



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: Arclin USA LLC
Physical Address: 475 N. 28th St, Springfield, OR 97477
Phone Number: 541-746-6501
Latitude/Longitude: 44.048889, -122.985556
RMP Facility ID#: 1000 0006 1513
FRS ID#: 110000488507
EJ Concerns: No (below 80%)

CONTACT INFORMATION (RMP Implementation):

Name: Merle Vasbinder
Phone Number: 541-221-5722
E-mail: Merle.Vasbinder@arclin.com

EMERGENCY CONTACT INFORMATION:

Name: Merle Vasbinder
Phone Number 24hr: 541-221-5722
E-mail: Merle.Vasbinder@arclin.com
Website: arclin.com

TRIP DETAILS:

Inspection Date: June 29, 2022
Inspection Time: 0900 hours through 1145 hours
EPA Inspection Team: Terry Garcia, US EPA Region 10 SEE Grantee, Lead RMP Inspector
Peter Phillips, US EPA Region 10 SEE Grantee, RMP Inspector
Edward Johannes, US EPA Region 10 SEE Grantee, RMP Inspector
Tom Vroman, CIH, Weston Solutions, Inc., EPA START Contractor

DATE AND PROGRAM LEVELS OF SUBMITTED RMP:

Initial Submission Date: June 18, 1999
Date of Latest Update: May 20, 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)
1000096462	Kettle 2	1000120812	325211	3	Formaldehyde (solution) 50-00-0	53,000
1000096463	SF-1 Storage	1000120813	325199	3	Formaldehyde (solution) 50-00-0	470,000
1000096464	SF-2 Storage	1000120814	325199	3	Formaldehyde (solution) 50-00-0	580,000
1000096465	SF-3 Storage	1000120815	325199	3	Formaldehyde (solution) 50-00-0	2,000,000
1000096466	Kettle 4	1000120816	325211	3	Formaldehyde (solution) 50-00-0	36,000
1000096467	Kettle 8	1000120817	325211	3	Formaldehyde (solution) 50-00-0	36,000
1000096468	Ammonia Storage	1000120818	325211	3	Ammonia (conc 20% or greater) 7664-41-7	30,000
1000096469	Kettle 3	1000120819	325211	3	Formaldehyde (solution) 50-00-0	31,000
1000096470	Kettle 7	1000120820	325211	3	Formaldehyde (solution) 50-00-0	31,000

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 ☐
If Yes, Date of Last Inspection:
- 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 the 2022 Tier II report to the SERC? No ☐ Yes ☒
If Yes, Date the Tier II was submitted: 02/28/2022

Did the facility submit a Tier II to the LEPC and local fire department? No ☐ Yes ☒
If Yes, Date the Tier II was submitted: 02/28/2022

INSPECTION ENTRY:

Terry Garcia led the inspection entry. The inspection team met with Gary Johnson at the OFD Foods, LLC main office in Albany, Oregon. The team arrived at the facility at 09:00 and was joined by the following facility and contracted personnel:

Name	Title
Merle Vasbinder	Plant Manager
Wayne Thornton	Operations Supervisor
Todd Hughes	HSE Leader
Kalina Hentze-Davis	HSE Leader
Bryan Murray	Plant Engineer
Caitlin Ditullio	Process Engineer

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

If Yes, Name and Title of Representative:

The facility is a first responder: No ☒ Yes ☐

If No, Responding Agency: Eugene-Springfield Fire Department

The inspection team was escorted to a conference room located in the facility's office building. Introductions were made by Terry Garcia, 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. Gary Johnson 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 ☐

If Yes, Name of Union:

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

If Yes, Name/Title:

GENERAL INFORMATION:

The facility is regulated under the Risk Management Program as a Program Level 3 facility and is owned and operated by Arclin USA LLC (Arclin). Arclin uses formaldehyde and aqueous ammonia at their Springfield, Oregon facility to manufacture resins for use in plastics manufacturing. The facility utilizes chemicals to manufacture formaldehyde on site. The RMP covered chemicals on site are formaldehyde and aqueous ammonia (20% concentration or greater) that are stored in tanks and managed in kettles during manufacturing processes. Additional chemicals observed on site not covered by RMP rule include molybdenum, methanol, phenols, and sulfuric acid.

The facility manufactures formaldehyde at two operational formaldehyde plants on site, SF-2 and SF-3. SF-2 is a silver process plant constructed in 1975 and serves as an auxiliary plant used occasionally to

meet increased demand for product. SF-3 is a molybdenum oxide process plant constructed in 1989 and serves as the main manufacturing plant, operating 24 hours a day, 7 days a week. A tank farm stores the formaldehyde manufactured at the respective plants. Formaldehyde Plant SF-1 was built in 1968 and was taken out of operation in 2013.

The facility manufactures resins at the Resin Plant, located at the northeast corner of the facility. Kettles hold various chemical mixtures which produce different types of plastics and resins. One resin manufacturing process in Kettle K2 utilizes aqueous ammonia, which arrives via truck delivery and is stored in a storage tank on the east side of the property.

Arclin has 41 employees at the facility. Twenty-six employees work in the plant, with 15 of those employees trained as operators in the covered processes.

There are no process modifications in the formaldehyde or aqueous ammonia processes.

ON-SITE OBSERVATIONS:

The facility tour was conducted from approximately 915 hours to 1015 hours. The EPA Inspection Team (EPA) was escorted by facility representatives Merle Vasbinder, Wayne Thornton, Todd Hughes, and Kalina Hentze-Davis. Facility representatives provided an overview of chemical manufacturing processes (Photos 1, 2) before guiding a tour of the facility (Photo 3). EPA observed formaldehyde plants SF-2 and SF-3, the Transfer Station, the Resin Plant, and exterior areas of the facility.

EPA observed process areas of SF-2 (Photos 4, 5) and SF-3 (Photos 6, 7). The formaldehyde made in these plants are stored in above ground storage tanks on the southern end of the property (Photo 8).

EPA observed RMP covered operations at the Transfer Station at the facility. Safety features observed in this area include an eyewash, emergency stops, and grounding wires (Photos 9, 10, 11). Aqueous ammonia arrives via truck at this area and is transferred to a pressurized storage tank in an exterior area of the facility (Photo 12). Safety features on the aqueous ammonia storage tank include pressure relief valves (Photo 13), gauges and NFPA placarding (Photos 14, 15), an emergency washing station, and ammonia detectors (Photo 16). Lines transfer liquid ammonia (Photos 17, 18) and methanol (Photo 19) to processes in the Resin Plant.

The Resin Plant includes multiple kettles which contain a variety of chemicals used to manufacture plastics and resins (Photos 20, 21, 22). Kettle K2 in the Resin Plant utilizes the aqueous ammonia in a resin manufacturing process (Photo 20). Kettles K3 and K7 utilize phenols to manufacture plastics (Photo 21); this process creates an explosive atmosphere, and the room is equipped with Class 1 electronic equipment (Photo 22).

EPA observed areas of the facility exterior and a windsock (Photo 23), and sulfuric acid storage containers (Photo 24) adjacent to the Resin Plant.

Plant operations are coordinated through the Control Room (Photo 25) where operators observe and control plant operations. The Control Room has operators have access to the plant's standard operating procedures via network, hard copy and computer terminal.

INFORMATION COLLECTED FROM FACILITY:

1. Arclin USA LLC PSM and RMP Audit (conducted by AECOM) (9 pages)
2. Operators Training Records (2 pages)
3. Operator training certifications (2 pages)
4. Aqueous Ammonia Tank Inspection (conducted by EMI Integrity Services 3/28/18) (4 pages)
5. EMI Integrity Services Inspector Certification for Cameron Pinto (1 page)
6. Kettle 2 Inspection report (conducted by EMI Integrity Services 5/24/19) (3 pages)

AREAS OF CONCERNS ADDRESSED IN CLOSING CONFERENCE:

1. The annual certification of the 2021 standard operating procedures (SOPs) for formaldehyde and aqueous ammonia process were not provided. [68.69(c)]. Arclin stated they were working on the annual certification of the 2022 SOPs at time of the inspection. On 9/15/2022 Arclin provided documentation on the completion of the annual certification of the 2022 SOPs.
2. Initial training documentation did not include emphasis on safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks. [68.71(a)(1)]. Arclin was unable to locate the initial training records for four operators (Will Waddell - 01/04/1999, Bruce Sutherland – 01/02/2000, Mark Westerkamp – 04/16/2001, Anthony Teal - 08/11/2014).

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. Contractor evaluations for all PSM related activities.
2. Mechanical Integrity Audit results and any findings for the Ammonia storage vessel. The MI audit was work in progress at the time of the inspection.
3. Incident investigation reports for NRC#1223980 and NRC# 1338868 were provided with a complete causal, root cause and corrective actions post investigation.

INSPECTION REPORT CERTIFICATION:

This is to certify that Terry Garcia, was the lead inspector at this facility and that I have verified the accuracy of the observations in this inspection report.

TERRY GARCIA (Affiliate) Digitally signed by TERRY GARCIA (Affiliate)
Date: 2022.09.27 11:18:24 -07'00'

Inspector Signature

JAVIER MORALES Digitally signed by JAVIER MORALES
Date: 2022.09.27 13:01:16 -07'00'

RMP Coordinator/Approval

ERIN WILLIAMS Digitally signed by ERIN WILLIAMS
Date: 2022.09.27 12:49:02 -07'00'

EPCRA Coordinator/Approval

Jennifer A Sullivan Digitally signed by Jennifer A Sullivan
Date: 2022.09.28 10:43:57 -07'00'

Land Enforcement Section Chief/Approval

Attachment A – Photo Log

Site Name: ArcIn USA LLC

City, State: Springfield OR

Photographer: Tom Vroman

File	Photo Layout ID	Date	Time	Description
Picture 1.jpg	1	6/29/2022	8:55 AM	Slide of facility summary, presented during morning briefing
Picture2.jpg	2	6/29/2022	8:57 AM	Slide summarizing organizational structure, presented during morning briefing
Picture3.jpg	3	6/29/2022	9:18 AM	Overview of facility and tanks, northwest corner of the facility
Picture4.jpg	4	6/29/2022	9:20 AM	SF-2 silver process formaldehyde plant
Picture5.jpg	5	6/29/2022	9:21 AM	SF-2 silver process formaldehyde plant, alternate view
Picture6.jpg	6	6/29/2022	9:24 AM	SF-3 molybdenum oxide process formaldehyde plant
Picture7.jpg	7	6/29/2022	9:25 AM	SF-3 molybdenum oxide process formaldehyde plant
Picture8.jpg	8	6/29/2022	9:26 AM	SF-3 Tank Farm adjacent to SF-3 formaldehyde plant
Picture9.jpg	9	6/29/2022	9:26 AM	Transfer Station with eyewash, emergency stops, grounding wires
Picture10.jpg	10	6/29/2022	9:27 AM	Aqueous ammonia transfer lines, Transfer Station
Picture11.jpg	11	6/29/2022	9:28 AM	Transfer Station with eyewash, emergency stops, grounding wires, alternate view
Picture 12.jpg	12	6/29/2022	9:29 AM	Aqueous ammonia storage tank, NFPA placard, pressure relief valve, emergency washing station at facility exterior
Picture13.jpg	13	6/29/2022	9:30 AM	Aqueous ammonia tank pressure relief valve, facility exterior
Picture14.jpg	14	6/29/2022	9:31 AM	Aqueous ammonia tank pressure gauge and NFPA placard, facility exterior
Picture15.jpg	15	6/29/2022	9:32 AM	Aqueous ammonia tank NFPA placard, facility exterior
Picture16.jpg	16	6/29/2022	9:32 AM	Emergency washing station and NH3 alarms at liquid ammonia tank, facility exterior
Picture17.jpg	17	6/29/2022	9:33 AM	Transfer lines connecting aqueous ammonia storage vessel to Kettle K2, facility exterior
Picture18.jpg	18	6/29/2022	9:34 AM	Aqueous ammonia transfer lines, facility exterior
Picture19.jpg	19	6/29/2022	9:35 AM	Methanol transfer station, facility exterior
Picture20.jpg	20	6/29/2022	9:38 AM	Kettle K2 incorporates aqueous ammonia in the resin manufacturing process, Resin Plant
Picture21.jpg	21	6/29/2022	9:40 AM	Kettles K3 and K7 containing phenols, Resin Plant
Picture22.jpg	22	6/29/2022	9:45 AM	Placard designating flammable atmosphere, facility exterior
Picture23.jpg	23	6/29/2022	9:46 AM	Windsock on top of tank, facility exterior
Picture24.jpg	24	6/29/2022	9:48 AM	Sulfuric acid storage, facility exterior
Picture25.jpg	25	6/29/2022	9:54 AM	Control Room