

24-110 – Variances for Cooking Equipment (Cook Stove)

Section of Air Code Variance: 24-149.5 Cook Stoves (c) (existing Cook Stove) “No person shall use an existing cook stove unless such cook stove is in compliance by January 1, 2020, with the requirements for control systems established by the commissioner pursuant to subdivision (b).”

1. Reason for Variance Request:

- **What is the purpose of using solid fuel (wood or coal)?**

The purpose of using small amounts of firewood is to fulfill a traditional religious custom of baking Passover Matzah, which were traditionally baked in wood-burning ovens. This matzah is eaten on our holy holiday of Passover. We place a small amount of wood into the gas-powered oven to uphold this traditional religious custom.

- **Explain why complying with Section 24-149.5 of the Air Code to install a pollution control device to reduce particulate matter from solid fuel cooking emissions would impose an unreasonable hardship.**

Our ovens are primarily powered by a gas burner 399,000 BTU/hr. The small amount of solid fuel is used only to maintain a religious custom.

- Emissions are below the mandated threshold:

As demonstrated by the attached test results done by Walden Environmental Engineering, (Order ID: CHMB2601), the particulate matter (PM) emissions from our operation are at or below the regulatory threshold of 10 mg/m.

The measured samples at 460 Albany Avenue showed concentrations ranging from 8.130 mg/m to 0.987 mg/m. giving us an average of 4.139mg/m Therefore, the facility meets the required emission standard, and the requirement to install an emission control device is an unnecessary financial hardship.

2. Description of Cooking Equipment:

- **Application ID of each piece of cooking equipment. The Application ID can be found on the DEP registration.** PG015325
- **Provide the oven volume capacity in cubic feet or surface area of the grill in square feet.** 64 Sq ft
- **During which months of the year will each piece of equipment be in operation, and how many days per month?** November - April (Through passover)
- **How many total days per year will each piece of equipment be in operation?** Approximately 100
- **How many hours per day will each piece of equipment be in operation?** 8
- **Indicate whether the solid fuel is used in combination with natural gas or if only solid fuel is used in each piece of equipment.**
solid fuel is used in combination with natural gas

- Specify the type of fuel wood and/or coal used in each piece of equipment. Include the dimensions (length, width, height) and weight (in pounds) of each log of wood and weight (in pounds) of a bag of coal, if applicable. If it is a combination, provide specifics for each solid fuel source. Firewood. Approximately 4" x 17" & Approximately 2 lbs. per log
- How many logs of wood/ bags of coal are used per day in each piece of equipment? Approximately 32 logs
- How many logs of wood/ bags of coal are used per hour in each piece of equipment? 4

3. Test Data Available:

- Do you have test data to establish the emission level without controls? Yes, attached are the test results done by Walden Environmental Engineering (Order ID: CHMB2601),
- If you have a pollution control device (a/k/a emission control device), what is the % reduction of particulate matter (PM)? N/A

If test results with or without a pollution control device show that emissions of PM are below 10mg/m³, proceed to Owner Affirmation. If not, please complete #4.

4. (Section 4 is omitted as emissions are below 10 mg/m, per form instructions)

Owner Affirmation

I affirm that all submitted information is true, accurate, and complete.

Signature 
Yitzchak Tenenbaum Owner
 (type name and title here)

Date: 01/29/26



Delivered via email to sales@lubavitchmatzah.com

January 29, 2026
CHMB2601

Y. Tenenbaum
Y. Tenenbaum Matzoh Inc.
460 Albany Avenue
Brooklyn, New York 11213

- Re: 1) Cook Stove Total Suspended Particulate
Emission Testing at Crown Heights Matzah Bakery
460 Albany Avenue, Brooklyn, NY 11213
- 2) Rules of the City of New York, Title 15,
Chapter 62-05, Testing Requirements for
Emission Control Devices

Dear Mr. Tenenbaum:

This letter summarizes Total Suspended Particulate testing performed at Crown Heights Matzah Bakery, located at 460 Albany Avenue, Brooklyn, NY 11213 (the Site) on 1/23/2026 by representatives of Walden Environmental Engineering, PLLC (Walden). Testing was conducted at the Site in accordance with the requirements of the Rules of the City of New York, Title 15, Chapter 62-05. Readings were taken as follows:

Run #1:	10:42 A.M.	-	10:52 A.M.	-	<i>Cook Stove Exhaust Fan - Operating</i>
Run #2:	10:53 A.M.	-	11:03 A.M.	-	<i>Cook Stove Exhaust Fan - Operating</i>
Run #3:	11:03 A.M.	-	11:13 A.M.	-	<i>Cook Stove Exhaust Fan - Operating</i>
Run #4:	11:14 A.M.	-	11:24 A.M.	-	<i>Cook Stove Exhaust Fan - Operating</i>

Crown Heights Matzah Bakery informed Walden that during the testing four (4) pieces of wood, weighing approximately two (2) pounds each for a total weight of approximately eight (8) pounds, were used to start the Cook Stove's (Matzah Oven) initial fire and an additional eight (8) pounds were added to maintain peak load in the wood-burning Cook Stove for the duration of testing. Walden was informed that eight (8) pounds of wood is added for each hour of cooking during standard baking operations. Typical operations involve eight (8) hours per day of Cook Stove use, corresponding to a throughput of approximately 64 pounds of solid wood fuel per day.



Four (4) consecutive Total Suspended Particulate readings were taken using a TSI DustTrak™ II Monitor 8530 at a flow rate of two (2) liters per minute for ten (10) minutes, downstream from the Cook Stove's operating exhaust fan with the sampling probe inserted into a precut hole. Testing was conducted directly from the Cook Stove's exhaust; no control device was installed in the facility. The average results were then calculated to determine compliance. The attached table presents the results of each sampling event for Total Suspended Particulates conducted on 1/23/2026. A summary of the results is as follows:

Run #1: *Cook Stove Exhaust Fan Operating* = 8.130 mg/m³

Run #2: *Cook Stove Exhaust Fan Operating* = 0.987 mg/m³

Run #3: *Cook Stove Exhaust Fan Operating* = 4.380 mg/m³

Run #4: *Cook Stove Exhaust Fan Operating* = 3.060 mg/m³

Average Value Calculation: $\frac{\text{Sum of Values}}{\text{Number of Values}}$

$$\text{Average Cook Stove Emissions} = \frac{8.130 + 0.987 + 4.380 + 3.060}{4} = 4.139 \text{ mg/m}^3$$

Testing conducted at the Site on 1/23/2026 demonstrates an average Total Suspended Particulate Emission of 4.139 mg/m³ which complies with the current NYCDEP upper limit threshold of 10.0 mg/m³.

If you have any questions or require any additional information, please call (516) 624-7200.

Please call if there are any questions.

Very truly yours,
Walden Environmental Engineering, PLLC

Robert A. LoPinto

Robert A. LoPinto, PE
Project Manager III

Louis Goldstein
Project Engineer II

LTG: RAL

Enc.

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Table 1

Total Suspended Particulate Testing Results Summary

Test 001

Instrument		Data Properties	
Model	DustTrak II	Start Date	01/23/2026
Instrument S/N	8530133101	Start Time	10:42:47
		Stop Date	01/23/2026
		Stop Time	10:52:47
		Total Time	0:00:10:00
		Logging Interval	30 seconds

Test Data			
Data Point	Date	Time	AEROSOL mg/m ³
1	01/23/2026	10:43:17	13.700
2	01/23/2026	10:43:47	9.430
3	01/23/2026	10:44:17	8.790
4	01/23/2026	10:44:47	8.790
5	01/23/2026	10:45:17	8.150
6	01/23/2026	10:45:47	7.340
7	01/23/2026	10:46:17	8.060
8	01/23/2026	10:46:47	6.960
9	01/23/2026	10:47:17	7.320
10	01/23/2026	10:47:47	6.780
11	01/23/2026	10:48:17	7.460
12	01/23/2026	10:48:47	8.170
13	01/23/2026	10:49:17	11.200
14	01/23/2026	10:49:47	11.100
15	01/23/2026	10:50:17	10.100
16	01/23/2026	10:50:47	8.290
17	01/23/2026	10:51:17	7.230
18	01/23/2026	10:51:47	6.520
19	01/23/2026	10:52:17	5.300
20	01/23/2026	10:52:47	1.860

Test 001

Instrument		Data Properties	
Model	DustTrak II	Start Date	01/23/2026
Instrument S/N	8530133101	Start Time	10:42:47
		Stop Date	01/23/2026
		Stop Time	10:52:47
		Total Time	0:00:10:00
		Logging Interval	30 seconds

Statistics	
	AEROSOL
Avg	8.130 mg/m ³
Max	13.700 mg/m ³
Max Date	01/23/2026
Max Time	10:43:17
Min	1.860 mg/m ³
Min Date	01/23/2026
Min Time	10:52:47
TWA (8 hr)	N/A
TWA Start Date	01/23/2026
TWA Start Time	10:42:47
TWA End Time	10:52:47

Test 002

Instrument		Data Properties	
Model	DustTrak II	Start Date	01/23/2026
Instrument S/N	8530133101	Start Time	10:53:14
		Stop Date	01/23/2026
		Stop Time	11:03:14
		Total Time	0:00:10:00
		Logging Interval	30 seconds

Test Data			
Data Point	Date	Time	AEROSOL mg/m ³
1	01/23/2026	10:53:44	0.954
2	01/23/2026	10:54:14	0.194
3	01/23/2026	10:54:44	0.139
4	01/23/2026	10:55:14	0.641
5	01/23/2026	10:55:44	1.020
6	01/23/2026	10:56:14	0.854
7	01/23/2026	10:56:44	0.852
8	01/23/2026	10:57:14	0.731
9	01/23/2026	10:57:44	0.666
10	01/23/2026	10:58:14	0.629
11	01/23/2026	10:58:44	0.742
12	01/23/2026	10:59:14	1.600
13	01/23/2026	10:59:44	1.750
14	01/23/2026	11:00:14	1.580
15	01/23/2026	11:00:44	1.360
16	01/23/2026	11:01:14	1.480
17	01/23/2026	11:01:44	1.400
18	01/23/2026	11:02:14	1.160
19	01/23/2026	11:02:44	1.030
20	01/23/2026	11:03:14	0.964

Test 002

Instrument		Data Properties	
Model	DustTrak II	Start Date	01/23/2026
Instrument S/N	8530133101	Start Time	10:53:14
		Stop Date	01/23/2026
		Stop Time	11:03:14
		Total Time	0:00:10:00
		Logging Interval	30 seconds

Statistics	
	AEROSOL
Avg	0.987 mg/m ³
Max	1.750 mg/m ³
Max Date	01/23/2026
Max Time	10:59:44
Min	0.139 mg/m ³
Min Date	01/23/2026
Min Time	10:54:44
TWA (8 hr)	N/A
TWA Start Date	01/23/2026
TWA Start Time	10:53:14
TWA End Time	11:03:14

Test 003

Instrument		Data Properties	
Model	DustTrak II	Start Date	01/23/2026
Instrument S/N	8530133101	Start Time	11:03:57
		Stop Date	01/23/2026
		Stop Time	11:13:57
		Total Time	0:00:10:00
		Logging Interval	30 seconds

Test Data			
Data Point	Date	Time	AEROSOL mg/m ³
1	01/23/2026	11:04:27	0.914
2	01/23/2026	11:04:57	0.907
3	01/23/2026	11:05:27	0.672
4	01/23/2026	11:05:57	0.730
5	01/23/2026	11:06:27	0.740
6	01/23/2026	11:06:57	0.804
7	01/23/2026	11:07:27	0.927
8	01/23/2026	11:07:57	0.864
9	01/23/2026	11:08:27	0.836
10	01/23/2026	11:08:57	0.829
11	01/23/2026	11:09:27	0.898
12	01/23/2026	11:09:57	0.814
13	01/23/2026	11:10:27	0.826
14	01/23/2026	11:10:57	7.520
15	01/23/2026	11:11:27	17.200
16	01/23/2026	11:11:57	14.500
17	01/23/2026	11:12:27	11.900
18	01/23/2026	11:12:57	9.300
19	01/23/2026	11:13:27	8.410
20	01/23/2026	11:13:57	7.860

Test 003

Instrument		Data Properties	
Model	DustTrak II	Start Date	01/23/2026
Instrument S/N	8530133101	Start Time	11:03:57
		Stop Date	01/23/2026
		Stop Time	11:13:57
		Total Time	0:00:10:00
		Logging Interval	30 seconds

Statistics	
	AEROSOL
Avg	4.380 mg/m ³
Max	17.200 mg/m ³
Max Date	01/23/2026
Max Time	11:11:27
Min	0.672 mg/m ³
Min Date	01/23/2026
Min Time	11:05:27
TWA (8 hr)	N/A
TWA Start Date	01/23/2026
TWA Start Time	11:03:57
TWA End Time	11:13:57

Test 004

Instrument		Data Properties	
Model	DustTrak II	Start Date	01/23/2026
Instrument S/N	8530133101	Start Time	11:14:20
		Stop Date	01/23/2026
		Stop Time	11:24:20
		Total Time	0:00:10:00
		Logging Interval	30 seconds

Test Data			
Data Point	Date	Time	AEROSOL mg/m ³
1	01/23/2026	11:14:50	5.490
2	01/23/2026	11:15:20	4.900
3	01/23/2026	11:15:50	3.680
4	01/23/2026	11:16:20	3.590
5	01/23/2026	11:16:50	3.760
6	01/23/2026	11:17:20	4.320
7	01/23/2026	11:17:50	3.730
8	01/23/2026	11:18:20	3.120
9	01/23/2026	11:18:50	2.510
10	01/23/2026	11:19:20	2.450
11	01/23/2026	11:19:50	2.170
12	01/23/2026	11:20:20	2.730
13	01/23/2026	11:20:50	2.420
14	01/23/2026	11:21:20	2.770
15	01/23/2026	11:21:50	2.890
16	01/23/2026	11:22:20	2.350
17	01/23/2026	11:22:50	2.400
18	01/23/2026	11:23:20	1.990
19	01/23/2026	11:23:50	1.990
20	01/23/2026	11:24:20	1.930

Test 004

Instrument		Data Properties	
Model	DustTrak II	Start Date	01/23/2026
Instrument S/N	8530133101	Start Time	11:14:20
		Stop Date	01/23/2026
		Stop Time	11:24:20
		Total Time	0:00:10:00
		Logging Interval	30 seconds

Statistics	
	AEROSOL
Avg	3.060 mg/m ³
Max	5.490 mg/m ³
Max Date	01/23/2026
Max Time	11:14:50
Min	1.930 mg/m ³
Min Date	01/23/2026
Min Time	11:24:20
TWA (8 hr)	N/A
TWA Start Date	01/23/2026
TWA Start Time	11:14:20
TWA End Time	11:24:20



Environmental Protection

Lisa F. Garcia
Commissioner

**THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Bureau of Environmental Compliance
59-17 Junction Blvd. 9th Floor, Flushing, NY 11373
Records Control (718) 595-3855

Mark N Page, Jr.
Executive Director
Environmental Compliance

Industrial General Registration

Business Owner Information

Owner Information: Y.Tenenbaum Matzah Inc.

Owner Address : 460 Albany Avenue Brooklyn NY 11213

Application ID: **PG015325**

Issued: **3/6/2026**

Expiration: **8/8/2028**

Request ID: **469184**

FACILITY ADDRESS: Lubavitch Matzah Bakery, 460 Albany Avenue, Brooklyn, NY 11213

Type of Process	SolidFuelBurningEquipment	Contaminants	PM
Material Being Processed	Matzah		
Emission Control Type	Other - Exhaust Fan		

Emission Control	Process Equipment
1 No Control	1 Custom Oven

Total number of units	1	ACFM/ unit	3000
Hours per day	8	Stack Height	
Days per year	100	Exhaust Location	Roof
Oven Volume (Cu.Ft.)	130	Natural gas startup?	Yes
Emission Control Installation		Natural Gas MMBTU/hr	0.399
Certified control device?	No	Startup Duration (Hr/Day)	24

Fuel	Quantity	Unit per day
Wood	64	lbs

Process Description

Uses gas burner (0.399 mmbtu/hr) to pre heat and bake at approximately 1100 degrees. Wood is added to keep to the religious custom.

Special Conditions

This registration requires that the equipment comply with Section 24-149.5 and 15 RCNY 62-02, or that it have an approved variance for the duration of the permit.

This facility has two ovens: one unit is decommissioned and the other is in operation. This registration authorizes the use of only one oven. Failure to meet these requirements will invalidate the registration prior to its expiration date.



PG015325

Kit Liang

Kit Liang, P.E.
Director of Engineering

DISPLAY REGISTRATION ON PREMISES NEAR EQUIPMENT