



REGION 10

SEATTLE, WA 98101

**Clean Air Act - Risk Management Program – Section 112(r)
Emergency Planning Community Right-to-Know Act – Sections 302, 311 and 312
On-site Compliance Inspection Report
Alto Magic Valley LLC**

PURPOSE

The purpose of this On-site Compliance Inspection was to determine compliance with the Clean Air Act Section 112(r)(7) Risk Management Program (40 C.F.R. Part 68) and the Emergency Planning and Community Right to Know Act Sections 302, 311 and 312.

CAA Section 112(r)(7) requires facilities that hold more than a threshold quantity of a regulated substance in a process to develop and implement a Risk Management Program. EPCRA Section 311 requires facilities that hold chemicals above reporting threshold to submit copies of the SDSs or a list of these chemicals to the State Emergency Response Commission, the Local Emergency Planning Committee and the local fire department. EPCRA Section 312 requires the Annual Chemical Inventory Reports (Tier II) for the current calendar year to be submitted by March 1 of the following year. The Tier II is required to be submitted to the SERC, LEPC and fire department. EPCRA Section 302 requires any facility that has any EHS above the threshold planning quantities to notify the SERC and LEPC. LEPCs should also include the EHS(s) in their emergency response plans. Facilities covered under EPCRA Section 312 are required to indicate on the Tier II if they are subject to EPCRA Section 302 emergency planning requirements.

COMPANY INFORMATION

Name: Alto Ingredients, Inc.
Mailing Address: PO Box 10, 1300 S 2nd Street
Pekin, Illinois 61555
Website: <https://www.altoingredients.com/>

FACILITY INFORMATION

Name: Alto Magic Valley LLC
Facility Address: 2600 Washington Avenue
Burley, Idaho 83318
Latitude/Longitude: 42.521, -113.815
RMP Facility ID#: 1000 0020 1998
FRS ID#: 110035761912
EJ Concerns: Yes (90 %) – National Drinking Water Non-Compliance

CONTACT INFORMATION (RMP Implementation)

Name: Zack Jensen
Title: Plant Manager
Phone Number: (208) 409-5992
E-mail: zjensen@altoingredients.com

EMERGENCY CONTACT INFORMATION

Name: Kevin J. Reid
Title: EHSS Manager
Phone Number: (208) 678-6563
E-mail: kreid@altoingredients.com

INSPECTION DETAILS

Inspection Date: September 17, 2024
Inspection Time: 9:00-14:00
Inspectors: Mhara Coffman, US EPA R10, Lead RMP/EPCRA Inspector
Ryan Bowlsby, US EPA R10, RMP/EPCRA Inspector-in-Training
Edward Johannes, US EPA R10, SEE Grantee, RMP/EPCRA Inspector
Peter Phillips, US EPA R10, SEE Grantee, RMP/EPCRA Inspector

On September 03, 2024, EPA emailed a Notice of Inspection Letter to the facility informing them of a planned RMP and EPCRA inspection. The letter included 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. A copy of the letter must be provided to the employee representatives and the letter posted in a manner accessible to employees in the facility.

- Is the facility is unionized? Yes ☐ No ☒
If yes, name of union:
- Was an employee representative present during the inspection? Yes ☐ No ☒
If yes, name/title:

GENERAL INFORMATION

The facility is regulated under the Risk Management Program as a Program Level 3 process and is owned and operated by Alto Ingredients, Inc. There are forty-nine (49) full-time employees on site. In 2020 the company went through a name change from Pacific Ethanol to Alto Ingredients, Inc. and rebranded to reflect the diversity of ingredients they produce. The ingredients include ethanol, corn oil, distillers' grain, and syrup. All production at the Burley facility is used for a variety of animal feeds and fuel. The covered process included boilers for steam, aqueous ammonia tanks for pH control in the cook process, a tank farm including a stripper and rectifier, a Regenerative Thermal Oxidizer (RTO) to burn the natural gas that goes through scrubbers, distillation columns, and heat exchangers.

At peak production 62,000 bushels of corn is delivered by rail daily as kernels from Nebraska and Iowa. The corn is then ground into a flour and heated at 195 °F in what is referred to as the cook process. The heat for cooking comes from the distillation columns. Alpha Amylase enzyme and aqueous ammonia (24%) is added to break down the starch into produce multichain sugars and adjust the pH to

5-5.5, respectively. The corn flour, enzyme and aqueous ammonia mixture is referred to as slurry. The slurry is cooled to 94 °F and pumped into fermenters. At the fermentation stage the mixture is called mash. Glucoamylase is added to the mash to break down the complex sugars into simple sugar, glucose. Yeast is added to consume the glucose and produce alcohol. At optimal alcohol yield, 17-19% volume/volume, the mash is sent to distillation. The mash is then called stream beer.

The distillation process consists of three columns. The first column is the beerwell where separation of liquid and solids begin. The beerwell is heated via steam to 248 °F. The alcohol and water vapor get purified by recycling between the distillation columns. The stripper column removes the water and produces process condensate that is used to heat the corn flour at the beginning of the process. Remaining vapor made up of alcohol and impurities is sent the rectifier. The rectifier removes the fuels and alcohol oils. The purified vapor travels through the sieve beads that pull the remaining water from the alcohol.

The stream beer bottoms go through a pressure screen and a screw press. The solid phase exiting the press is the distillers' grain that is stored onsite and sold as truck loads to local dairies. The liquid phase is sent to a centrifuge where corn oil, protein and remaining water are separated. The corn oil is stored and sold to poultry farms. The water is evaporated into corn syrup and sold as a binder for dairy feed. The protein is sold as a wet product, but there are plans to install a dryer for dry product.

DATE AND PROGRAM LEVELS OF SUBMITTED RMP

Initial Submission Date: March 20, 2008

Date of Latest Update: March 8, 2023

- Has the facility has been inspected in the past 5 years? Yes ☒ No ☐
If yes, date of last inspection: September 1, 2022 (Offsite compliance monitoring inspection)
- Is the facility High Risk? Yes ☒ No ☐

Process (as reported in the RMP)

Process ID	Description	Process Chemical ID	NAICS Code	Program Level	Chemical Name CAS Number	Quantity (lbs.)
1000130222	Ammonia (conc 20% or greater)	1000163306	325193	3	Ammonia, Aqueous (7664-41-7)	275,000
1000130221	Denaturant Tank (Flammable Mixture)	1000163305	325193	3	00-11-11	321,000
-	Pentane	1000144635	325193	3	109-66-0	
-	Isopentane	1000144634	325193	3	78-78-4	

CAA TITLE V AIR PERMIT

- Does the facility have a CAA Title V Permit? Yes ☐ No ☒
If yes, permit number:

EMERGENCY RELEASE / ACCIDENT HISTORY

- Did an RMP reportable release occur in the past 5 years? Yes ☐ No ☒
- Did a CERCA/EPCRA reportable release occur in the past 5 years? Yes ☐ No ☒
If either yes, date and description of release:

EPCRA 312 – TIER II REPORT

- Was the 2023 Tier II report submitted to the SERC? Yes ☒ No ☐
If yes, date Tier II was submitted: 09-Apr-2024
- Was the 2023 Tier II submitted to the LEPC/fire department? Yes ☒ No ☐
If yes, date Tier II was submitted: 09-Apr-2024
- Is the facility subject to EPCRA Section 302? Yes ☒ No ☐
If yes, is it correctly checked on the Tier II? Yes ☒ No ☐
- Is the subject to RMP correctly checked on the Tier II? Yes ☒ No ☐
- Is RMP facility ID correct on the Tier II? Yes ☒ No ☐

EPCRA CHEMICALS OVER THRESHOLD

According to the most recent Tier II, the facility stores the following hazardous chemicals over the reporting threshold. See the attached Tier II, Attachment C, for inventory amounts.

Chemical Name	EHS (Yes or No)	CAS Number
Aqua Ammonia	Yes	1336-21-6
Amyl XT	No	9000-90-2
Argon Gas	No	7440-37-1
BWT 101AF	No	9038-95-3
BWT 103L +	No	7681-57-4
BWT 104	No	7631-90-5
BWT 200B	No	1310-73-2
Caustic Soda	No	1310-73-2
CorrPro N	No	107-21-1
Denatured Alcohol	No	64-17-5
Diesel No. 2	No	68476-34-6
Ethyl Alcohol 200 Proof	No	64-17-5
Fermasure XL	No	7758-19-2
Gasoline	No	86290-81-5
Hydri-Maize D272	No	9005-65-6
Natural Gasoline	No	8006-61-9
Nitrogen gas, compressed	No	7727-37-9
Novozyme Cellulase 50243	No	9012-54-8
Oxygen, compressed	No	7782-44-7
ProClean 200	No	77-92-9
RLT 19	No	1336-21-6
ROC 20	No	1310-73-2
Strive Max	No	9032-08-0
Sulfuric Acid	Yes	7664-93-9
T-Chlor	No	7681-52-9
Tower MP 4550	No	1310-58-3

EPCRA 311 – SDSs

The facility stores two chemicals classified as EHSs onsite. See Attachment B for SDSs and chemical information on each EHS stored over the reporting threshold at the Facility.

EPCRA 302 – LEPC Coordination

Emergency response coordination activities was not conducted annually with local emergency planning and response organizations aside from submitting the Tier II report, which the 2023 Tier II was submitted over one month late in 2024.

LEPC

Agency: Cassia County
Program Contact: Jennifer Gee
Title: Emergency Manager
Address: 129 East 14th Street

Burley, Idaho, 83318
Phone Number: (208) 878-8610
Email: jgee@cassiacounty.org
Website: <https://www.cassia.gov/emergency-management>

INSPECTION ENTRY

Mhara Coffman led the inspection entry. The inspection team met with Zack Jensen and Kevin Reid at the Alto Magic Valley facility in Burley, Idaho. The team arrived at the facility at 9:00 a.m. and was joined by the following facility personnel:

Name	Title
Zack Jensen	Plant Manager
Kevin Reid	EHSS Manager
Steve Anronacci	Environmental Manager

- Were any SERC, LEPC or fire department representative present? Yes ☐ No ☒
If yes, names and titles of representatives:
- Is the facility a first responder? Yes ☐ No ☒
If no, responding agency:

The inspection team was escorted to a conference room. Introductions were made by Mhara Coffman, who provided a summary of the risk management program and explained the purpose of the visit. Each team member presented their credentials.

EPA requested an explanation of the facility's operations and any additional safety measures that should be taken during the site tour. Kevin Reid provided a safety briefing. The team was given a site plan and observed the hard copy SDS storage (Photos 43, and 44). The alarm system is a single signal. It is the same alarm activated for fires, loss of air, heat, and smoke. The emergency system is a dry system until triggered wet. The PPE required for the tour included hardhat, hearing protection, closed toed shoes, safety shoes, and heat-resistant gloves were recommended.

FACILITY TOUR / ON-SITE OBSERVATIONS

The facility tour was conducted from approximately 9:30 am to 10:30 am. The inspection team was escorted by Zack Jensen and Steve Anronacci. The conditions at the time were approximately 60 °F and rainy. The inspection team observed an American flag that acted as a windsock in front of the main office (Photo 1). A 10,029-gallon aqueous ammonia tank and a 32,191-gallon sulfuric acid tank were observed (Photos 2-5). Both tanks are used as pH control in the cooking process. The tanks are surrounded by a berm that acts as full tank rupture containment and had an emergency shower and eyewash station nearby (Photos 2, 3, and 5). The inspection team entered the boiler room. The boiler room is used for EPCRA chemical storage and contained two boilers (Photos 7-9 and 11-13). An emergency shower and eyewash are located in the boiler room area (Photo 6). The boilers are fueled by natural gas to heat the water for the covered process (Photo 7). The process water goes through a CIP tank for treatment (Photo 10). Next to the boiler room is the boiler control and sample room (Photo 14). Diesel is stored outside in an above ground storage tank (AST) (Photo 15). The inspection team went to the bulk grain storage area (Photo 24). The bulk grain storage area is no longer run by Alto Magic Valley as of 2020. The facility currently operates on 50,000 bushels of corn per day. A 24/7 tanker truck loading area with grounding cables and an emergency shower and eyewash is located next to the rail line (Photo 17).

The inspection team observed the Regenerative Thermal Oxidizer (RTO). The RTO takes process emissions of natural gas from the scrubber and converts it to carbon dioxide and water vapor before exhausting to the atmosphere. A fire pump house is located by the RTO. In the distillation area there are three evaporator columns across from the extractor (Photo 16). In the tank farm is a side stripper and rectifier column (Photo 19), and dairy feed and denatured alcohol storage tanks (Photos 20-22). By the tank farm is a fire foam shed (Photo 23).

In the mash building the facility processes about 670,000 gallons of ferm or corn mash each day. The mash is lightly heated for 52 hours to produce 19% alcohol. The food grade corn oil is expelled from the mash. A third of the ferm is contained in the beerwell. There are four (4) fermenters in addition to the beerwell (Photos 26 and 28). The mash building houses water treatment tanks, fourteen (14) plate and frame heat exchangers, and ten (10) shell and tub heat exchangers (Photos 31 and 32). Chemical storage areas were observed in the mash building (Photos 25, 29, 30, 33, and 34). The process lines are color coded, green for air and blue for water (Photos 28 and 32).

The enzyme tanks area included an empty poly tank and 10,000-gallon tanks of alpha amylase and glucoamylase located inside a berm (Photos 35 and 36). The control room is located inside the main office building (Photos 37 and 38). The control room is operational 24/7 with at least three operators in the control room, four operators onsite at all times. Inside the control room was a PPE vending machine and LOTO station (Photos 39 and 42). The main building has a lab with a High-Performance Liquid Chromatography (HPLC) and protein analyzer (Photos 40 and 41).

Photographs were taken of the covered process areas. The photographs are included in Attachment A.

After touring the RMP-covered process areas and the EPCRA chemical storage areas, the inspection team returned to the conference room to review the RMP documentation. Upon completion of the document review, EPA provided a debriefing to Zack Jensen, Steve Anronacci, and Kevin Reid.

INFORMATION COLLECTED FROM FACILITY

1. 2021 PHA recommendations and tracking
2. PHA process description
3. Emergency coordination with Burley Fire Department

AREAS OF CONCERNS

The following is a list of areas of concern identified.

1. Emergency response coordination activities were not conducted annually with local emergency planning and response organizations after the effective date of September 21, 2018. [68.93]. Alto Magic Valley LLC was unable to provide annual emergency response coordination documentation for 2020, 2021, 2023, and 2024. A drill was conducted in fall of 2022.
2. PHA recommendations were not completed in a timely manner. [68.67(e)]. The 2021 PHA contained eleven (11) open items without a proposed completion date.

FOLLOW-UP DOCUMENTS REQUESTED

No follow-up documents were requested during the inspection.

ON-SITE INSPECTION REPORT CERTIFICATION

This is to certify that I, Mhara Coffman, as the lead inspector for the On-site Compliance Inspection and that I have verified the accuracy of the information in this report.

MAIGHDEAN COFFMAN

Digitally signed by MAIGHDEAN
COFFMAN
Date: 2025.02.14 09:15:05 -08'00'

Inspector Signature

JAVIER MORALES

Digitally signed by JAVIER MORALES
Date: 2025.02.14 11:36:14 -08'00'

RMP Coordinator Signature

ERIN WILLIAMS

Digitally signed by ERIN WILLIAMS
Date: 2025.02.14 11:20:03 -08'00'

EPCRA Coordinator Signature

MATTHEW
QUARTERMAN

Digitally signed by MATTHEW
QUARTERMAN
Date: 2025.02.24 15:54:46 -08'00'

Land Enforcement Section Chief Signature

ATTACHMENTS

- A. Photo Log and Photographs
- B. Tier II Submission

Attachment A – Photo Log

Site Name: Alto Magic Valley, LLC

City, State: Burley, ID

Photographer: Ryan Bowsby

File	Photo ID	Date	Time	Description
Photo1.jpeg	1	9/17/2024	9:30 AM	Flag used as windsock
Photo2.jpeg	2	9/17/2024	9:31 AM	Sulphuric acid tank
Photo3.jpeg	3	9/17/2024	9:32 AM	Emergency shower
Photo4.jpeg	4	9/17/2024	9:33 AM	Aqua ammonia tank
Photo5.jpeg	5	9/17/2024	9:34 AM	Aqua ammonia tank in containment and emergency shower
Photo6.jpeg	6	9/17/2024	9:35 AM	Emergency shower - boiler room area
Photo7.jpeg	7	9/17/2024	9:36 AM	Boilers to heat process water
Photo8.jpeg	8	9/17/2024	9:37 AM	Dechlorination chemicals (BWT 104)
Photo9.jpeg	9	9/17/2024	9:38 AM	Boiler #2 placard and water treatment chemicals
Photo10.jpeg	10	9/17/2024	9:39 AM	CIP tank for water treatment
Photo11.jpeg	11	9/17/2024	9:40 AM	Chemical storage (BWT 200B, Boiler MP Plus)
Photo12.jpeg	12	9/17/2024	9:41 AM	Chemical storage and emergency shower (RLT 19, BMT 200 Plus)
Photo13.jpeg	13	9/17/2024	9:42 AM	Chemical storage (ammonia solution, sodium hypochlorite)
Photo14.jpeg	14	9/17/2024	9:43 AM	Boiler control and sample room
Photo15.jpeg	15	9/17/2024	9:44 AM	Diesel above ground storage tank (AST)
Photo16.jpeg	16	9/17/2024	9:45 AM	Evaporator columns in distillation area
Photo17.jpeg	17	9/17/2024	9:46 AM	Alcohol loading tanker truck area and emergency shower/eyewash
Photo18.jpeg	18	9/17/2024	9:47 AM	Diesel and gasoline small storage tanks
Photo19.jpeg	19	9/17/2024	9:48 AM	Rectifier and side-stripper columns
Photo20.jpeg	20	9/17/2024	9:49 AM	Final product storage
Photo21.jpeg	21	9/17/2024	9:50 AM	Denatured alcohol storage
Photo22.jpeg	22	9/17/2024	9:51 AM	Denatured alcohol storage
Photo23.jpeg	23	9/17/2024	9:52 AM	Foam fire suppression system
Photo24.jpeg	24	9/17/2024	9:53 AM	Bulk grain storage and railcar unloading area
Photo25.jpeg	25	9/17/2024	9:54 AM	Chemical storage (Philbro scale and bacterial inhibitors)
Photo26.jpeg	26	9/17/2024	9:55 AM	Fermenter
Photo27.jpeg	27	9/17/2024	9:56 AM	Emergency shower in fermenter area
Photo28.jpeg	28	9/17/2024	9:57 AM	Fermenter area
Photo29.jpeg	29	9/17/2024	9:58 AM	Fermenter chemical storage (sodium hypochlorite)
Photo30.jpeg	30	9/17/2024	9:59 AM	Fermenter chemical storage (sulfuric acid)
Photo31.jpeg	31	9/17/2024	10:00 AM	Heat exchanger and emergency shower
Photo32.jpeg	32	9/17/2024	10:01 AM	Yeast prop cooler and mash intake
Photo33.jpeg	33	9/17/2024	10:02 AM	Gear oil storage area
Photo34.jpeg	34	9/17/2024	10:03 AM	Phosphoric acid solution, yeast, and antibiotic storage
Photo35.jpeg	35	9/17/2024	10:04 AM	Alpha amylase tank
Photo36.jpeg	36	9/17/2024	10:05 AM	Glucosylase tank
Photo37.jpeg	37	9/17/2024	10:06 AM	Distillation operator panel in control room, main building
Photo38.jpeg	38	9/17/2024	10:07 AM	Distillation operator panel in control room, main building
Photo39.jpeg	39	9/17/2024	10:08 AM	Lock out/tag out area
Photo40.jpeg	40	9/17/2024	10:09 AM	Lab area
Photo41.jpeg	41	9/17/2024	10:10 AM	Lab area protein analyzer
Photo42.jpeg	42	9/17/2024	10:11 AM	PPE vending
Photo43.jpeg	43	9/17/2024	10:12 AM	Site plan
Photo44.jpeg	44	9/18/2024	10:29 AM	SDS storage