

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

FACILITY INFORMATION:

Name: Zirkle Fruit Company
Physical Address: 352 Harrison Road, Selah, Washington 98942
Phone Number: (509) 697-6101
Latitude/Longitude: 46.673056/ -120.510000
EPA Facility ID# 1000 0008 9664

CONTACT INFORMATION (RMP Implementation):

Name: Scott Blackledge
Phone Number: (509) 697-6101
E-mail: scottb@zirklefruit.com

EMERGENCY CONTACT INFORMATION:

Name: Bruce Cone
Phone (24-hr): (509) 961-7056
E-mail: N/A
Website: <https://www.zirklefruit.com/>

AUDIT DETAILS:

Contact Date: June 1, 2021
Inspectors: Bob Hales, US EPA Region 10 SEE Grantee, RMP Inspector

DATE AND PROGRAM LEVELS OF SUBMITTED RMP:

Initial Submission Date: June 21, 2004
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)
1000100087	Basic Inorganic Chemicals	1000125366	49312	3	Ammonia, Anhydrous (7664-41-7)	54,000
1000100086	Basic Inorganic Chemicals	1000125365	49312	3	Ammonia, Anhydrous (7664-41-7)	45,000

PURPOSE:

The purpose of this document review 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 and compliance with Section 312 of the Emergency Planning and Community Right to Know Act (EPCRA) which requires the Tier II Chemical Inventory Reports to be submitted annually. EPA Region 10 RMP inspectors will not be conducting onsite inspections due to the COVID-19 pandemic requiring restricted travel and social distancing by the Centers for Disease Control (CDC) to prevent the spread of COVID-19. EPA Region 10 will coordinate with the RMP facility to schedule an onsite inspection when the CDC has determined it is safe.

- The facility has been previously inspected in the past 5 years: No ☒ Yes ☐
If Yes, Date of Last Inspection:
- Is the emergency contact information current? 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 ☐

If Yes, Permit Number:

RELEASE/ACCIDENT HISTORY:

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

If Yes, Date and Description of the Release:

EPCRA TIER II REPORTING:

Did the facility submit their 2020 Tier II report to the SERC? No ☐ Yes ☒

If Yes, Date the Tier II was submitted: February 23, 2021

If No, calendar year of the most recent Tier II:

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

If Yes, Date the Tier II was submitted: February 23, 2021

GENERAL INFORMATION:

The facility is regulated under the Risk Management Program as a Program Level 3 process and is owned and operated by Zirkle Fruit Company (Zirkle Fruit). Zirkle Fruit uses refrigerated storage for fruits such as apples that are harvested during the growing season. The refrigeration system is single stage with all equipment being of a “flooded design”. There are controlled atmosphere and common storage rooms, and also water hydro-coolers. The facility has three machine rooms identified as the North Machine Room, the South Machine Room, and the Loading Dock Machine Room. The North Machine Room is totally independent of the other two machine rooms. The South and Loading Dock Machine Rooms are next to each other and share a common wall. The regulated chemical anhydrous ammonia is used as a refrigerant in the refrigeration system. There are 650 full-time employees on site.

INFORMATION REQUESTED FROM FACILITY:

1. Process Hazard Analysis – last two updates/revalidations.
2. Compliance Audit – last two compliance audit reports.
3. Training – operator/maintenance initial and refresher training records.

ANALYSIS OF DOCUMENTATION SUBMITTED:

Process Hazard Analysis (PHA): Zirkle Fruit submitted their 2012 and 2017 PHA. The 2012 PHA team consisted of three employees and assisted in the study by refrigeration contractor, Doubl-Kold Company. The PHA was based on a generic study developed by the International Institute of Ammonia Refrigeration (IIAR) and the International Association of Refrigerated Warehouses (IARW). The generic study was customized and supplemented with unique site-specific issues to ensure that all hazards of this particular ammonia refrigeration system were reviewed. This PHA was done with the

qualified PHA leader in a team format using the What If/Checklist technique. The 2012 PHA identified forty-three recommendations that have been addressed and corrected.

The 2017 PHA revalidation was conducted by Zirkle Fruit refrigeration technicians including four from other Zirkle Fruit refrigerated warehouse locations. The 2017 PHA identified ten (10) recommendations that were completed by September 2019. These PHA recommendations addressed process equipment such as compressors and condensers, emergency planning and facility siting.

Compliance Audit: Zirkle Fruit submitted their 2017 and 2020 compliance audits for review. The 2017 audit was conducted by a team of three Zirkle Fruit employees. The team was guided by Doubl-Kold refrigeration contractor, Kem Russell. The 2017 audit used a checklist format including a facility inspection tour. The audit checklist identified twenty-six (26) findings addressing issues with their process safety management system. The facility tour identified fifty-six (56) findings in their refrigeration system such as pipe labeling and valve tags that were missing. All 2017 audit findings were shown as completed.

The 2020 audit was conducted by eight Zirkle Fruit employees involved with the refrigeration process and their regulatory specialist. The audit checklist identified eight findings with six closed and two findings open. Open finding of the Risk Management Plan Hazard Assessment #1 requires Doubl-Kold to verify that are using the correct census numbers for their hazard assessment and submit a correction to their RMP by December 2021. The second open finding Management System #1 is requesting management to consider using a contractor for their 2023 audit. The facility tour identified fifteen (15) findings in their refrigeration system such as labeling, signage, and housekeeping maintenance. All of the facility tour findings have been addressed.

Training: Zirkle Fruit provided a completed Training Summary for seven operators. Zirkle Fruit provided the testing and certification for each operator on ammonia safety training. Zirkle Fruit provided initial training documentation (classroom and on-the-job (OTJ)) dated January 23, 2020 for one operator, Daniel Zavala, covering the overview of the refrigeration system, safety and health hazard of ammonia, operating procedures, emergency shutdown, and safe work practices. They did not provide initial training documentation for the following operators: Rick Bangs (2004, not available), Jacob Marshall (2018), Donnie Wangler (2019), Tony Romero (2001), Fernando Sanchez (2016) and Rodrigo Mendoza. Zirkle Fruit did provide a written training certification for operator, Bruce Cone who has been involved in operating the refrigeration system since 1997.

Zirkle Fruit conducts refresher training annually for their operators that is classroom and on-the-job (OJT) addressing covering overview of the refrigeration system, safety and health hazard of ammonia, operating procedures, emergency shutdown, and safe work practices, and the emergency action and response plan. The following operators received refresher training in January 2020 and/or January 2021: Rodrigo Mendoza (2021), Daniel Zavala (2021), Rick Bangs (2020), Jacob Marshall (2021), Fernando Sanchez (2021), and Bruce Cone (2021). Zirkle Fruit did not provide refresher training documentation for Donnie Wangler and Tony Romero.

Zirkle fruit uses verbal testing as a means to verify their operators understanding of their initial and refresher training. According to Zirkle Fruit's RMP dated June 7, 2019, they use demonstration to test competency of their operators.

AREAS OF CONCERNS:

1. Zirkle Fruit did not provide initial training documentation for the following operators: Rick Bangs (2004, not available), Jacob Marshall (2018), Donnie Wangler (2019), Tony Romero (2001), Fernando Sanchez (2016) and Rodrigo Mendoza.
2. Zirkle Fruit did not provide refresher training documentation for Donnie Wangler and Tony Romero.

The findings in this report will be discussed with the facility via telephone and email after certification of this report.

DOCUMENTS REQUESTED ON FOLLOW-UP:

The following documents were requested after the initial submission of documents. These documents were reviewed to determine compliance with Section 112(r) of the Clean Air Act.

1. Operator training documentation for the operating procedures.

AUDIT REPORT CERTIFICATION:

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

RMP Coordinator/Approval

Date

EPCRA Coordinator/Approval

Date

Land Enforcement Section Chief/Approval

Date