



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
WB Frozen LLC, Brownsburg, Indiana

FROM: Erin DuMontelle, Environmental Engineer
AECAB (MI/WI)

THRU: Sarah Marshall, Section Supervisor
AECAB (MI/WI)

TO: File

BASIC INFORMATION

Facility Name: WB Frozen LLC (an FGF Bakery Facility)

Facility Location: 50 Maplehurst Drive, Brownsburg, Indiana 46112

Date of Inspection: December 6, 2023 – December 8, 2023

EPA Inspector(s):

1. Erin DuMontelle, Environmental Engineer
2. Sasa Dunovic, Inspector/Enforcement Officer

Other Attendees:

1. Ellen Mcfaul, Environmental Health and Safety Lead
2. Joshua Gorrell, Director of Engineering
3. Mark Speck, Refrigeration Manager

Contact Email Address: Joshua.gorrell@fgfbrands.com, mark.speck@fgfbrands.com,
Ellen.mcfaul@fgfbrands.com

Purpose of Inspection: To assess compliance with the Chemical Accident Prevention Provisions (CAPP) at 40 C.F.R. Part 68 and complete an inspection regarding the Title V Air Permit under the Clean Air Act

Facility Type: Bakery and Temporary Freezer Storage Facility.

Facility Name: WB Frozen

Facility Location: 50 Maplehurst Drive, Brownsburg, Indiana 46112

Date of Inspection: December 6 – 8, 2023

Regulations Central to Inspection: Clean Air Act, Part 68 – Chemical Accident Prevention Program and the Indiana State Implementation Program Provisions

Arrival Time: 1:00 PM EST December 6, 2023

Departure Time: 9:50 AM EST December 8, 2023

Inspection Type:

- ☐ Unannounced Inspection
- ☒ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Small Business Resource Information Sheet not provided. Reason: not a small business
- ☒ Provided CBI warning to facility

The following information was obtained verbally from representatives of WB Frozen unless otherwise noted.

Company Ownership: The facility was a subsidiary under Weston Foods since 1997. In 2021, Weston Foods was bought by FGF.

Process Description:

WB Frozen (the facility) is a commercial bakery that creates both yeast and cake doughnuts. Bulk goods are brought in by truck and loaded into silos. Each silo has a baghouse for dust collection. The silos hard pipe the ingredients to a batch room where the ingredients are pulled for each type of dough. The batch ingredients are taken to their designated line. There are eight lines in total; six lines are yeast doughnuts that include proof boxes prior to the fryers, and two lines are cake doughnuts that lead straight to the fryers. The emissions from the proof boxes and fryers are directly vented into the atmosphere through their associated stacks. Moline #3 has not run at all in 2023. The batches of dough are mixed, extruded into sheets, stamped out, proofed (if the doughnuts are yeast), and then fried. Each of the lines have spiral coolers and blast freezers; all doughnuts made at the facility are ultimately flash frozen. The lines end in boxing stations that package the doughnuts into bulk boxes. The doughnuts are then moved to chilled temporary storage. The blast freezers and temporary storage are chilled by the ammonia refrigeration system. The freezers are chilled to 0°F, and the temporary storage is kept at -10°F. The ammonia refrigeration is a two-stage system that is centered in the Engine Room. The facility also has a glycol cooling system that are used in the mixer jackets to cool the dough and in underfloor storage room coolers.

Staff Interview:

The facility is open 24/7; it runs production starting Monday at 6 am through Saturday at 6am and completes routine cleaning of the production lines from 6 am Saturday to 6 am Monday. The work is stretched out over three shifts. There are approximately 300 employees on-site. There are around 30 maintenance staff with six operators that are specifically trained to work on the refrigeration system.

There are always two refrigeration operators on-site. The refrigeration operators are trained to complete basic inspections and maintenance around the system such as strainer changes and monthly Mechanical Integrity inspections. Large projects, pressure relieve valve (PRV) change-outs, and maintenance requiring the system to be opened are completed by a 3rd party contractor, DEEM Mechanical (DEEM). DEEM will review the system, complete service on the system and, make recommendations. The 3rd party contractor did not change when new ownership took over in 2021.

Cleaning of the facility is normally completed on Saturday and Sunday. Routine activities include replacing oil in the fryers, cleaning fryer vents, washing down the lines, defrosting the lines, and general maintenance when needed. The fry oil is usually replaced every one to two weeks depending on demand and cleanliness of the oil.

EPA talked with the refrigeration operators who stated that they complete the daily rounds to monitor the ammonia system; there are always two people on shift at all times. The operators also noted that they complete semi-annual drills for fire and ammonia. Communication between shifts is completed through email, as well as a community whiteboard. When asked about whether they have input on larger jobs and recommendations from the 3rd party contractors, operators noted that they are able to make suggestions to the refrigeration manager who makes the final call. The operators reiterated that they do not complete work on the refrigeration system outside of the routine maintenance and visual inspections and will call the 3rd party contractors.

August 2022 Incident:

There was an incident that occurred on August 11, 2022. A PRV was being replaced by a contractor. Ammonia was released and the emergency shutdown button was pressed. The facility was evacuated. The local Fire Department was notified, and a second contractor was called in. The contractors donned emergency equipment and were able to isolate the leak. The facility was cleared of ammonia. The facility remained closed for over 24 hours.

Data Collected:

The facility uses a software system to manage the Standard Operating Procedures (SOPs), the Management of Changes (MOCs), the Process Safety Information (PSI), the Mechanical Integrity (MI) program, and create and maintain their work orders. The facility previously utilized the Digital PSM platform to monitor work orders, MI, MOCs, etc. In 2020, it switched to the NH360 software platform, which was used for approximately two years. However, the facility moved away from this platform in 2022 and transitioned to the current tracking platform, EPSM Catalyst. The following remarks are made from the review of documentation that was made available at the time of EPA's inspection.

Process Safety Information

- The Ventilation System Design was completed in April of 2008 using ASHRAE 15 Standards.
- There is a difference of 1,275 lbs less ammonia used for the Ventilation Calculations than is claimed as the inventory.
- The wiring for the emergency shutoff (E-stop) was connected to the ammonia alarm system when the system was installed in 2021, and the E-stop would turn off the alarm system when initiated.

- The wiring systems were divided during maintenance in 2023 so that the E-stop no longer turned off the ammonia alarm system.

Mechanical Integrity

- The facility does not currently complete weekly Testing/Inspection/Preventative Maintenance (TIPM) Inspections.
- The current TIPM program does not include piping inspections.
- The facility was missing the Annual Inspection report for CG SS1.
- The facility was missing the previous Monthly Ventilation Inspection Reports or documentation that the tech had followed the procedure.
- Deficiencies regarding equipment being outside of acceptable limits is documented in the new software system.
- There is no current procedure that assures maintenance materials, spare parts or equipment that is purchased is suitable for application within the process.

Operating Procedures

- The facility certified the SOP's with a wet signature until the introduction of the new management system that allows for a digital signature.
- The Operating Procedures for each piece of equipment contains an Emergency Shutdown section that covers types of occurrences that would require an emergency shutdown.
- The Emergency Shutdown section does not cover the topic of activating the ammonia alarms or evacuation in the case of an ammonia release.
- The facility has a Line & Equipment Opening Procedure (L&EOP).
- The only people allowed to complete the L&EOP are Refrigeration Operators.
- The L&EOP was first developed in July 2008 and revised in September 2011.
- The L&EOP was again revised in September of 2022.
- Both the 2011 revision and the 2022 revision require the use of a "buddy system".
- The 2011 revision did not require the use of a Line and Equipment Opening Permit.
- The 2011 revision did not require written notification that a line or a piece of equipment was being opened.
- Neither the 2011 revision nor the 2022 revision of the L&EOP include emergency procedures in the case an incident were to occur during the procedure.
- Neither the 2011 revision nor the 2022 revision of the L&EOP include the consequences that could occur were deviations to happen during the procedure.
- The Ammonia Detectors Operating Procedures are a copy of the manufacturer's generic instructions; the facility has not developed a specific procedure for the detectors.
- None of the Operating Procedures that were reviewed note that the ammonia alarms should turn on when the Emergency Stop button is pressed.
- The current Lockout/Tagout Standard Operating Procedure (LOTOP) had not been revised following the change in ownership.

Training

- Initial training for operators that came on after 2020 did not contain documentation of the classroom portion of the training.

- Training does not include the software used for work orders.

Management of Change

- Two MOC's from 2021 were reviewed; one was a replacement-in-kind, and the second was an update to the ammonia alarms.
- The facility MOC procedure includes initiation documentation in the form of a Management of Change Form that includes the facility information, the reason for the change, and a description of the technical basis for the change.
- The facility MOC procedure requires that the Management of Change Form is reviewed to determine the type of change being made, identify drawings/procedures/documents that need modification, identify training needs from the change, determine safety and healthy impacts from the change, and determine the necessary authorization for the change.
- Neither MOC included the initiation documentation that would include the technical basis for the change, the impact made to safety and health, the modification required for specific operating procedures, the necessary time period for the change, or an authorization required to complete the proposed change.
- The ammonia MOC did not note that the P&IDs had been updated following the change.
- Neither MOC completed a Pre-Startup, Shutdown, Safety Review (PSSR) prior to starting up normal operations.

Compliance Audits

- The 2022 Compliance Audit still had five outstanding recommendations that had not been initiated and five outstanding recommendations that were initiated but not completed.
- The 2019 Compliance Audit created 18 recommendations, which were not being actively tracked and it was unknown which items were still open and being corrected.

Incident Investigation

- The facility only investigates incidents that lead to a loss of five lbs of ammonia or more.
- The facility did not have the investigation report for a leak that occurred in June 2022.

Hot Work

- The Hot Work Procedure had not been revised following the change in ownership.

Contractors

- The 3rd party contractor was last evaluated in 2019 by the previous owner/operator.
- An "Acknowledgment of Training and Understanding of the Contractor Orientation Package" DEEM contractors was completed on August 16, 2022.
- There is a signed contract between the facility and DEEM that lists out the services the contractor completes at the site as well as the terms and conditions regarding their responsibilities as the emergency response for the facility.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Tour Observations:

Bakery Process Area

- Moline #2, Moline #1, Moline #8, Moline #4, Moline #5, Moline #6, and Moline #7 were active.
- Each line's proof box and fryer vents directly to the atmosphere..
- Each of the blast freezer doors contained an ammonia detection alarm that has both audible and visible indicators.
- There is a glycol system that is cooled by the ammonia next to the bakery line area.
- There was corrosion on the piping on for the glycol/ammonia cooling system.
- The oil pot for the glycol/ammonia system had ice buildup near and around the valves.

Maintenance Shop, Electrical Room, and Engine Room

- The Maintenance Room connects to the Electrical Room which connects to the Engine Room that contains the ammonia refrigeration equipment.
- There is a separate outside door for each of the three rooms.
- The control room for the ammonia refrigeration system is within the Maintenance Room.
- The door from the Maintenance room to the Electrical room contains the NFPA diamond, the safety shower, an ammonia detector that pulls from the Engine room, and signage to denote that only authorized personnel are to enter.
- There is a visual alarm that notifies operators of issues within the Engine Room above the door connecting the Maintenance Room and the Electrical Room. This door and visual alarm are visible from the Control Room.
- The door from the Electrical Room to the Engine Room contains an NFPA diamond, the emergency E-stop button, the exhaust fans bypass button, and signage noting that only authorized personnel should access the area. There is no ammonia detector or monitor.
- The door out of the Engine Room into the Electrical Room does not contain panic hardware.
- The door out of the Engine Room into the Electrical Room does not open outward.
- The door out of the Engine Room to the outside contains panic hardware.
- The door into the Engine Room from outside contains an ammonia detector, the E-Stop button, the exhaust fans bypass button, signage stating only authorized personnel were allowed, and signage that notes the amount of ammonia as of 2012.
- The king valve is located near the HPR.
- There was ice buildup on the -50 Recirculator around the sight glasses and valves.
- The door from outside into the Electrical Room only contains an ammonia sensor.

The Roof

- Each of the fryers and proof boxes vent on the roof.
- Vents for the fryers of Moline #7 and Moline #2 had not been cleaned in two weeks.
- The PRVs vent within five feet of the condenser walkways.
- The evaporators for the cold storage are stored in penthouses.
- There was a high amount of corrosion on the hot gas pipes.

- There was corrosion on the HPR pipes.
- There was ice buildup around piping and valves near the penthouse that were not insulated.

Cold Storage and Loading Dock

- The cold storage area is split into two side that are connected and each side was equipped with an ammonia detector.
- The loading dock contained piping that was un-labeled and not properly barricaded from the fork-lift traffic.

Photos and/or Videos: were taken during the inspection.

Photos and videos were taken using a Canon 360HS Digital Camera.

RECORDS REVIEW

EPA reviewed documents for the Following RMP Level 3 Requirements:

1. Program Applicability
2. Management Structure
3. Off-site consequence analysis
4. Worst-case release scenario analysis
5. Alternative release scenario analysis
6. Hazard Assessment Documentation
7. Five-year accident history
8. Process Safety Information (PSI)
9. Process Hazard Analysis (PHA)
10. Mechanical Integrity (MI)
11. Operating Procedures (SOP)
12. Training
13. Management of Change
14. Pre-startup safety review (PSSR)
15. Compliance Audits
16. Incident Investigation
17. Employee Participation
18. Hot Work Permit
19. Contractors
20. Emergency Response
21. Risk Management Plan

CLOSING CONFERENCE

- ☒ Provided U.S. EPA point of contact to the facility

Requested documents:

The following is a list of documents that were requested during the inspection and were received before EPA left the facility.

1. Baghouse reports regarding maintenance and sanitation from 2022 and 2023

2. Proofer reports regarding maintenance and sanitation from 2022 and 2023
3. Visual Emission Checks from 2022 and 2023
4. VOC calculations from 2022 and 2023
5. The current Air Permit for the Brownsburg facility
6. Dust Collector PMs from 2022 and 2023

The following is a list of documents that were requested at the end of the inspection to be received in follow-up communications between EPA and the facility.

7. The updated training documents for the 3rd party contractors that work on-site,
8. List of all emergency contacts under the RMP program,
9. List of site acronyms,
10. Ammonia sensor calibration records,
11. The stack tests that were issues in the Air Permit Modification from the Lebanon, TN facility, and
12. The Air Permit that is current for the Lebanon, TN facility.

Compliance Assistance:

EPA assisted with getting the facility into the CDX system so that the new Refrigeration Manager could be the “Preparer” for the RMP that is due for resubmission in 2024.

Concerns:

- The facility is completing a transfer of documentation into the new software system which could leave many paper copies of documentation to be unknowingly outdated due to current procedures.
- The ventilation system was last evaluated in 2008 under the previous standards and not the current RAGAGEP.
- There were outstanding procedures that had not been updated since the change in ownership.
- Procedures were missing updates regarding emergencies.
- There were open recommendations from the Compliance Audit in 2022.
- There is no specific TIPM for piping inspections.
- Training needed to include the new software system.
- The facility was missing documentation for Incident Investigations, MOCs, PSSR, and Mechanical Integrity Inspections.
- The facility had not completed a review of the contractor since the change of ownership.
- The Ammonia Detectors did not have a specific inspection procedure, and their operating procedure lacked the limits and background that was required.
- The second exit from the Engine Room requires the operator to open the door into the Engine Room.
- There was corrosion and ice build-up around the facility.
- The exhausts for the pressure relief valves are close to the condenser platforms.
- Guarding of the refrigeration system piping in the dock area does not provide full coverage.

DIGITAL SIGNATURES

Report Author: Erin Dumontelle Digitally signed by ERIN DUMONTELLE
Date: 2024.01.30 10:54:46 -06'00'

Section Supervisor: SARAH MARSHALL Digitally signed by SARAH MARSHALL
Date: 2024.01.31 09:52:48 -06'00'

Facility Name: WB Frozen
Facility Location: 50 Maplehurst Drive, Brownsburg, Indiana 46112
Date of Inspection: December 6 – 8, 2023

APPENDICES AND ATTACHMENTS

1. Appendix A: Photo Log

APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: Erin DuMontelle, Sasa Dunovic	2. Archival Record Location: Region 5 Electronic Record Center
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Image Number	File Name	Date and Time (EST)	Description of Image
1	IMG_0445.JPG	12/07/2023 4:59 PM	Proofer Box for Moline #7 and exhaust (top)
2	IMG_0446.JPG	12/07/2023 5:03 PM	Door into blast freezer with alarm
3	IMG_0447.JPG	12/07/2023 5:27 PM	Piping for glycol system near process area
4	IMG_0448.JPG	12/07/2023 5:28 PM	Piping for glycol system near process area
5	IMG_0449.JPG	12/07/2023 5:30 PM	Piping for ammonia for the glycol system near process area
6	IMG_0450.JPG	12/07/2023 5:32 PM	Ammonia sensor on blast freezer for Moline #2
7	IMG_0451.JPG	12/07/2023 5:32 PM	Ammonia sensor on blast freezer for Moline #2, up-close view
8	IMG_0452.JPG	12/07/2023 5:49 PM	Door leading into the Electrical Room and Engine Room from Maintenance Shop
9	IMG_0453.JPG	12/07/2023 5:51 PM	Door out of Engine Room into Electrical Room
10	IMG_0454.JPG	12/07/2023 5:54 PM	Piping in the Engine Room
11	IMG_0455.JPG	12/07/2023 5:59 PM	Door from outside into Engine Room
12	IMG_0456.JPG	12/07/2023 6:00 PM	King valve location on HPR.
13	IMG_0457.JPG	12/07/2023 6:00 PM	King valve location on HPR, far-away view
14	IMG_0458.JPG	12/07/2023 6:06 PM	Door #18 - outside of Electrical Room
15	IMG_0459.JPG	12/07/2023 6:08 PM	Door #18 – inside view
16	IMG_0460.JPG	12/07/2023 6:08 PM	Door into Engine Room from Electrical Room
17	IMG_0461.JPG	12/07/2023 6:09 PM	Piping in Engine Room
18	IMG_0462.JPG	12/07/2023 6:09 PM	Piping in Engine Room

Facility Name: WB Frozen

Facility Location: 50 Maplehurst Drive, Brownsburg, Indiana 46112

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19	IMG_0463.JPG	12/07/2023 6:12 PM	Piping in Engine Room that pictures PSV-53
20	IMG_0464.JPG	12/08/2023 8:25 AM	Piping from HPV
21	IMG_0465.JPG	12/08/2023 8:25 AM	Piping from HPV
22	IMG_0466.JPG	12/08/2023 8:28 AM	Dry goods silos
23	IMG_0467.JPG	12/08/2023 8:32 AM	Piping from HPV and reliefs
24	IMG_0468.JPG	12/08/2023 8:32 AM	Backside of Condensers
25	IMG_0469.JPG	12/08/2023 8:33 AM	Ice buildup on roof equipment
26	IMG_0470.JPG	12/08/2023 8:37 AM	Condensers and relief vents
27	IMG_0471.JPG	12/08/2023 8:39 AM	Penthouse piping
28	IMG_0472.JPG	12/07/2023 8:42 AM	Roof piping
29	IMG_0473.JPG	12/08/2023 8:44 AM	Moline #4 exhausts – fryers (center) and proofers (smaller in background)
30	IMG_0474.JPG	12/08/2023 8:47 AM	Hot gas line piping
31	IMG_0475.JPG	12/08/2023 8:52 AM	Ice buildup on roof piping
32	IMG_0476.JPG	12/08/2023 8:54 AM	Exhausts from Moline #7 fryers
33	IMG_0477.JPG	12/08/2023 8:55 AM	Exhaust from Moline #7 fryer – up-close view
34	IMG_0478.JPG	12/08/2023 8:58 AM	Moline #2 exhausts
35	MVI_0479.MP4	12/08/2023 8:58 AM	Video of Moline #2 fryer exhaust
36	IMG_0480.JPG	12/08/2023 9:34 AM	Glycol lines in dock area