

U.S. ENVIRONMENTAL PROTECTION AGENCY

Region 1

EPCRA and CAA 112(r) Inspection Report

Date: November 7, 2022
From: Drew Meyer/Len Wallace, USEPA Inspectors
Through: Mary Jane O'Donnell, Chief
Waste and Chemical Compliance Section
To: File
Subject: Inspection under Clean Air Act (CAA) § 112(r), Emergency Planning and Community Right-To-Know Act (EPCRA) § 302-312, and Comprehensive Environmental Response Compensation and Liability Act 103, of Cabot Creamery Cooperative, Cabot VT

I. GENERAL INFORMATION

Facility Name: Agri-Mark Inc., DBA Cabot Creamery Cooperative, Inc. (Manufacturing Plant)

RMP Number: none

Address: 2878 Main Street, Cabot, VT 05647

Inspector Names:

Leonard B. Wallace, U.S. Environmental Protection Agency (EPA) Region 1

Drew Meyer, US EPA Region 1

John Burton, Weston Solutions

Patrick McLaughlin, Chief of the VT Hazmat Team

Inspection Date: July 20, 2022

Type of Inspection: Risk Management Plan (RMP) CAA § 112(r); CAA § 112(r)(1) General Duty Clause (GDC), CERCLA § 103, and EPCRA §§ 302-313 Compliance Evaluation Inspection

Purpose of Inspection: This inspection was conducted as a routine inspection of Cabot Creamery Cooperative, for compliance with EPA CAA § 112(r) General Duty Clause (GDC), CERCLA 103, and EPCRA §§ 302-312. The facility was selected for inspection because the Facility annually submit Tier II reports identifying itself as using anhydrous ammonia in refrigeration systems.

This report identifies observations and findings made by the EPA inspection team with respect to compliance with the CAA § 112(r), EPCRA, and CERCLA 103 requirements.

Current Owner: Agri-Mark Cabot Creamery Cooperative, Inc.

Current Operator: Agri-Mark Cabot Creamery Cooperative, Inc.

Primary NAICS codes: 311513 (Cheese Manufacturing)

Number of full-time employees: Approximately 100

Estimated Annual Sales: \$94.30 million

II. GENERAL FACILITY DESCRIPTION

Agri-Mark Family Farms is a cooperative that started around 1980 having evolved from an earlier cooperative. Around 1992, Agri-Mark merged with Cabot Creamery Cooperative. More than one third of all of the dairy families in New England are part of the current cooperative. The facility is not a union operation.

The Cabot Creamery Cooperative facility (Facility), located in Cabot, VT, produces and packages cheese and other milk-based products. Two separate facilities operate at the location, employing approximately 350 employees between the two facilities, 250 employees in the “Cutting Plant/Warehouse” and the remaining in the “Manufacturing Plant”, each build somewhere around 1987. The facility does not have union employees.

The Manufacturing Plant is equipped with large refrigerated stainless steel above-ground tanks located outside, that are used for storage of milk and milk-based products or by-products. Each of the two locations have anhydrous ammonia systems, with associated equipment including piping runs, rooftops piping/pumps, evaporator-condensers, ventilation equipment, and each with a High-Pressure Receivers (HPR) and Ammonia Refrigeration Rooms (AMR).

During the in-briefing, Aaron Burke, Environmental Engineer stated that the Manufacturing facility’s anhydrous ammonia system has as much as 5,000 lbs of anhydrous ammonia in at at any one time. The Manufacturing Plant/Warehouse is a two-level building with a lower small “basement” space, so effectively has three levels. The upper level has a lunch and uniform room, electrical room, and office space. Most of the production operations occur on the main level, including the AMR and other refrigerated production processes. The HPR for the refrigeration system is partially enclosed in-doors, and partially outside along the perimeter of the building. The lower level also includes Control Rooms, Maintenance Packaging, Boiler, and miscellaneous other operations including dry storage and chemical and packaging storage. Bulk acids and caustics are stored at various locations in the facility, mainly for sterilization of stainless-steel tanks and piping.

III. IN-BRIEF/OPENING CONFERENCE

The EPA inspection team, including Leonard Wallace, EPA and Drew Meyer, EPA and John, Burton, Weston Solutions (Weston), and Patrick McLaughlin, VT State Fire Marshall, entered the Facility at approximately 8:30 a.m. The inspection team entered the facility and was met by

Aaron Page, Environmental Engineer and escorted inside the facility to a conference room. Inspectors Wallace and Meyer presented credentials to Aaron Page and Panos Lekkas, Plant Manager, during the opening conference. Inspector Wallace conducted the opening meeting and explained the reason and scope of the inspection. Mr. Burton, Weston explained that he would primarily be monitoring air during the inspection for ammonia using hand-held monitoring equipment. Dean Deasy, Cabot Fire Chief was only able to participate in the opening conference and then had to depart.

Inspector Wallace presented the EPCRA Notice of Inspection to Mr. Page, who signed as the Recipient of the Notice. Mr. Page did not attempt to deny facility entry to the inspectors, and he did not invoke any claims of Confidential Business Information (CBI) for purposes of the inspection.

Facility Representatives:

Name	Title/Company	E-mail
Panos Lekkas	Plant Manager - Manufacturing	plekkas@agrimark.net
Aaron Page	Environmental Engineer	apage@cabotcheese.com
Jim Burke	Owner/NEAS	james.burke@neas-inc.com
Bryan Weller	Plant Manager - Cut & Wrap	bweller@agrimark.net
Susan Murray	Regional Safety Coordinator	smurry@cabotcheese.com
Eric Werner	Tech	
Scott Lamonda	Tech	slamonda@cabotcheese.com
Al Rutledge	Operator	arutledge@cabotcheese.com
Michael Bolduc	Supervisor	mbolduc@cabotcheese.com
Barry Tatro	Maint. Sup.	btatro@cabotcheese.com
Tim Shea	Project Manager	tshea@cabotcheese.com
Jim Tringe	Dir Plt Svcs	jtringe@cabotcheese.com

Inspector Wallace shared the following guidance documents with facility representatives:

- Guide to the Emergency Planning and Community Right-to-Know Act (Fall 2020)
- EPCRA Quick Reference Fact Sheet (Fall 2020)
- List of Lists (EPA 550-B-20-001, August 2020)
- Small Business Resource Information Sheet (February 2020, EPA-300-F-20-002)
- National Response Center Oil and Chemical Spill Reporting flyer
- Chemicals in Your Community brochure (EPA 550-K-99-001, December 1999)

Inspector Wallace stated that after the opening meeting, the inspectors would do a walk-through around the perimeter of the facility and then would inspect production and other operations inside the building. Inspector Wallace explained that he would be taking photographs of items and areas of interest and copies of all photographs taken would be available to facility personnel, after the inspection.

IV. PHYSICAL INSPECTION

General Inspection

After completing a walk around the perimeter of the Cutting Plant and associated operations, the inspection team proceeded to the Manufacturing Plant.

Inspector Wallace took a total of 98 digital photographs during the one-day inspection to provide reference documentation of conditions observed. The photographs are referenced throughout the document. The digital photographs start with P1090426 – P1090523¹.

The inspection team noted that the facility lacked windsocks at all approaches to the building to inform emergency responders and evacuating personnel of the prevailing wind direction (see Photographs 426-429). NFPA diamonds were not posted on any of the entrance doors (see Photographs 431-433). The exterior Chiller Room and Ammonia Machinery Room (AMR) doors did not have signage on the outside door indicating the presence of ammonia inside (see Photographs 432-433).

The portion High Pressure Receiver (HPR) visible from the outside was not posted with NFPA diamonds or words describing its contents (see Photograph 432) and showed signs of corrosion.² The hand valve located on top of the HPR was heavily rusted (see Photographs 435-436) and pitted and the Pressure Relief header was not directed upward and was not located 7.25' above the highest nearby working surface (see Photographs 437). The air intake into the AMR was located just above the CNG pipeline (see Photographs 440), which could cause an explosion potential in the event of a CNG piping leak or the CNG Pressure Relief Valve lifts. The CNG piping was not properly labeled.

An ammonia audio/visual alarm outside of Door #32 into the AMR was not properly labeled and the AMR air intakes into the AMR was not located at ground level (see Photograph 440). No Emergency Stop control was equipped on the outside door of the AMR and P&IDs with emergency valves uniquely identified for the AMR were not posted (see Photograph 444). Additionally, these AMR doors did not have emergency shut down instructions posted. The door into AMR was not equipped with any exterior handle to open door from the outside (see Photograph 440) and pipe penetration into AMR was not properly sealed (see Photographs 440-443). There was no eyewash/shower on the outdoor side any of the doors from AMR and Chiller Room (see Photographs 430, 431, 432, 440, and 441).

Outside, along the AMR, the inspection team observed a drainage catch basin that Aaron Page stated was equipped with an ammonia detector for the purpose of monitoring spill releases. The presence of this detector in the area was not labeled (see Photographs 441-442). Mr. Page stated that the catch basin led to the Winooski River.

Outside, adjacent to the AMR, the inspection team observed a propane tank that was not labeled with an NFPA diamond or a description of its contents (see Photographs 441). The piping connected to this tank was also not properly labeled and the tank was not protected with bollards (see Photographs 441 and 443). The inspection team also observed a pipe from the AMR which

¹ The last three number of the digital photographs are being used as the identifier.

²Stains indicated drippage from the Evaporator Condenser, located immediately above.

terminated above the propane tanks that was not plugged and not labelled (see Photographs 441 and 443).

The diesel underground storage tanks (USTs) near the AMR were not clearly labeled (see Photographs 446, 447, and 448). Additional propane tanks located adjacent to the Main Street were not marked with NPFA diamonds or with words identifying the contents of the tank (see Photographs 451 and 452). The propane piping were not labeled, and the vegetation was not cleared to within 10' of propane tanks (see Photographs 451 and 452).

Next, the inspection team proceeded to the Bulk Chemical Storage Room. The door into the room was not posted with an NFPA diamond (see Photograph 453). There was no eyewash/shower outside of room. A second door from Bulk Chemical Storage Room was not equipped with panic hardware (see Photograph 456). Inside the room, the inspection team observed small containers that are not labeled or in secondary containment (see Photograph 458). Hoses and piping used inside Bulk Chemical Storage Room were not properly labeled with unique identifiers (see Photographs 455, 460, 461, 462, and 467). Bulk poly tanks had open tops and were not sealed and were not marked with confined space signs (see Photograph 464). No fall protection on mezzanine was observed to prevent falling into Bulk poly tanks (see Photograph 455). Some parts of the chemical delivery systems were leaking in the Bulk Chemical Storage Room (see Photograph 459).

At the Drum Chemical Storage Area, the inspection team observed drums without secondary containment, and others that were open when not in use (see Photographs 469). The floor showed signs of chemical spills in the area (see Photographs 469, 470, 471, 475, and 476). Hoses used for distribution in the area were not marked with unique identifiers. Piping in the area was not labeled (see Photographs 469, 470, 471, 473, 479, 480, and 481).

Next the inspection team observed a panel identified by Aaron Page as the Main Ammonia Panel. An evacuation plan and a telephone call down list was posted nearby. The ammonia control panel had green and yellow beacons without labels identifying what they indicated (see Photographs 485-488). Over the door leading into the Machine Shop and next to the Main Ammonia Panel the inspection team observed a blue audio/visual alarm, identified by facility personnel as an ammonia alarm beacon. This alarm was not labeled with a sign indicating its function (see Photographs 487 and 488).

The inspection team observed oxygen and flammable gas cylinders blocking the stairs into the AMR that were not properly secured (see Photographs 489, 490, 491, and 495). No Emergency eyewash/shower was located outside the AMR entrance door from Machine Shop into AMR (see Photographs 489 and 495). Piping penetrating AMR into wall was not sealed. Ammonia system Emergency switches in the Machine Shop were not properly labeled (see Photographs 492). The

door was not equipped with an ammonia audio-visual alarm (see Photograph 489) and the door from the AMR into Machine Shop was not equipped with panic hardware (see Photographs 496).

Within the AMR, pipes at ground level in the AMR did not have bump protection (see Photographs 513). Some tanks showed signs of rusting (see Photograph 493, 510, and 511). Insulation was breached on the saddle supporting the “Accumulator Recirculator” Tank (see Photographs 497, 498, and 499). Pipes entering AMR from the Boiler Room were not properly sealed (see Photographs 519 and 521).

The door leading into AMR from the Chiller Room had a blue beacon that was not labeled with a sign regarding its function (see Photographs 506). The door leading into AMR from Chiller Room went the wrong way and was not equipped with panic hardware (see Photograph 506). The Chiller Room piping was not labeled properly, and piping was not protected from bumps (see Photograph 502, 503, 504, and 505). The company stated they were in the process of replacing the Chiller unit in the Chiller room.

The Main emergency isolation valve on the HPR was inaccessible from floor level (see Photographs 510-512). Multiple colors (red, orange, yellow) were used for ammonia piping inside AMR (see Photographs 498, 500, 507, and 509). There was limited aisle space next to HPR due to the storage of drums of chemicals around the HPR (see Photographs 507, 508, 510, and 513). There was an ammonia stem pipe that terminated in the walking area near the HPR with no bump protection (see Photographs 507).

V. OUT-BRIEF/CLOSING CONFERENCE

Inspectors Wallace and Meyer concluded the inspection with an out-brief to facility representatives, via a Microsoft Teams meeting on August 15, 2022 and discussed preliminary areas of concern identified during the inspection related to failure to maintain a safe workplace and lack of adherence to industry standards for the ammonia refrigeration system.

Observations noted and identified during the inspection and in the out-briefing include:

Manufacturing

- 1) Facility lacked windsocks at all approaches to the building to inform emergency responders and evacuating personnel of the prevailing wind direction.
- 2) No NFPA diamonds on any of the entrance doors.
- 3) Chiller Room and AMR doors had no signage on the outside door indicating that the room contained ammonia.
- 4) HPR no marking or NFPA sign and words.
- 5) HPR showed signs of rusting from what appeared to be drippage from the Evaporator Condenser located immediately above.
- 6) Hand valve located on top of the HPR heavily rusted and pitted.
- 7) Pressure Relief header not directed upward and not located 7.25' above the highest nearby working surface.

- 8) Air intake to AMR just above the CNG pipeline appeared to be causing a potential explosion.
- 9) CNG piping not properly labeled.
- 10) Ammonia AV alarm outside of Door #32 to the AMR not properly labeled.
- 11) AMR Air intakes not at ground level.
- 12) No Emergency Stop control on the outside door of the AMR.
- 13) No Piping and Instrumentation Diagram (P&ID) were posted with emergency valves uniquely identified for the AMR.
- 14) No Emergency shut down instructions were posted for the AMR.
- 15) Door into AMR not equipped with any exterior handle to open door from the outside.
- 16) Pipe penetration into AMR not properly sealed.
- 17) Boiler Room piping missing labelling.
- 18) A outside drainage catch basin near the AMR has ammonia detector for the purpose of monitoring spill releases. Labeled detector not present. The catch basin leads to the Winooski River.
- 19) Outside propane tanks near the AMR not labeled with NFPA or a description of contents. Propane piping not properly labeled. No Bollards.
- 20) A pipe from AMR terminates above propane tanks and terminal is not plugged. Piping not labelled.
- 21) Underground diesel underground storage tanks (USTs) not clearly labeled.
- 22) Propane tanks located adjacent to the Main Street, no NFPA diamond and not properly labeled. Propane piping not labeled. Vegetation not cleared to within 10' of propane tanks.
- 23) Bulk Chemical Storage Room - no NFPA diamond.
- 24) Bulk Chemical Storage Room -no eyewash/shower outside of room.
- 24) Second door from Bulk Chemical Storage Room – no panic hardware.
- 26) Small containers inside Bulk Chemical Storage Room were not labeled or in secondary containment.
- 27) Hoses and piping used inside Bulk Chemical Storage Room not properly labeled.
- 28) Bulk poly tanks inside the Bulk Chemical Storage Room had open tops and were not sealed.

- 29) Bulk poly tanks not marked with confined space signs.
- 30) No fall protection on mezzanine to prevent falling into Bulk poly tanks.
- 31) Some drums without secondary containment inside Drum Chemical Storage Area and some open when not in use.
- 32) Signs of spillage on the floor in the Drum Chemical Storage Area.
- 33) Hoses used for distribution in Drum Chemical Storage Area not marked with unique identifiers.
- 34) Location of evacuation plan and call down list located at Main Ammonia Panel not at the main entrance door into AMR.
- 35) Ammonia AV alarms located at the door that leads into the Machine Shop not labeled.
- 36) Ammonia control panel had green and yellow beacons without labels identifying what they indicated.
- 37) Oxygen and flammable gasses blocking the egress stairs into the AMR and not properly stored.
- 38) No Emergency eyewash/shower located outside AMR entrance door from Machine Shop into AMR.
- 39) Piping penetrating AMR into wall not sealed.
- 40) Ammonia system Emergency switches in the Machine Shop not properly labeled and no A-V alarm.
- 41) Door from AMR into Machine Shop not equipped with panic hardware.
- 42) Pipes at ground level in the AMR do not have bump protection.
- 43) Insulation breached on the saddle supporting the Accumulator Tank.
- 44) Door leading into AMR from the Chiller Room had a blue beacon that was not labeled with a sign regarding its function.
- 45) Door leading into AMR from Chiller Room swings the wrong way and was not equipped with panic hardware.
- 46) Pipes entering AMR from the Chiller Room not properly sealed.
- 47) Main emergency isolation valve on the HPR inaccessible from floor level.
- 48) Multiple colors (red, orange, yellow) used for ammonia piping inside AMR.
- 49) Limited aisle space next to HPR. Drums of chemicals impeding aisle space around HPR.

VII. FACILITY COMPLIANCE STATUS AND ELEMENTS OF PROOF - EPCRA

EPCRA Section 302

(1) Does facility have on-site, at any one time, extremely hazardous substances (EHS) at or above the TPQ? Yes, Anhydrous Ammonia, Peracetic Acid, Sulfuric Acid, and Nitric Acid

(2) List or obtain documentation: Inspectors' observations; 2021 Tier II report

(3) How was maximum quantity on-site determined or calculated? The Facility determined maximum amounts. Example Cabot reported 15,798 pounds of ammonia on 2021 Tier II report. This amount is for both the Cutting Operations and the Manufacturing Operations.

EPCRA Section 303

(1) Facility Coordinator identified per Sec. 303 and date LEPC was notified? Facility coordinator identified in 2021 Tier II reports. Unknown when LEPC was notified (most recent Tier II report dated 2021).

EPCRA Section 311

(1) Is facility required to maintain SDSs (MSDSs) under the OSHA Hazard Communication Standard 29 CFR 1910.1200 (no specific chemical list)? Yes

(2) Has the facility conducted a comprehensive audit to identify SDS chemicals on-site and to determine if 500 lb./10,000 lb./TPQ thresholds were exceeded? Yes

(3) List of OSHA chemicals manufactured, processed, used/stored, and obtained? Yes. Facility did provide a list.

(4) How were the maximum amounts determined? The Facility determined maximum amounts.

(5) Section 311 info supplied to the:

SERC (Y/N):	<u>Yes</u>
LEPC (Y/N):	<u>Unknown</u>
Local Fire Department(Y/N):	<u>Unknown</u>
Date	<u>Unknown</u>
Chemical List	<u>Unknown</u>

SDSs Yes

(6) Have any new hazardous chemicals, mixtures, or substances been introduced into the facility in the last 5 years? Unknown

(7) If yes, has the facility submitted updated lists or SDSs? N/A

EPCRA Section 312 (due March 1 of year following reporting calendar year)

(1) Was Tier II form submitted for all required chemicals? Yes

(2) What procedures are used to update Section 312 information for annual submittal and to ensure additional or new chemical data is submitted within 90 days? The facility has previously submitted Tier II reports to SERC annually via electronic submission.

(3) Was facility aware of annual reporting requirements under Section 312? Yes

(4) Had the facility completed and signed a list of all reportable chemicals on site on date of the inspection? Yes

(5) Table of EPCRA 312 Reportable Substances:

Cabot Creamery Cooperative – Reports both the Cutting Operations and the Manufacturing Operations on one Tier 2

Chemical Name	CAS Number	EHS	Maximum Amount (Pounds)
Alept E3 Plus - Hand Sanitizer		No	1,760
Alpet D2 - Surface Sanitizing Wipes		No	631
Anyhdrous Ammonia	7664-41-7	Yes	15,798
Aqueous Ammonia - food additive	1336-21-6	Yes	3,755
Argon, compressed	7440-37-1	No	135
Calcium Chloride - Road Salt	10043-52-4	No	4,422
Carbon Dioxide	124-38-9	No	26,075
Caustic / Sodium Hydroxide 50%	1310-73-2	No	16,733
Defoamer No. 553		No	980
Detbuild No. 394		No	1,026
Diesel Exhaust Fluid		No	2,729
Diesel Fuel	68334-30-5	No	150,000
Eclipse No. 285		No	9,661
Enrich No. 299		No	2,985
Enzyterge No. 400		No	1,877
Fuel Oil (No. 2)	68476-30-2	No	180,659
Grease X No. 367		No	1,273
Heavy Duty Gallant No. 158		No	1,875
Hydiflux NP, No. 366		No	3,123
HydriBlend Red No. 145		No	462
Hydrisoak No. 180		No	2,035
Hydrogen Peroxide 34%	7722-84-1	No	

Lead Acid Batteries		Yes	43,145
Multiquat No. 455		No	1,363
Natural Gas, Compressed	74-82-8	No	35,000
New and Used Oil (on-spec)		No	3,300
Orbit No. 363		No	2,000
Peracetic Acid / PAA ~6%		Yes	14,606
Phosphoric Acid - Food Additive		No	1,200
Potassium Hydroxide		No	2,800
Propane	74-98-6	No	6,636
PURE Hard Surface Cleaner		No	917
Score No. 312 - Floor / Foot Sanitizer		No	2,410
Sentinel No. 473		No	1,608
Sterilex Activator Solution		No	2,157
Sterilex Disinfectant Cleaner Solution		No	1,872
Sulfuric Acid - Waste Treatment pH Neutralizing		Yes	2,513
Surchlor - Sodium Hypochlorite - Bleach		No	10,765
Ultra 1030 - 30% Caustic - Sodium Hydroxide		No	28,816
Ultra LFA (45% Nitric Acid)		Yes	20,000

Reported on RY2021 Tier II report.

IX. ENFORCEMENT HISTORY

The facility has no reported violations in ECHO.

X. ENVIRONMENTAL JUSTICE

The national EJSCREEN mapping tool indicates that the Facility is not located in area of Environmental Justice interest.