
	Public School 47	E 23rd St	wshama@schools.nyc.gov	New York	NY	10010
	Acorn Preschool	330 East 26th Street	ndonnelly@acornschoollny.com, hdaub@acornschoollny.com	New York	NY	10010
	Bellevue Daycare Center	462 1st Ave. Chapel Hall. Suite D-100	registrar@bellevuedaycarecente r.org	New York	NY	10016
	PS 116 Mary Lindley Murray	210 E 33 Street	https://www.ps116.org/contact- us	New York	NY	10016
	School of the Future	127 East 22nd Street,	sgoldstein@sof.edu, lmathew@sof.edu	New York	NY	10010
	MS 104 Simon Baruch	330 East 21st Street	brivera@schools.nyc.gov	New York	NY	10010
	PS 040 Augustus St-Gaudens	319E AST 19 STREET	JKnight3@schools.nyc.gov	New York	NY	10003
	MS 255 Salk School of Science	320 E 20th St.	https://www.salkschool.org/app s/contact/	New York	NY	10003
	The Churchill School and Center	301 East 29th Street	spalermo@churchhillschoollnyc. org	New York	NY	10016

Bellevue Hospital Public Participation Plan

	The Epiphany Lower School	234 East 22nd Street		New York	NY	10010
	NYPL Epiphany Library, Document Repository	228 E 23rd St	mhiggins@theepiphanyschool.org	New York	NY	10010
	First Christian Church of the Valley, Religious Organization	234 E 27th St	patronservices@nypl.org	New York	NY	10016
Local Civic, Community, Environmental, and Religious Organizations	Church of the Epiphany, Religious Organization	375 2nd Ave	pastor@epiphanychurch.nyc office@epiphanychurch.nyc jonathan@epiphanychurch.nyc	New York	NY	10010
	Congregation Talmud Torah Adereth El, Religious Organization	135 E 29th St	info@aderethel.org	New York	NY	10016
	New Covenant Church NYC	234 East 27th Street		New York	NY	10016
	Chapel of the Sacred Hearts of Jesus and Mary	325 E 33rd St	office@oursaviournyc.org	New York	NY	10016
	The Armenian Church	630 2nd Ave	chrisz@armeniandiocese.org, publicrelations@armeniandiocese.org	New York	NY	10016
	Church of the Good Shepherd	240 E 31st St	GSC@goodshepherdNYC.ORG	New York	NY	10016
	Remnant Neighborhood Center	223 E 30th St	admin@remnant.nyc	New York	NY	10016
	Parish of Our Lady of the Scapular And Saint Stephen's	151 E 28th St		New York	NY	10016
	First Moravian Church	154 Lexington Ave		New York	NY	10016
	Air NYC	349 East 149th Street, Suite 609	<a href="https://www.air-nyc.org/contact-us">https://www.air-nyc.org/contact-us</a>	Bronx	NY	10451
	Kips Bay Neighborhood Association		<a href="https://kipsbaynyc.org/contact/">https://kipsbaynyc.org/contact/</a>			
	Lower East Side Ecology Center	Seward Park House, Essex and Canal Street	info@lesecolgycenter.org	New York	NY	10002
	Clean Air NY	342 Broadway, Suite 404	rebecca@cacwny.org	New York	NY	10013
	Parc East Apartments	240 East 27th St		New York	NY	10016

Bellevue Hospital Public Participation Plan

	The Grayson Apartments	247 East 28th St		New York	NY	10016
Adjacent business owners, residents, occupants and/or property owners	Kips Bay Court	490 Second Ave	kips@beamliving.com	New York	NY	10016
	Phipps House	330 E 26th St	pn@phippsony.org	New York	NY	10016
	Carmel Place	335 E 27th St		New York	NY	10016
	Prism Apartments	50 E 28th St		New York	NY	10016
	Renwick Gardens	332 E 29th St	info@metreal.com	New York	NY	10016
	Murray Hill Neighborhood Association	Post Office Box 1897	Info@murrayhillnyc.org	New York	NY	10156-1897
	Grammercy Park Block Association	34 Grammercy Park E	harrisongrammercypark@gmail.com	New York	NY	10003
	Grammercy Park Block Association	61 Grammercy Park N	harrisongrammercypark@gmail.com	New York	NY	10010
		Peter Cooper Village	252 First Avenue		New York	NY
	Timothy C. Grogan, President, Managing Agent for 2 Tudor City	320 East 39th Street, 3rd Floor	tcgrogan@groganassoc.com	New York	NY	10016-2106
	Resident Manager - George T., 2 Tudor City	2 Tudor City Place	georget@2tudor.com	New York	NY	10017
	Concierge Desk, 2 Tudor City	2 Tudor City Place		New York	NY	10017
	2 Tudor City Tenants Corp	2 Tudor City Place		New York	NY	10017
	The Lo-Down		tips@thelodownny.com			
	Lower East Side Chinatown Patch		<a href="https://patch.com/new-york/lower-east-side-chinatown/compose">https://patch.com/new-york/lower-east-side-chinatown/compose</a>			
	The Children's Center	492 1st Ave		New York	NY	10016
	HRA Men's Shelter	400 E 30th St		New York	NY	10016
	Waterside Plaza Swim and Health Club	35 Waterside Plaza	livekips@beamliving.com	New York	NY	10010
	Proof Coffee Roasters	335 E 27th St	hello@proof.coffee	New York	NY	10016
	Happy Dogs at 23rd and 1st	403 1st Ave.	hd23@happydogsnyc.com	New York	NY	10010

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	Halpern Pharmacy	331 E 23rd St	halpernpharmacy@gmail.com	New York	NY	10010
	Riverpark	450 E 29th St		New York	NY	10016
	Alexandria Center for Life Science	430 E 29th St,		New York	NY	10016
	Kadmon	450 E 29th St,		New York	NY	10016
	New York City Poison Center	455 1st Ave. #123		New York	NY	10016
	Brookdale Dorms CUNY	425 E 25th St	living@hunter.cuny.edu, facilities@hunter.cuny.edu	New York	NY	10010
	NYU Dental Urgent Care Center	345 E 24th St	dental.communications@nyu.edu	New York	NY	10010

**APPENDIX B**  
**Virtual Public Meeting Notice**  
**(English and Spanish)**

# YOU ARE INVITED

Virtual Public Meeting

Thursday, September 28, 2023 at 6:30pm

Installation of a 4MW Cogeneration System at Bellevue Hospital

462 First Avenue, New York, NY 10016

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New York City Health and Hospitals Corporation has submitted an application to the New York State Department of Environmental Conservation (NYSDEC) for the renewal and modification of an Air State Facility permit for the installation of two (2) cogeneration units as well as participation of six (6) generators in Coordinated Demand Response Programs (CDRP). A Public Participation Plan has been developed in accordance with NYSDEC Commissioner Policy 29, Environmental Justice and Permitting (CP-29). The purpose of this meeting is to inform the public about the project and to involve the community during the State Facility Air permit application review process.

#### To Join Online

Click the following link:

<https://hhc.webex.com/hhc/j.php?MTID=m330e08>

[ccb7be09b2f9734720c318e8c0](https://hhc.webex.com/hhc/j.php?MTID=ccb7be09b2f9734720c318e8c0)

**When prompted, enter the Meeting ID:**

2301 272 4435

**Webinar Password:**

bellevue2023!

#### To Call-in Using a Phone

Dial in using the following number:

1-844-621-3956

\*If joining by phone, questions, comments, and contact information for follow ups can be sent to the contact email listed below

#### Agenda:

- Project Overview
- Background
- Scope of work
- Project schedules
- Community Impacts
- Questions and Answers

#### **Your Attendance is Important!**

Project personnel will be available to answer questions from the community. For additional information on the proposed project:

- Contact: Anthony Muhlig by phone at 516-974-9712 or by email at [amuhlig@guthdeconzo.com](mailto:amuhlig@guthdeconzo.com)
- Visit the repository at: <https://www.nychealthandhospitals.org/bellevue/cogen-energy-system/>
- Contact the project liaison to request reasonable accommodation for a disability or interpreter services in a language other than English, so that you can participate in the call and/or to request a translation of any of the event documents into a language other than English.



**APPENDIX C**  
**Fact Sheet and FAQ**  
**(English and Spanish)**

# **Cogeneration System** **at Bellevue Hospital** **Fact Sheet**

- **Project:** Installation of 2 Cogeneration Units
- **Applicant:** NYC Health and Hospitals Corporation
- **Facility:** NYC Health and Hospitals – Bellevue Hospital, 462 First Ave, New York, NY 10016
- **NYSDEC Application Number:** 2-6206-00032/00004
- **A Public Participation Plan (PPP) has been developed in accordance with NYSDEC Commissioner Policy 29, Environmental Justice and Permitting (CP-29)**

## **What is the Proposed Project?**

The Proposed Project will involve the installation and operation of two (2) new natural gas fired cogeneration engines – Caterpillar G3516H, each with 1982 kW rating.. To implement the proposed project, NYC Health and Hospitals has submitted an application for an Air State Facility Permit Renewal with Modifications to the New York State Department of Environmental Conservation (NYSDEC) to permit the installation and operation of these engines in addition to their current permit that covers participation of six (6) generators in Coordinated Demand Response Programs (CDRP). The nature of the project is to enable the Hospital to generate its own heat and electricity, offering greater energy independence by moving a portion of the load off the grid. The purpose of this fact sheet is to inform the public about this proposed project and to involve the community during the NYSDEC permit application review process.

## **Why does NYC HHC need to Install Two Cogen Engines?**

The primary goal of this project is to provide Bellevue Hospital with a 4MW Combined Heat and Power (CHP) system capable of meeting two tasks: (1) Delivering on-site power to the facility in the event of an electrical utility outage for an extended amount of time, and (2) Reducing energy costs and increasing energy efficiency for the facility.

## **How might the project affect the surrounding community?**

The installation of these cogeneration units will lead to an increase in air emissions on the Bellevue Hospital Site, but will reduce the facility's overall energy use. Air quality modelling has been performed to ensure the addition of these units will not impact ambient air quality. Installation of these new, state-of-the-art engines will create resiliency for the hospital in the case of extreme weather events or power outages, ultimately benefitting the members of the community who utilize the hospital's services. Participation in Coordinated Demand Response Programs will also help reduce strain on the power grid to help New York City avoid blackouts.

## **How can I participate in the permit review process?**

- Attend the upcoming virtual public meeting scheduled on Thursday, September 28, 2023 at 6:30pm to learn about the project, ask questions and/or express concerns about the project.
- Ask questions, express concerns, provide input or submit by comments in writing, by phone or email to the project contact person identified below.

**Where can I get more information about the proposed project?**

- Visit the online document repository at: <https://www.nyhealthandhospitals.org/cogen-energy-system/> to obtain application materials, relevant documents, and information about the project.
- Contact Anthony Muhlig by phone at 516-974-9712, by email at [amuhlig@guthdeconzo.com](mailto:amuhlig@guthdeconzo.com) or in writing at: 1983 Marcus Ave., Suite 103 | Lake Success, NY 11042 for information on the project, instructions on how to attend the upcoming virtual public meeting, or to find out about the status of the permit application and public comment period.

**Who is responsible for reviewing the Permit Application?**

- NYSDEC Region 2 Headquarters, 47-40 21st St., Long Island City, NY 11101, is responsible for reviewing and issuing the required permits. Tel: (718) 482-4997; email: [DEP.R2@dec.ny.gov](mailto:DEP.R2@dec.ny.gov)

**APPENDIX D**  
**Frequently Asked**  
**Questions**  
**(For Document**  
**Repository)**

# Cogeneration System

## Frequently Asked Questions

### What is cogeneration (Cogen) and how will it work at NYC Health + Hospitals/Bellevue?

Cogeneration (Cogen) is a process that generates two forms of energy (electricity and heat) from a single fuel source. Natural gas is burned to drive an engine which provides the torque to spin a generator and produce electricity. Also known as Combined Heat and Power (CHP), Cogen captures and reuses the engine's exhaust waste heat to reuse it in multiple ways.

Large facilities, such as hospitals, are increasingly turning to Cogen to boost energy efficiency, save money, and relieve pressure on the existing electrical grid. Cogen provides a reliable backup energy source in case of power failure or other disasters.

Bellevue's new Cogen system will consist of two new gas engines that will generate approximately 4 Megawatts of electricity every hour of operation. The waste heat captured during the operation of the engine's cooling system will be used to make hot water, low-pressure steam, and other uses that the hospital requires for uninterrupted patient care.

### Why is Bellevue switching to a Cogen system?

NYC Health + Hospitals is taking steps to advance sustainability and climate action goals by implementing this project. Cogen systems provide considerable environmental and economic benefits over purchased electricity:

- + The new Cogen system will help Bellevue achieve greater campus resiliency by enabling the hospital to maintain its mission-critical functions even when the electric grid is not available and emergency generators fail.

- + As a power-producing resource, Cogen reduces the demand on the grid, enhancing its stability and relieving the congestion that can lead to brownouts and blackouts.
- + Bellevue will continue to purchase power and steam from the local utility provider, though the quantities will be significantly reduced. An on-site Cogen system will typically generate electricity at a less expensive rate than purchasing the same amount of electricity. This is primarily because Cogen systems use less fuel to produce the same amount of electrical energy, resulting in lower energy bills for the hospital.
- + Power from the Cogen unit is expected to produce electricity to meet 60 percent of the hospital's power needs during the winter and 40 percent during the summer
- + Cogen systems capture and use heat that would otherwise be wasted from the production of electricity, decreasing the amount of fuel needed to produce the same amount of energy. A Cogen module produces the least amount of carbon dioxide per kilowatt (kW) of useful work of any comparable fossil fuel heat source.
- + A Cogen module produces the least amount of carbon dioxide per kilowatt (kW) of useful work of any comparable fossil fuel heat source. By consuming less fuel per unit of energy produced, Cogen systems significantly reduce other greenhouse gas emissions and pollutants such as nitrogen oxide and sulfur dioxide.
- + Cogen is a key component of NYC Health + Hospital's compliance with Local Law 97 which outlines the City's commitment to reducing greenhouse gas emissions by at least 50 percent by 2030.

## Bellevue Hospital Public Participation Plan

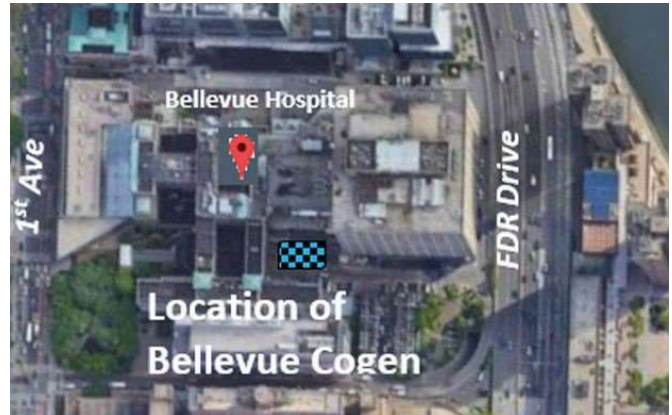
### How will the Cogen system impact the surrounding community?

- + The Cogen system is a self-contained unit located in the hospital's South Parking Lot, which is enclosed on three sides by the Bellevue campus. The system is not visible from the street or sidewalks.
- + Construction will not impact pedestrian or vehicular traffic, nor interrupt access to the emergency room or hospital entrances. There will be no significant increase in noise levels during construction.
- + Project completion would result in an overall reduction in greenhouse gas emissions within the local community, and generate less demand for water resources. The project is part of the hospital's efforts to reduce its carbon footprint and meet New York State and City initiatives to curtail and eventually achieve net zero greenhouse gas emissions.

### Will flooding and rising sea levels affect the Cogen system?

The Cogen plant will improve Bellevue's ability to handle storm events. Equipment is being designed and positioned specifically to maintain operation during severe weather conditions.

All the key equipment in the new Cogen system will be built above the anticipated 500-year flood level.



As utility work progresses on campus, we have already relocated critical equipment to elevations that will not be prone to flood damage in the future.

### How common is Cogen in North America?

Currently, Cogen applications supply approximately 8 percent of all the energy consumed in the United States. Other hospital systems, including NYU Langone, in the proximal area to Bellevue have switched to Cogen for the benefits identified above.

### Additional Information on Cogen Systems

View the EPA website for additional details about the [benefits of cogeneration](#) in terms of efficiency, cost-effectiveness, and environmental impact.