



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

ENFORCEMENT &
COMPLIANCE ASSURANCE
DIVISION

**Clean Air Act - Section 112(r)
Risk Management Program
and EPCRA 312 – Tier II
Facility Inspection Report**

FACILITY INFORMATION:

Name: Zirkle Fruit Co., Johnny Appleseed
Physical Address: 226 B&O Road, Malott, WA 98829
Phone Number: 509-245-5231
Latitude/Longitude: 48.303818 / -119.684517
RMP Facility ID#: 100000141704
FRS ID#: 110071178192
EJ Concerns: Yes (Above 80%)

CONTACT INFORMATION (RMP Implementation):

Name: Scott Blackledge
Phone Number: 509-941-8714
E-mail: scottb@zirklefruit.com

EMERGENCY CONTACT INFORMATION:

Name: Joel Hand
Phone (24-hr): 509-421-0986
E-mail: joelh@zirklefruit.com

TRIP DETAILS:

Inspection Date: May 27, 2022
Inspection Time: 0815 hours through 1130 hours
Inspection Team: Peter Phillips, US EPA Region 10 SEE Grantee, Lead RMP Inspector
Terry Garcia, US EPA Region 10 SEE Grantee, RMP Inspector
Edward Johannes, US EPA Region 10 SEE Grantee, EPCRA Inspector
Lisa Graves, Weston Solutions, Inc., EPA START Contractor

DATE AND PROGRAM LEVELS OF SUBMITTED RMP:

Initial Submission Date: June 25, 1999
Date of Latest Update: June 7, 2019

Process (Program 1, 2, 3) as reported in RMP:

Process ID	Description	Process Chemical ID	NAICS Code	Program Level	Chemical Name CAS Number	Quantity (lbs)
1000100118	Ammonia Refrigeration	1000125397	49312	3	Ammonia, Anhydrous (7664-41-7)	14,000

PURPOSE:

The purpose of this inspection was to determine whether this facility is in compliance with Section 112(r) of the Clean Air Act and Title 40 Code of Federal Regulations (CFR) Part 68, Chemical Accident Prevention Provisions.

- The facility has been previously inspected in the past 5 years: No ☒ Yes ☐
- The facility is High Risk: No ☒ Yes ☐
- Joint EPCRA inspection: No ☐ Yes ☒

CAA Title V Air Permit:

Does the facility have a CAA Title V Permit? No ☒ Yes ☐

RELEASE/ACCIDENT HISTORY:

Did the facility have a reportable release in the past 5 years? No ☒ Yes ☐

EPCRA TIER II REPORTING:

Did the facility submit the 2022 Tier II report to the SERC? No ☐ Yes ☒

If Yes, Date the Tier II was submitted: 2/22/2022

Did the facility submit a Tier II to the LEPC and local fire department? No ☐ Yes ☒

If Yes, Date the Tier II was submitted: 2/22/2022

INSPECTION ENTRY:

Peter Phillips led the inspection entry. The EPA Inspection Team (EPA) met with facility representative Joshua Austin at the Zirkle Fruit Co., Johnny Appleseed facility in Marlott, Washington. EPA arrived at the facility at 0815 hours and was joined by the following facility personnel:

Name	Title
Joshua Austin	PSM Manager
Scott Blackledge	Safety Manager
Myles Austin	Refrigeration Operator
Troy French	Facility Manager
Michael Leadon	Compliance

Was a state/county/or local emergency representative present? No ☒ Yes ☐

The facility is a first responder: No ☒ Yes ☐

If No, Responding Agency: Marlott Fire Department

The inspection team was escorted to a conference room located in the facility's office building. Introductions were made by Peter Phillips, who provided a summary of the risk management program (RMP) and explained the purpose of the visit. Each team member presented his/her credentials.

EPA then requested an explanation of the facility's operations and any additional safety measures that should be taken during the site tour. Joshua Austin and other facility personnel gave a brief description of the facility, operations, and personal protective equipment required for the tour.

Prior to the inspection, EPA sent a certified notice of inspection letter to the facility informing them of the CAA Section 112(r)(6)(L) requirement that facility employees and employee representatives (such as a union representative) have the right to participate in the RMP inspection, and that a copy of the letter must be provided to the employee representative(s) and the letter posted in a manner accessible to employees in the facility.

The facility is unionized: No ☒ Yes ☐

An employee representative present during the facility visit: No ☒ Yes ☐

GENERAL INFORMATION:

The facility is regulated under the Risk Management Program as a Program Level 3 facility and is leased and operated by Zirkle Fruit Co., Johnny Appleseed (Zirkle Fruit). Zirkle Fruit operates produce packing and refrigeration warehouse which utilizes an ammonia refrigeration system. The refrigeration system retains 14,000 lbs. of anhydrous ammonia on site. There are 25 full-time employees on site, four of whom are responsible for refrigeration operations.

Two engine rooms house components of the facility's interconnected refrigeration system, which provides cooling to fifteen controlled atmosphere rooms. The refrigeration operator checks the ammonia refrigeration system every workday and all refrigerated areas are continuously monitored by an ammonia detection system. The refrigeration system remotely notifies the refrigeration operator when an alarm is triggered, or when refrigeration parameters are out-of-range. There are no process modifications that impact the facility's ammonia refrigeration process. The facility has established an Emergency Action Plan (EAP) in the event of an ammonia release and all employees receive refresher training at least every three years or more as necessary.

ON-SITE OBSERVATIONS:

The facility tour was conducted from approximately 0930 hours to 1020 hours. The EPA Inspection Team was escorted by facility representatives Joshua Austin, Troy French, Michael Leadon, and Myles Austin. EPA observed refrigeration system equipment at exterior areas of the facility, Engine Room 1, Engine Room 2, the Control Room, and two controlled atmosphere rooms CA 1A and CA 2.

The hydro-cooler conveyor system is located at the exterior of the building designated as Common Storage 11. The hydro-cooler included a dedicated evaporator with ancillary equipment adjacent to it (Photos 1-3). The interior of Common Storage 11 (Photos 4-5) contained ammonia piping components of the refrigeration system.

EPA observed two controlled atmosphere (CA) rooms, CA 1A (Photos 6-8) and CA 2 (Photos 9-11). The equipment observed in each CA room included an evaporator, ammonia sensor intake, and an alarm leak detection device.

The equipment observed in Engine Room 1 included compressors, pressure relief valves, an accumulator tank, an exhaust vent, intake (which the facility identified as airflow through the opened inner door into the engine room), emergency shower/eyewash, and the alarm leak detection device (Photos 12-22). Three high pressure receiver (HPR) tanks and the associated king valve for Engine Room 1 were located outside the room, in an enclosed fenced area (Photos 23-24). The system condensers were housed above the HPR tanks on a metal platform (Photos 25-27).

The equipment observed in the Engine Room 2 (misabeled as Engine Room 3 by facility signage, Photo 28) included one HPR tank and associated king valve, compressors, pressure relief valves, emergency shower/eyewash, safety lock-out station, exhaust, intakes, and the alarm leak detection device (Photos 29-40). The system condensers for Engine Room 2 were located on the building rooftop (Photo 41). The Control Room used to monitor all facility refrigeration parameters from a dedicated computer terminal, and the ammonia sensor network panel were in an adjacent room from Engine Room 2 (Photo 42).

The facility ammonia refrigeration system and ancillary equipment were clearly labeled and tagged. In addition, safety features were observed throughout the facility (Photos 43-45). All photographs taken at the facility are included in Attachment A to this report.

After touring the RMP-covered process areas at the Zirkle Fruit facility, EPA returned to the conference room to review the facility RMP documentation. Upon completion of the document review, EPA provided a debriefing to Joshua Austin, Troy French, Michael Leadon, Myles Austin, and Scott Blackledge.

INFORMATION COLLECTED FROM FACILITY:

1. Training Summary Form: On-The Job Training - 2 pages
2. Training Summary Form: General Training - 3 pages
3. Grandfathering Certification Form - 1 page
4. Operating Procedures Review Summary and Certification Form - 1 page
5. Plant Process Flow Diagram - 1 page
6. Plant Facility Layout - 1 page
7. Plant Mechanical Rm. #1 Receiver & Condensers (Outside) - 1 page
8. Plant Mechanical Rm. #1 (Inside) - 1 page
9. Plant Building Layout #1 - 1 page
10. Plant Building Layout #2 - 1 page
11. Plant Building Layout #3 - 1 page
12. Plant Mechanical Rm. #3 - 1 page

AREAS OF CONCERNS ADDRESSED IN CLOSING CONFERENCE:

1. **Process Hazard Analysis (PHA):** Zirkle Fruit has no documentation prior to the 2017 PHA for process updates or revalidations from the previous facility owner. Zirkle Fruit only has a 2017 PHA documentation on file. [68.67(g)]
2. **Training:** Zirkle Fruit has no initial training documents for ammonia operator, Arnulfo Mercado, on site specific operating procedures. [68.71(a)(1)]
3. **Mechanical Integrity:** Zirkle Fruit has pressure relief valves (PRVs) with a replacement date of 1/2020 that are passed due located in Engine Room 2. The inspection and testing frequency for the PRV maintenance is different than every five years for replacement.¹ The facility stated the

¹ The facility employs a methodology that only the PRV that is selected to relieve pressure on a 3-way manifold is tagged and current. The other relief valve on the manifold is out of date. When the active relief valve nears its replacement date, the other valve (out of date) is replaced by a new valve and the manifold is switched accordingly. The facility reasons that using one relief valve whether it be a single valve or mounted on a 3-way valve is adequate and that it is more cost-effective since the PRV inventory is reduced by 50%.

PRV replacement method was an approved method by Washington State L&I and would provide documentation for this approval. [68.73(f)(2)]

DOCUMENTS REQUESTED NOT INCLUDED IN REPORT:

The following documents were requested during the inspection but are not included in this report. These documents will still be reviewed to determine compliance with Section 112(r) of the Clean Air Act.

1. Mechanical Integrity – Letter from Washington State for PRV replacement practices.
2. Mechanical Integrity – SOP for changing out pressure relief valves.

This follow-up information was requested on 5/28/2022, 8/2/2022 and 8/4/2022. The facility did not respond to the follow-up request.

INSPECTION REPORT CERTIFICATION:

This is to certify that I, Peter Phillips, was the lead inspector at this facility and that I have verified the accuracy of the observations in this inspection report:

PETER PHILLIPS
(Affiliate)

Digitally signed by PETER
PHILLIPS (Affiliate)
Date: 2022.08.16 14:08:31 -07'00'

Inspector Signature

JAVIER MORALES

Digitally signed by JAVIER
MORALES
Date: 2022.08.16 14:31:00 -07'00'

RMP Coordinator/Approval

ERIN WILLIAMS

Digitally signed by ERIN WILLIAMS
Date: 2022.08.17 09:28:26 -07'00'

EPCRA Coordinator/Approval

Jennifer A Sullivan

Digitally signed by Jennifer A Sullivan
Date: 2022.08.18 14:30:07 -07'00'

Land Enforcement Section Chief/Approval

Attachment A – Photo Log

Site Name: Zirkle Fruit Co. Johnny Appleseed
City, State: Marlott, Washington
Photographer: Lisa Graves

File	Photo Layout ID	Date	Time	Description
DSCN2655	1	5/27/2022	9:34 AM	Facility - Hydro Cooler
DSCN2656	2	5/27/2022	9:35 AM	Facility - Hydro Cooler
DSCN2657	3	5/27/2022	9:35 AM	Facility - Hydro Cooler and Condenser
DSCN2658		5/27/2022	9:37 AM	Facility - Windsock
DSCN2659	4	5/27/2022	9:38 AM	Common Storage 11 - General Storage Overview
DSCN2660	6	5/27/2022	9:39 AM	Controlled Atmosphere Room CA 1A - Entry/Exit
DSCN2661	8	5/27/2022	9:39 AM	Controlled Atmosphere Room CA 1A - Ammonia Sensor Tube
DSCN2662	7	5/27/2022	9:39 AM	Controlled Atmosphere Room CA 1A - Evaporator
DSCN2663		5/27/2022	9:40 AM	Controlled Atmosphere Room CA 1A - Ammonia Sensor Tube
DSCN2664		5/27/2022	9:41 AM	Controlled Atmosphere Room CA 1A - Storage Room Overview
DSCN2665	9	5/27/2022	9:41 AM	Controlled Atmosphere Room CA 2 - Entry/Exit
DSCN2666		5/27/2022	9:42 AM	Controlled Atmosphere Room CA 2 - Ammonia Sensor Tube
DSCN2667		5/27/2022	9:42 AM	Controlled Atmosphere Room - Ammonia Sensor Tube
DSCN2668	10	5/27/2022	9:42 AM	Controlled Atmosphere Room CA 2 - Evaporators
DSCN2669	11	5/27/2022	9:42 AM	Controlled Atmosphere Room CA 2 - Evaporator and Ammonia Sensor Tube
DSCN2670		5/27/2022	9:43 AM	Controlled Atmosphere Room CA 2 - Storage Room Overview
DSCN2671	5	5/27/2022	9:44 AM	Ammonia Piping in Common Storage 11 Mezzanine Area
DSCN2672		5/27/2022	9:44 AM	Ammonia Piping in Common Storage 11 Mezzanine Area
DSCN2673		5/27/2022	9:45 AM	Ammonia Piping in Common Storage 11 Mezzanine Area
DSCN2674		5/27/2022	9:47 AM	Engine Room 1 - Entry/Exit
DSCN2675	16	5/27/2022	9:47 AM	Engine Room 1 - Accumulator Vessel Test Hole Cut
DSCN2676	15	5/27/2022	9:48 AM	Engine Room 1 - Accumulator Vessel
DSCN2677	17	5/27/2022	9:48 AM	Engine Room 1 - Ammonia Leak Detector
DSCN2678		5/27/2022	9:49 AM	Engine Room 1 - Decommissioned Compressor
DSCN2679		5/27/2022	9:50 AM	Engine Room 1 - Exhaust Vent
DSCN2680	20	5/27/2022	9:51 AM	Engine Room 1 - Exhaust Vent
DSCN2681		5/27/2022	9:51 AM	Engine Room 1 - Relief Valve Tag
DSCN2682	21	5/27/2022	9:52 AM	Engine Room 1 - Calibration Log
DSCN2683	18	5/27/2022	9:52 AM	Engine Room 1 - Emergency Shower and Eye Wash
DSCN2684	19	5/27/2022	9:52 AM	Engine Room 1 - Intake (Facility identified as the opened door)
DSCN2685	22	5/27/2022	9:53 AM	Engine Room 1 - Emergency Contacts
DSCN2686	13	5/27/2022	9:53 AM	Engine Room 1 - Overview
DSCN2687		5/27/2022	9:53 AM	Engine Room 1 - Left Relief Valve Tag (Expired)
DSCN2688	14	5/27/2022	9:55 AM	Engine Room 1 - Relief Valve Tags (left expired, right current)
DSCN2689	25	5/27/2022	9:55 AM	Engine Room 1 - Emergency Shower and Eye Wash
DSCN2690		5/27/2022	9:56 AM	Engine Room 1 - Entry/Exit
DSCN2691	26	5/27/2022	9:56 AM	Engine Room 1 - Condenser
DSCN2692	23	5/27/2022	9:57 AM	Engine Room 1 - High Pressure Receiver (HPR) Tanks
DSCN2693	24	5/27/2022	9:57 AM	Engine Room 1 - King Valve
DSCN2694	12	5/27/2022	10:00 AM	Engine Room 1 - Entry/Exit
DSCN2695	44	5/27/2022	10:00 AM	Engine Room 1 - Visual Alarm
DSCN2696	27	5/27/2022	10:00 AM	Engine Room 1 - Condensers and HPR Tanks
DSCN2697		5/27/2022	10:02 AM	Engine Room 2 - Windsock
DSCN2698	41	5/27/2022	10:02 AM	Engine Room 2 - Windsock and Condenser
DSCN2699	28	5/27/2022	10:04 AM	Engine Room 2 - Entry/Exit (Facility signage "Engine Room No. 3" is incorrect)
DSCN2700	29	5/27/2022	10:05 AM	Engine Room 2 - Emergency Shower and Eye Wash
DSCN2701		5/27/2022	10:06 AM	Engine Room 2 - HDR Tank
DSCN2702	30	5/27/2022	10:06 AM	Engine Room 2 - King Valve
DSCN2703		5/27/2022	10:07 AM	Engine Room 2 - Solonoid King Valve

DSCN2704	31	5/27/2022	10:07 AM	Engine Room 2 - HPR Tank
DSCN2705	33	5/27/2022	10:08 AM	Engine Room 2 - Left Side Release Valve Tag (Current)
DSCN2706	34	5/27/2022	10:08 AM	Engine Room 2 - Right Side Release Valve Tag (Expired)
DSCN2707	32	5/27/2022	10:08 AM	Engine Room 2 - Compressor Release Valves
DSCN2708	35	5/27/2022	10:09 AM	Engine Room 2 - Exhaust Vent
DSCN2709	36	5/27/2022	10:09 AM	Engine Room 2 - Ammonia Leak Detector
DSCN2710	37	5/27/2022	10:09 AM	Engine Room 2 - Safety Lock-Out Station
DSCN2711	38	5/27/2022	10:10 AM	Engine Room 2 - Calibration Log
DSCN2712	39	5/27/2022	10:10 AM	Engine Room 2 - Emergency Contacts
DSCN2713		5/27/2022	10:10 AM	Engine Room 2 - Emergency Eye Wash On/Off Buttons
DSCN2714	45	5/27/2022	10:12 AM	Engine Room 2 - Emergency Shut Off
DSCN2715	40	5/27/2022	10:12 AM	Engine Room 2 - Louver Intake
DSCN2716	43	5/27/2022	10:13 AM	Engine Room 2 - Condensers
DSCN2717		5/27/2022	10:16 AM	Control Room - Intake and Carbon Scrubber
DSCN2718	42	5/27/2022	10:16 AM	Control Room - Ammonia Sensor Network Panel