Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	August 19-23, 2024		
Media:	Air		
Regulatory Program(s)	Clean Air Act Section 112(r) and 40 C.F.R. Part 68 Chemical Accident Prevention Provisions - Risk Management Program (RMP)		
Company Name:	**Univar Solutions USA LLC**		
Facility Name:	**Univar Solutions**		
Facility Physical Location:	777 Brisbane Street		
(city, state, zip code)	Houston, Texas 77061-5044		
Mailing address:	777 Brisbane Street		
(city, state, zip code)	Houston, Texas 77061-5044		
County/Parish:	Harris County		
Facility Contact:	Tommy Cole	Operations Manager	
	Tommy.Cole@univarsolutions.com		
FRS Number:	110000466157		
Identification/Permit Number:	1000 0004 7889		
NAICS:	424690 Other Chemical and Allied Products Merchant Wholesaler		
Personnel participating in inspection:			
Howard Cole	U.S. EPA Region 6	Risk Management Program Inspector	(214) 665-2116
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Ana Mauricio	Univar Solutions	Regional Regulatory Manager	
Tommy Cole	Univar Solutions	Operations Manager	
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EPA Lead Inspector Signature/Date	Howard Cole Date: 2024.12.09 15:52:56 -06'00' Digitally signed by Howard Cole	
	Howard Cole	Date
Supervisor Signature/Date	Charese Simpson (on behalf of Samuel Tates)	12/17/2024
	Samuel Tates	Date

SECTION I - INTRODUCTION

PURPOSE OF THE INSPECTION

United States Environmental Protection Agency (EPA), Region 6, inspectors Howard Cole ("I") and Julia Torres ("we") visited the Univar Solutions, USA, LLC, ("Univar") facility in Houston, Texas on August 19-23, 2024. We met with Ana Mauricio (Regional Regulatory Manager), Tommy Cole (Operations Manager), and Michael Peterson (Director, Operations Manager), for an opening conference.

I presented my credentials and informed Univar staff that this was an EPA inspection to determine compliance with the federal Chemical Accident Prevention Program. The scope of the inspection was a partial compliance evaluation, which included an evaluation of the facility's compliance with the Clean Air Act (CAA) Section 112(r) and the Chemical Accident Prevention Provisions in 40 C.F.R. Part 68. Univar's Risk Management Plan is listed as a Program Level Two (2), minor source, Air New Source Review permit. I inquired if an employee representative was available pursuant to section 112(r)(6)(L) of the CAA to participate in this inspection and was informed that employees were represented by the Teamsters, Local 988, and the union steward Jeff Thurman. Univar employs approximately 59 employees.

FACILITY OWNERSHIP HISTORY

The facility was owned by Univar USA, Inc. until the merger with Nexeo in 2019 when the name was changed to Univar Solutions, USA, Inc. There was a legal name change, effective January 1, 2024, from the name of Univar Solutions USA Inc. to Univar Solutions, USA, LLC. Nexeo Solutions had been a long-time competing chemical distributor and former division of Ashland, Inc., until a separate independent company, Univar, was created in 2011. Following completion of the acquisition, Univar rebranded itself as Univar Solutions on March 1, 2019.

FACILITY DESCRIPTION

Univar is a wholesale chemical distributor, founded in 1924. Univar supplies the food, chemical compounders, pharmaceuticals, mining, forest products, oil and gas producers, electronics, coatings and many other key industries with the raw chemical materials and support services required to produce or refine products used in numerous end-use markets. The facilities primary activities encompass the warehouse storage of industrial chemical raw materials and products, and their distribution via Univar's fleet of trucks or third-party fleet.

The facility receives chemicals from manufacturers by tanker and box truck, and by rail car. The facility operations include warehouse storage and transport of chemicals for distribution to end-users. Chemicals are primarily stored in various size containers in the storage warehouse, as well as outside. Univar typically operates 14 hours per day, 5 days per week.

RISK MANAGEMENT PLAN – PROGRAM 2

Some of the products stored and handled by the facility are subject to the federal Risk Management Program (RMP) regulations. A key requirement of this program is the preparation and submission of a Risk Management Plan. The federal EPA prescribes the content of the Risk Management Plan. The current June 2023 required 5-year Risk Management Plan update for Univar contains one process, containerized storage, and includes the following RMP chemicals: ammoniuum hydroxide (containing 20% or greater of ammonia), cyclohexylamine, and hydrochloric acid (HCL) (concentration 37% or greater). Univar has regular inventories of these three hazardous chemicals above the threshold quantities listed under 40 CFR 68.130.

Univar reported in their 2023 RMP submission that they are a RMP Program 2 facility based on having above threshold quantity amounts of:

- Aqua Ammonia (concentration 20% or greater): 40,000 pounds
- Hydrochloric acid (37% or greater): 40,000 pounds
- Cyclohexylamine: 60,000 pounds

At the beginning of this inspection Univar provided their February 2024 inventory and quantity of chemicals on site which included f 15,669 pounds of cyclohexylamine, 84,456 pounds of ammonium hydroxide, and 35,686 pounds of hydrochloric acid.

At the time of the EPA August 2024 inspection, the facility reported a quantity of 7,190 pounds of cyclohexylamine, 90,664 pounds of ammonium hydroxide, and 94,014 pounds of hydrochloric acid.

Ammonia hydroxide and hydrochloric acid are stored in plastic totes and drums. Cyclohexylamine is stored in metal drums. Many other hazardous chemicals are stored at the facility but are either not covered by the RMP standard or are not present above the RMP threshold quantity.

SECTION II - OBSERVATIONS

On Tuesday, August 20, 2024, we conducted a tour of the facility escorted by Ana Mauricio and Tommy Cole. Additional field tours were performed on August 21 and August 22 of stored chemicals located inside a warehouse and outside storage areas.

EPA's inspection of the storage areas was performed to verify the quantity of RMP chemicals onsite. Chemical containers are labelled with their batch and product numbers and are stored in drums or totes. The ammonium hydroxide and hydrochloric acid are stored in various concentrations. For example, ammonium hydroxide varies from 19% to 29% and hydrochloric acid varies from 10% to 37%.

Univar indicated that their onsite inventory consisted of 41 containers, storing 90,664 pounds of ammonium hydroxide and 63 containers, storing 94,014 of hydrochloric acid. EPA's inspection of the chemical inventory of the RMP substances, identified 30 containers, storing 51,598 pounds of ammonia hydroxide and 65 containers storing 94,014 pounds of hydrochloric acid. During the inspection EPA found that:

1. Two batches of hydrochloric acid were missing (one tote each):

a. Batch No. 003584562; Product No. 16142345 (499 pounds)
b. Batch No. 003360648; Product No. 16144192 (2,799 pounds)

2. One batch of hydrochloric acid had one more tote than listed:
   a. Batch No. 0003519780; Product No. 16142345 (499 pounds)

3. One batch of hydrochloric acid was not listed in the inventory.

4. Two hydrochloric acid drums were missing labels, which Univar planned to relabel.

5. One batch of ammonia, as well as a separate tote of ammonia was found in the yard that were not listed in the inventory.

At the time of the inspection, Univar also had in storage for Valley Solvents (a tenant, recent acquisition pending) the following chemicals: thirteen (13) drums and one (1) tote of hydrochloric acid, as well as fourteen (14) drums and two (2) totes of ammonium hydroxide.

Process Descriptions

Containers are received and moved from the dock to the outside covered storage area and placed into an assigned storage location within the covered area. The specific locations selected for storage are determined by the computerized inventory system and are based on chemical compatibilities and facility occupancy classifications. The containers remain in storage until an order is received, at which time they are picked from their storage location and moved by forklift to the shipping dock where they are loaded on to a transport vehicle for distribution to end-use customers. The facility does not manufacture, use, or process any of these regulated substances, and at no time are the sealed containers opened.

Univar only stores containers of ammonium hydroxide, hydrochloric acid, and cyclohexylamine. These chemicals are filled off-site and received by Univar Brisbane in sealed containers. The Univar Brisbane facility stores these chemicals and then ships for chemical distribution.

Process #1 - Aqua Ammonia (Concentration of 20% or greater)
Warehouse Operations (Container Storage and Distribution)

The process involves receiving aqua-ammonia at the receiving dock by common carrier truck in sealed, factory-packaged 110-gallon containers or 310-gallon (2170 pound) totes. The covered process constitutes movement and warehouse storage of regulated substances in sealed containers only.

Process #1 - Hydrochloric Acid (HCl) (37% or greater)
Warehousing Operations (Container Storage and Distribution)

The process involves receiving HCL at the receiving dock by common carrier truck in sealed, factory-packaged 55-gallon containers and 310-gallon totes. The covered process constitutes movement and warehouse storage of regulated substances in sealed containers only.

Process #1 – Cyclohexylamine
Warehouse Operations (Container Storage and Distribution)

The process involves receiving cyclohexylamine at the receiving dock by common carrier truck in sealed, factory-packaged 55-gallon containers. The covered process constitutes movement and warehouse storage of regulated substances in sealed containers only.

Subpart A - General

40 C.F.R. §68.10 Applicability – Univar is the owner/operator of a stationary source that has more than a threshold quantity of three regulated toxic substances in a process (ammonia, hydrochloric acid, and cyclohexylamine) as listed in 40 C.F.R. § 68.130 and is subject to the provisions of the Chemical Accident Prevention Program requirements. Univar has a CAA Title V Air Operating Permit, Number 49675 and a North American Industry Classification System (NAICS) code of 424690 - Other Chemical and Allied Products Merchant Wholesaler. Univar is not subject to the Occupational Safety and Health Administration (OSHA) process safety management standard, 29 C.F.R. § 1910.119, and is an EPA RMP Level 2 facility.

40 C.F.R. §68.12 General requirements – Univar re-submitted their 5-year updated Risk Management Plan as is required by 40 C.F.R. 68.190(b)(1) on June 6, 2023. This re-submission listed one covered process containing 3 regulated toxic chemicals. This requires Univar to implement the Program 2 requirements; develop and implement a management system as provided in § 68.15; conduct a hazard assessment as provided in § 68.20 through 68.42; implement the Program 2 prevention steps provided in §§ 68.48 through 68.60 and submit the data elements from 40 C.F.R. 68.170.

40 C.F.R. §68.15 Management – Univar's accidental release prevention program covers areas such as design, installation, operating procedures, maintenance, and employee training associated with the processes, which demonstrates the facility's commitment to reducing the potential for accidental releases. It is the facility policy to implement appropriate controls to prevent possible releases of regulated substances.

The Univar's Director of Environmental Compliance has overall responsibility for the development of the RMP for EPA regulated processes at the facilities. However, the specific responsibilities for certain aspects of that program have been delegated to the Operations Manager who reports directly to the District Operations Manager. The Regional Regulatory Manager provides technical guidance to the Operations Manager, which includes compliance assistance with the program elements of the RMP rule.

Subpart B - Hazard Assessment

40 C.F.R. §68.20 Applicability – Univar has one Program Level 2 stationary source process subject to this subpart and is required to prepare an offsite consequence analysis, worst-case release scenario as provided in §68.25 of this part and complete the five-year accident history as

provided in §68.42.

The offsite consequence analysis included ammonia, hydrochloric acid, and cyclohexylamine. The facility is surrounded by commercial buildings that contain potential offsite industrial public receptors. In addition, there are residential locations approximately one-quarter mile to the east of the facility.

40 C.F.R. §68.22 Offsite Consequence Analysis (OCA) Parameters - To perform the required offsite-consequence analyses (OCAs) for the facility, Environmental, Health & Safety Support used the look-up tables and equations provided by the EPA in the RMP OCA Guidance. The EPA's RMP*COMP software was used for modeling purposes. Google Maps was used for the purposes of identifying sensitive receptors within the modeled radius of impact.

I reviewed Univar's offsite consequence analysis and supporting documentation. Univar used appropriate wind speeds and stability classes, ambient temperatures and humidity values, values for height of the release, and surface roughness values for the release scenario analyses. These values are within parameters specified by EPA for the regulated toxic chemicals.

Each scenario included the instantaneous release of the entire contents of the container at liquid temperature of 80°F. For each regulated substance, a liquid was assumed to be immediately released to form a pool of 1 cm height, from which evaporation occurred. The entire contents of all containers of each regulated substance on site was assumed to be released instantaneously to form a liquid pool of unrestricted dimensions. For purposes of this analysis only, the surface area of the pool was assumed to be uncontrolled and passive mitigation systems (enclosure or berm) that would serve to contain the spill and limit the surface area. The entire pool was estimated to evaporate over 10 minutes. These are default parameters which EPA requires to be used for worst case scenario evaluations.

40 C.F.R. §68.25 Worse-case Release Scenario (WCS) Analysis – Univar analyzed and reported in the RMP one WCS, estimated to create the greatest distance to an endpoint from an accidental release of a regulated toxic substance from a covered process under worst-case conditions. This was determined by analyzing all regulated toxic chemicals and choosing the chemical with the greatest distance to endpoint.

The WCS's for Program 2 substances involve separate catastrophic releases from the largest inventory amount of each of the regulated substances held above the threshold quantities onsite. One WCS was identified and analyzed for each regulated substance in the covered process.

Listed below are the WCS's of each regulated substance stored onsite using the above conditions for Process #1:

- Aqua Ammonia (cone 20% or greater): 40,000 pounds
- Hydrochloric acid (37% or greater): 40,000 pounds
- Cyclohexylamine: 60,000 pounds

The maximum distances to the toxic endpoints for any of the three covered chemicals was 5.6 miles; representing a release of 40,000 lbs. hydrochloric acid. Residential and commercial establishments are present within this distance from the facility.

40 C.F.R. §68.28 Alternative Release Scenario Analysis - Univar identified and analyzed at least one alternative release scenario for each regulated toxic substance (ammonia, hydrochloric acid and cyclohexylamine) stored in a covered process, using a scenario that is more likely to occur, and which will reach an endpoint off-site.

40 C.F.R. §68.30 Defining Offsite Impacts - Population – Univar's offsite impacts documentation did identify the presence of parks and recreational areas, major commercial offices, and industrial buildings in the RMP. The maps provided did not identify receptors within a circle. The RMP hazard assessment documentation provided included the distance to endpoint based on a circle with the release point at the center.

40 C.F.R. §68.33 Defining Offsite Impacts - Environment – Univar's offsite impacts documentation did not identify the presence of any environmental receptors. This information was reviewed by EPA and was determined to be accurate.

40 C.F.R. §68.36 Review and Update – Univar's most recent off-site consequence analyses was completed in June 2023 during the last RMP re-submission. Univar ensures that this documentation is reviewed and updated at least once every five years.

40 C.F.R. §68.39 Documentation - For the worst-case and alternate release scenarios, a description of the vessel, the substance selected as worst-case, and the rationale for selection was included. RMP* Comp™ was used to verify the distance to endpoint for each scenario.

40 C.F.R. §68.42/68.168 Five-year accident history – Univar has not had an accidental release involving a covered process that resulted in deaths, injuries, or significant property damage on site, or known deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage off-site.

Subpart C - Program 2 Prevention Program

40 C.F.R. §68.48 Safety Information - Univar keeps a variety of technical documents that are used to help maintain safe operation of the processes. These documents address chemical properties and associated hazards and specific chemical inventories. Chemical-specific information, including exposure hazards and emergency response/ exposure treatment considerations is provided in Safety Data Sheets (SDS).

I reviewed written process safety information, which includes information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process. I reviewed the SDS for the three (3) RMP regulated chemicals: ammonium hydroxide (20% ammonia), hydrochloric acid, and cyclohexylamine to confirm toxicity information, permissible exposure limits, physical data, reactivity data, corrosivity data, thermal and chemical stability

data, and the hazardous effects of inadvertent mixing of materials that could foreseeably occur.

National Electric Code Article 500
Article 500 is the Recognized and Generally Accepted Good Engineering Practice for classification of electrical equipment. Articles 500 through 504 cover the requirements for electrical and electronic equipment and wiring for Class I, Divisions 1 and 2 locations; where fire or explosion hazards may exist due to flammable gases, flammable liquid—produced vapors, combustible liquid—produced vapors.

500.4 Documentation: All areas designated as hazardous (classified) locations shall be properly documented. This documentation shall be available to those authorized to design, install, inspect, maintain, or operate electrical equipment at the location. Univar failed to document the electrical classification category for all areas of the plant. **AOC 1 [68.48(b)]**.

40 C.F.R. §68.50 Hazard Review - A team of qualified personnel with training and experience in process operations, chemistry, and health and safety conducted each PHA study. Each scenario studied received a risk ranking using a Risk Matrix discussed below. Each scenario studied also included a consideration of safeguards that are either in place or are recommended to minimize or eliminate risk. Safeguards included facility design, process equipment, operating practices, emergency response procedures and equipment, and training that prevent, detect, and/or mitigate the consequences of hazards.

Dates of completion of the most recent PHAs are listed in the table below.

Table 5 - Date of Last PHA

RMP REGULATED SUBSTANCES	DATE OF MOST RECENT PHA STUDY
Aqua Ammonia >20%	03/30/2021
Cyclohexylamine	04/20/2023
Hydrochloric acid >37%	04/20/2023

Risk Matrix

Each scenario studied in the PHA received a risk ranking using a "risk matrix". The risk ranking considered the severity of each event and the likelihood that it may occur. The degree of severity considered for each event ranged from serious (rank=1) to none (rank= 5), and the degree of likelihood ranges from high (rank=1) to very low (rank= 5). In this manner, the risk of managing a regulated substance was given a relative numerical value from the risk matrix with the values ranging from one to ten (1-10). A risk rank value of one (1) was the highest and ten (10) was the lowest. The risk matrix, definitions, and a Recommendations Guidance Chart are detailed for each regulated substance in Attachment of each PHA in Appendix C. Specific recommendations for the regulated substances in this RMP were generated as part of the PHA.

The tracking system for the PHA recommendations does not document how findings and recommendations have been ultimately resolved. **AOC 2 [68.50(c)]**.

No hazard reviews/PHAs were performed between March 2019-March 2023 for cyclohexylamine and hydrochloric acid. **AOC 3 [68.50(d)]**.

40 C.F.R. §68.52 Operating Procedures - For purposes of safely conducting operational activities within the covered process, Univar developed and maintains written operating procedures for each regulated substance. Procedures are reviewed and revised whenever changes occur in a process. The information is made readily accessible to material handlers involved in the processes. These procedures do not address various modes of operation such as initial startup, normal operations, emergency shutdown, emergency operations, and normal shutdown. However, such procedures are not applicable for a storage warehouse operation.

40 C.F.R. §68.54 Training – Univar maintains a comprehensive training program in place to ensure that employees are competent in the procedures associated with each process. Initial training for new employees is given within 90-days of hire and/or prior to working unsupervised in a process. Refresher training is provided at regular intervals and more frequently as needed, but generally between one and three years.

EPA reviewed the training records of employees involved in the handling of RMP regulated substances. Univar's employee training program consists of several courses given on-line or in a classroom setting. Training in operating procedures to include health and safety hazards, emergency operations, and safe work practices applicable to employee responsibilities is conducted for all new operations personnel, and refresher training is provided at least every three years or more frequently as required.

40 C.F.R. §68.56 Maintenance – The process involves warehouse storage and transport of chemicals for distribution to end-users. The facility receives and distributes chemicals in totes and drums; both are subject to damage, corrosion, and leakage. Leak testing of the totes is a recognized and generally accepted good engineering practice and is required by the UN Model Regulations, UN Recommendations on the Transport of Dangerous Goods, the Department of Transportation, and Snyder Industries (the manufacturer of the totes) and is required by Univar Solutions in procedure OSM 3.42. The Department of Transportation has regulations which require the leak testing of totes:

Department of Transportation Standard

180.352 Requirements for retest and inspection of (Intermediate Bulk Containers (IBCs).

(a) ***General.*** *Each IBC constructed in accordance with a UN standard for which a test or inspection specified in paragraphs (b)(1), (b)(2) and (b)(3) of this section is required may not be filled and offered for transportation or transported until the test or inspection has been successfully completed.*

(b) ***Test and inspections for metal, rigid plastic, and composite IBCs.*** *Each IBC is subject to the following test and inspections:*

(1) Each IBC intended to contain solids that are loaded or discharged under pressure or intended to contain liquids must be tested in accordance with the leak-proofness test prescribed in § 178.813 of this subchapter prior to its first use in transportation and every 2.5 years thereafter, starting from the date of manufacture or the date of a repair conforming to paragraph (d)(1) of this section. For this test, the IBC is not required to have its closures fitted. **AOC 4 [68.56(d)].**

(2) An external visual inspection must be conducted initially after production and every 2.5 years starting from the date of manufacture or the date of a repair conforming to paragraph (d)(1) of this section to ensure that:

(i) The IBC is marked in accordance with requirements in § 178.703 of this subchapter. Missing or damaged markings, or markings difficult to read must be restored or returned to original condition.

(ii) Service equipment is fully functional and free from damage which may cause failure. Missing, broken, or damaged parts must be repaired or replaced.

(3) Each metal, rigid plastic and composite IBC must be internally inspected at least every five years to ensure that the IBC is free from damage and to ensure that the IBC is capable of withstanding the applicable design qualification tests.

40 C.F.R. §68.58 Compliance Audits – Univar presented two compliance audits (10/1/2020 and 6/5/2023) to address compliance with Section 68.58 of the RMP rule. However, both audits have inaccuracies and do not precisely reflect the requirements for Program 2 facilities that have regulated RMP chemicals on site above the threshold quantities. **AOC 5 [68.58(d)].**

40 C.F.R. §68.60 Incident Investigation – Univar did not have any incidents that met the criteria of the section 68.60 of the RMP standard; investigation of each incident which resulted in or could reasonably have resulted in a catastrophic release. Univar does investigate safety and health and chemical releases that do not meet the RMP standard criteria. I reviewed the Univar incident log, with a description of the incident and the factors that contributed to the incident. There were two incidents of note, but neither met the definition of catastrophic release nor involve RMP regulated chemicals:

In 2023 a transfer hose burst and sprayed 4-tertbutylprocatechol, methane, 1,2- benzene diol on an employee.

In 2022 an employee was splashed with caustic soda while in the process of blowing down.

Subpart E - Emergency Response

40 C.F.R. §68.95 Emergency Response Program – Univar has chosen to be a non-responding facility. An emergency response program is not required for facilities whose employees will not respond to accidental releases of regulated substances and will evacuate the facility.

40 C.F.R. §68.90 Applicability - An Emergency Contingency/Evacuation Plan is maintained in place at the facility in accordance with company guidelines. Within the plan it addresses the

facility response to small spills/release which are capable of being managed with Univar employees. Employees receive training in spill response and participate in evacuation drills. Evacuation drills are conducted every six months.

The Emergency Contingency Plan has been provided to local emergency service agencies including fire department, police/sheriff department, hospital, and the Houston Hazardous Materials department.

Subpart G - Risk Management Plan

40 C.F.R. § 68.190 Updates - Univar's Risk Management Plan was re-submitted as a 5-year update on June 6, 2023. However, Univar had not submitted to EPA a revised and updated the RMP at least once every five years from the date of its initial submission or most recent update as required by paragraphs (b)(2) through (b)(7) of this section. Prior to submittal of the June 2023 RMP update, Univar had not updated its RMP since September 2010. **AOC 6 [68.190(b)(1)].**

40 C.F.R. § 68.195 Required corrections – Univar's next RMP re-submission is due by June 2028, unless an update or correction is required by 40 C.F.R. 68.190 and 40 C.F.R. 68.195.

Clean Air Act (CAA) §112(r)(1) – General Duty Clause

Section 112(r)(1) states: Prevention of Accidental Releases (1) Purpose and General Duty - It shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to paragraph (3) or any other extremely hazardous substance.

The process involves warehouse storage and transport of chemicals for distribution to end-users. The facility receives and distributes chemicals in totes containing hydrochloric acid (concentration less than 37%); which are subject to damage, corrosion, and leakage. Leak testing of the totes is a recognized and generally accepted good engineering practice and is required by the UN Model Regulations, UN Recommendations on the Transport of Dangerous Goods, the Department of Transportation, and Snyder Industries (the manufacturer of the totes) and is required by Univar Solutions in procedure OSM 3.42. The Department of Transportation has regulations which require the leak testing of totes. **AOC 7 [Clean Air Act (CAA) §112(r)(1) – General Duty Clause].**

Closing Conference – A closing conference was held on August 23, 2024, at which time the findings resulting from the inspection were presented; and we indicated additional Areas of Concern may be identified once the team was able to review all the documents provided. Confidential Business Information criteria were explained and a list of all copies of documents that were collected from the site was prepared.

SECTION III - AREAS OF CONCERN

AOC 1 – 40 C.F.R. §68.48(b) Process Safety Information

The owner or operator shall ensure that the process is designed in compliance with recognized and

generally accepted good engineering practices.

Univar Solutions failed to properly document all areas of the facility containing electrical equipment, where fire or explosion hazards may exist due to flammable gases, flammable liquid—produced vapors, combustible liquid—produced vapors; using the Class 1 Division 2 locations, under the Class and Zone system in accordance with the National Electric Code Article 500. Flammable chemicals present at the site include cyclohexylamine, hexane, heptane, toluene, xylene, methanol, methyl ethyl ketone, etc.

AOC 2 – 40 C.F.R. §68.50(c) Hazard Review

The owner or operator shall document the results of the review and ensure that problems identified are resolved in a timely manner.

Univar failed to document the results of the 2023 Hazard Review for hydrochloric acid, ammonium hydroxide (20% ammonia), and cyclohexylamine to ensure that the problems identified were resolved in a timely manner.

The tracking system for the PHA recommendations does not document how findings and recommendations are ultimately resolved. **AOC 2 [68.50(c)]**.

AOC 3 – 40 C.F.R. §68.50(d) Hazard Review

The review shall be updated at least once every five years.

Univar failed to perform hazard reviews/PHAs every five years. No hazard reviews were performed between March 2018-March 2023 for cyclohexylamine and hydrochloric acid.

AOC 4 - 40 C.F.R §68.56(d) Maintenance

The owner or operator shall perform or cause to be performed inspections and tests on process equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations, industry standards or codes, good engineering practices, and prior operating experience.

Univar failed to ensure that an ammonium hydroxide tote was retested every 2.5 years in accordance with recognized and generally accepted good engineering practice and as required by the UN Model Regulations, UN Recommendations on the Transport of Dangerous Goods, Department of Transportation, Snider Industries (the manufacturer of the tote) and as required by Univar Solutions in procedure OSM 3.42.
Batch No. 4527088679, Product No. 16163926; Test date: 1/22, Retest due date: 7/24.

AOC 5 - 40 C.F.R. §68.58(d) Compliance Audits

The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been

corrected.

1. 2020 Compliance Audit

i. Items were marked "yes" but there was no evidence they were ever performed;

ii. 68.10(a)-is applicable as Univar was a stationary source with more than a threshold quantity of regulated chemicals;

iii. 68.28 is applicable to this facility based on the presence of cyclohexylamine onsite (worst case and alternative release scenarios are required);

iv. 68.48 (safety information) and 68.50 (hazard review) are applicable to this facility;

v. 68.56(d) is applicable to this facility; and

vi. 68.90(b)(1)-(b)(5) are applicable due to the presence of HCL, ammonia, and cyclohexylamine which is flammable.

2. 2023 Compliance Audit

i. 68.56: Maintenance Section does not address inspection and testing of process equipment (totes, and drums);

ii. 68.48(a)(4) is applicable for totes, drums, and hoses;

iii. 68.50 the hazard review wasn't conducted until March 2023…it's not possible to determine if issues were resolved in a timely manner;

iv. 68.58 indicates previous compliance reports were not available;

v. 68.95 there is no answer for emergency response plan…N/A would be appropriate; and

vi. 68.90(b) which is not listed would be a "yes".

AOC 6- 40 C.F.R. §68.190(b)(1) Updates

The owner or operator of a stationary source shall revise and update the RMP submitted under §68.150 as follows:

At least once every five years from the date of its initial submission or most recent update required by paragraphs (b)(2) through (b)(7) of this section, whichever is later. For purposes of determining the date of initial submissions, RMPs submitted before June 21, 1999 are considered to have been submitted on that date.

Univar failed to submit a review an update the Risk Management Plan at least once every five years from the date of its most recent update (September 2010). Univar did not update its RMP between October 2010-May 2023.

AOC 7 – Clean Air Act (CAA) §112(r)(1) – General Duty Clause

Section 112(r)(1) states: Prevention of Accidental Releases (1) Purpose and General Duty - It shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to paragraph (3) or any other extremely hazardous substance. The owners and operators of stationary sources producing, processing, handling or storing such substances have a general duty, in the same manner and to the same extent as section 654, title 29 of the United States Code, to identify hazards which may result from such releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur.

Univar did not take such steps as are necessary to prevent releases. Leak testing of the following totes containing hydrochloric acid (concentration less than 37%) were overdue:

1. Hydrochloric Acid tote: Batch No. 0002471424; Product No. 16153262
   Test date: 6/21 Retest due date: 12/23

2. Hydrochloric Acid tote: Batch No. 0002471424; Product No. 16153262
   Test date: 1/19 Retest due date: 7/21

3. Hydrochloric Acid tote: Batch No. 0002316259; Product No. 16144192
   Test date: 1/19 Retest due date: 7/21

4. Hydrochloric acid tote missing label:
   Test date: 10/19 Retest due date: 4/22

SECTION IV - FOLLOW UP
Not applicable

SECTION V - LIST OF APPENDICES
Not applicable