



U.S. ENVIRONMENTAL PROTECTION AGENCY

RISK MANAGEMENT PROGRAM INSPECTION FINDINGS, ALLEGED VIOLATIONS AND PROPOSED PENALTY FORM

REASON FOR INSPECTION: This inspection is for the purpose of determining compliance with the accidental release prevention requirements of Section 112(r)(7) of the Clean Air Act (Act), 42 U.S.C. sec. 7412(r)(7), and the regulations set forth at 40 C.F.R. Part 68. The scope of this inspection may include but is not limited to: reviewing and obtaining copies of documents and records; interviews and taking of statements; reviewing chemical storage, handling, processing, and use; taking samples and photographs; and any other inspection activities necessary to determine compliance with the Act.

FACILITY NAME:

Brookline Ice Company, LLC

PRIVATE

GOVERNMENTAL/MUNICIPAL

of EMPLOYEES: approx. 15

FACILITY ADDRESS:

225 Southampton Street
Boston, MA 02118

INSPECTION START DATE: 11/17/2021

INSPECTION END DATE: 11/17/2021

RESPONSIBLE OFFICIAL, TITLE, PHONE NUMBER:

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EPA FACILITY ID#: 100000131083

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INSPECTOR NAME(S), TITLE(S):

Drew Meyer, EPA Region 1
Tyler Diercks, EPA, Region 1

INSPECTION FINDINGS

IS FACILITY SUBJECT TO RMP REGULATION (40 CFR Part 68)? YES NO

DID FACILITY SUBMIT AN RMP AS PROVIDED IN 68.150 TO 68.185 AND UPDATE THE RMP AS PROVIDED IN 68.190 TO 69.195? YES NO

DATE RMP INITIALLY FILED WITH EPA: Brookline Ice submitted its initial RMP to EPA on July 12, 2014. The next re-submission for Brookline Ice did not occur until July 24, 2020, which was identified as the Facility's "five-year update" pursuant to 40 CFR 68.190(b)(1). The time spanning the initial submission and next re-submission was over six (6) years.

1) PROCESS/NAICS CODE: 312113

REGULATED SUBSTANCE: anhydrous ammonia Program Level 3 MAX. QUANTITY IN PROCESS: 15,300 pounds

DID FACILITY CORRECTLY ASSIGN PROGRAM LEVELS TO PROCESSES? YES NO

ATTACHED CHECKLIST(S):

PROGRAM LEVEL 1 PROCESS CHECKLIST PROGRAM LEVEL 2 PROCESS CHECKLIST PROGRAM LEVEL 3 PROCESS CHECKLIST

OTHER

ATTACHMENTS: _____

**U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE
BOSTON, MA 02109-3912**

**Process Checklist (Findings) and Alleged Violations and Proposed Penalty Form:
Brookline Ice, Boston, MA**

1. Program Level 3 Alleged Violations and Unadjusted Penalties

Section C – Prevention Program – Safety information [68.65]	
<p>Has the owner or operator documented that equipment complies with recognized and generally accepted good engineering practices [68.65(d)(2)(3)]?</p> <p><i>–Impact Protection:</i> At the time of the inspection, the Facility lacked adequate protective measures including the following:</p> <p>The protective fencing surrounding the base of the elevated Condenser area immediately outside of the ammonia machinery room (“AMR”) lacked protective bollards to protect against vehicular impact in the shared alleyway that abuts the Facility to the rear.</p> <p>Evaporator AU-2 and associated ammonia piping were located above the top row of a pallet rack in the Freezer area, and the evaporator was not protected from impact;</p> <p>See, e.g., ANSI/IIAR-9 (2020), Section 7.2.12.1, ANSI/IIAR-2 (2014), Section 5.17.1 and 5.16.</p>	\$ 1500.00
Section C – Prevention Program – Safety Information [68.65]	
<p>Has the owner or operator documented that equipment complies with recognized and generally accepted good engineering practices [68.65(d)(2)(3)]?</p> <p><i>– Door and Alarm Labeling Issues:</i></p> <p>Multiple entry doors from the outside of the Facility into areas containing ammonia refrigeration equipment were not labeled with appropriate National Fire Protection Agency (NFPA) diamonds to provide warning regarding the presence of ammonia. Additionally, several interior entry/exit doors between rooms not containing ammonia refrigeration equipment and rooms containing ammonia refrigeration equipment were not labeled with NFPA diamonds (e.g., from the Bag Room into the Bin Room and from the Bag Room into the AMR); and</p> <p>Multiple ammonia audible/visible alarms located both exterior and interior to the Facility were not clearly labeled.</p> <p>See, e.g., ANSI/IIAR-2 (2014), Section 6.15.1, ANSI/IIAR-2 (2014), Appendix J.7, NFPA 704 (2010), Section 4.3, NFPA 704 (2010), Section 6.1.6.2.1, ANSI/IIAR-9 (2020), Section 7.2.9.1, ANSI/IIAR-2 (2014), Section 17.6.</p>	\$ 1500.00

Section C – Prevention Program – Safety Information [68.65]

Has the owner or operator documented that equipment complies with recognized and generally accepted good engineering practices [68.65(d)(2)(3)]?

\$ 1500.00

–Pipe Labeling:

Ammonia piping was not consistently labeled to indicate content, flow direction, and physical state in the following areas of the Facility: (1) exterior to the Facility nearby the elevated Condenser, and (2) in the Freezer nearby Evaporator AU-2.

See, e.g. ANSI/IIAR-9 (2020), Section 7.2.9.4, ANSI/IIAR-2 (2014), Section 5.14.5, ANSI/ASME A13.1 (2015)

Section C – Prevention Program – Safety information [68.65]

Has the owner or operator documented that equipment complies with recognized and generally accepted good engineering practices [68.65(d)(2)(3)]?

\$ 1500.00

Combustible Materials Stored In Ammonia Machinery Room:

Maintenance materials, cardboard boxes, and other flammable materials were actively being stored in the AMR at the time of the inspection.

See, e.g., ANSI/IIAR-9 (2020), Section 7.3.4, ANSI/IIAR-2 (2014), Section 6.4, NFPA 1 (2012), Section 53.3.1.3.1.

Section C - Prevention Program –Process Hazard Analysis (PHA) - 68.67

Has the owner of operator updated and revalidated the process hazard analysis (“PHA”) procedures as required by [68.67(f)]?

\$ 2500.00

Brookline Ice conducted its initial PHA in June 2014. The first PHA revalidation occurred in November 2019, several months after the five-year revalidation requirement. Therefore, Brookline Ice did not update and revalidate its initial PHA at least every five (5) years as required under 40 CFR § 68.67(f).

Section C – Prevention Program – Process Hazard Analysis (PHA) [68.67]

<p>Has the owner or operator established a system to promptly address the team’s findings and recommendations as required by 40 CFR § 68.67(e)?</p> <p>The Facility has not established a system to promptly address PHA findings, assure that recommendations are resolved in a timely manner and the resolutions are documented, document actions to be taken, develop a written schedule of when actions are to be completed, or communicate actions to operating, maintenance, and/or other employees whose work assignments are affected by PHA recommendations as required.</p> <p>Two action items (Ref. # 2.16 and 7.16) identified as part of the 2014 Initial PHA were not given a “Date Assigned” or “Assigned To” entry in the PHA Action Item Tracking Log. These two action items were not designated as complete until May 2019; and</p> <p>Recommendations related to operator training were identified both in the 2014 Initial PHA and then again in the 2019 PHA Revalidation. Specifically, both PHAs recommend the Facility to “Train ammonia system operators on Standard Operating Procedures.” This action item was not yet designated with a completion date and appears to still be in-progress.</p>	<p>\$ 1500.00</p>
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Section C – Prevention Program – Mechanical Integrity (68.73)

<p>Has the owner or operator corrected deficiencies in equipment that are outside of acceptable limits before further use as required by 40 C.F.R. § 68.73(e)?</p> <p><i>Maintenance/Mechanical Integrity of Piping and Oil Pot</i></p> <p>Ice build-up and localized corrosion were observed on ammonia piping in the AMR and the oil pot located at the base of the +0 Recirculator;</p> <p>Missing/damaged vapor barriers, missing insulation, and localized corrosion were observed on ammonia piping located behind Ice Maker 1 (IM-2) and Ice Maker 2 (IM-2) in the AMR; and</p> <p>Damaged vapor barriers and insulation were observed on ammonia piping located at the base of AU-2 Evaporator in the Freezer area.</p> <p>See, e.g., ANSI/IIAR-6 (2019), Section 5.6.8 and Section 11.1, ANSI/IIAR-2 (2014), Section 5.10.1, ANSI/IIAR-9 (2020) Section 7.2.6, NFPA 1 (2015), Section 53.3.1.1</p>	<p>\$900</p>
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Section C- Prevention Program-Mechanical Integrity (68.73)

<p>Has the owner or operator corrected deficiencies in equipment that are outside of acceptable limits before further use as required by 40 C.F.R. § 68.73(e)?</p> <p>In response to EPA’s requests for information, Brookline Ice provided a copy of its ongoing MI action item tracking log developed as part of the October 2019 five-year MI audit (“the audit”). The tracking log includes deficiencies identified, priority level, recommendations, applicable regulatory and/or code references, responsibility, and current status.</p> <p>The following concerns identified in the audit were also observed during the 11/17/21 EPA inspection but had been identified in the MI action item tracking log with “Completed.”</p> <ul style="list-style-type: none">- flammable liquids shall not be stored in Machinery Room outside of approved Fire rated containers.”- facility pipe labeling <p>See e.g., ANSI/IIAR-6 (2019), Section 11.1(n) ANSI/IIAR-9 (2020), Section 7.2.9.4, ANSI/IIAR-2 (2014), Section 5.14.5; ANSI/IIAR-9 (2020), Section 7.3.4, ANSI/IIAR-2 (2014), Section 6.4.</p>	<p>\$900</p>
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<p>Section C- Prevention Program-RMP Updates (68.190)</p> <p>Has the owner or operator updated its RMP submittal at least once every five years from the date of its initial submission or most recent update as required by 40 C.F.R. § 68.190(b)(1)?</p> <p>Brookline Ice submitted its initial RMP to EPA on July 12, 2014. The next re-submission for Brookline Ice did not occur until July 24, 2020, over a year late.</p>	<p>\$2000.00</p>
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Total unadjusted Program Level 3 penalty: \$13,800

3. Size-Threshold Quantity Multiplier

The Size-Threshold Quantity multiplier is a factor that considers the size of the facility and the amount of regulated chemicals at the facility. Brookline Ice has approximately 15-20 employees and 15,300 lbs. of anhydrous ammonia (less than 2x the multiple for the threshold quantity of ammonia).

Expedited Settlement Penalty Matrix: Private Industries

Largest Multiple of Threshold Quantity of any Regulated Chemical(s) on Site			
# of Employees	1 – 5	>5 – 10	> 10
0 – 9	0.4	0.6	0.8
10 – 100 (15)	0.6	0.8	1.0
> 100	1.0	1.0	1.0

Size/Threshold Quantity multiplier from Expedited Settlement Penalty Matrix: **0.6**

3. Proposed Penalty

The Proposed Penalty is the amount of the non-negotiable penalty that is calculated by multiplying the Total Penalty and the Size/Threshold Quantity multiplier.

Proposed Penalty	=	\$13,800 (Unadjusted Penalty)	
	x	0.6 (Size/Threshold Quantity Multiplier)	
	=		<u>\$8,280</u>