

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	August 11-15, 2025	
Media Program:	Air	
Regulatory Program(s)	Clean Air Act Section 112(r) and 40 Code of Federal Regulations (C.F.R.) Part 68 Chemical Accident Prevention Provisions – Risk Management Program (RMP)	
Company Name:	Vopak Industrial Infrastructure Americas, LLC	
Facility Name:	Vopak Terminal St. Charles	
Facility Physical Location:	355 Louisiana Hwy 3142	
(city, state, zip code)	Hahnville, LA 70057	
Mailing address:	355 Louisiana Hwy 3142	
(city, state, zip code)	Hahnville, LA 70057	
County/Parish:	St. Charles	
Facility Phone Number	(832)784-6238	
Facility Contact:	Kelly Phillips	Environmental Engineer
	Kelly.phillips@vopak.com	
FRS Number:	1100 7106 2771	
Identification/Permit Number:	Title V: 2520-00186-V1	
Media Identifier Number:	RMP: 1000 0009 1662	
NAICS:	49319 – Other Warehousing and Storage	
SIC:	N/A	
Personnel participating in inspection:		
Kristen Latiolais	EPA Region 6 ECDSC	Lead 112(r) Inspector
Michael Spillman	EPA Region 6 ECDSC	112(r) Inspector
Glenn Jenkins	LA Dept. of Environmental Quality	CAPP Inspector
Christopher Smith	LA Dept. of Environmental Quality	CAPP Inspector
Clifton Ferrell	Vopak	SHEQ Director
Kelly Phillips	Vopak	Environmental Engineer
Kory Pourciau	Vopak	Terminal Manager
Kenny Waldrop	Vopak	Technical Manager
Eric Desoto	Vopak	Training Coordinator
Darren Duhe	Vopak	EH&S Technician
Chad Cantrelle	Vopak	Process Control Technologist
Brandon Heasley	Vopak	Operations and Technical Director
Gerard Zeringue	Vopak	Operations Manager
EPA Lead Inspector Signature/Date		
	Kristen Latiolais	Date
Supervisor Signature/Date		
	Kayla Buchanan	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

The United States Environmental Protection Agency (EPA) Region 6 Inspectors Kristen Latiolais and Michael Spillman, and Louisiana Department of Environmental Quality (LDEQ) CAPP Inspectors Glen Jenkins and Christopher Smith (“We”) arrived at the Vopak Terminal St. Charles facility at 9:30 AM on Monday, August 11, 2025, for an announced inspection. We met with Kory Pourciau (Terminal Manager), Kelly Phillips (Environmental Engineer), and other Vopak Terminal St. Charles employees for an opening meeting. Both Michael Spillman and I, Kristen Latiolais, presented our credentials and informed Vopak Terminal St. Charles personnel 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 (PCE), which included an evaluation of the facility’s compliance with the Clean Air Act (CAA) Section 112(r)(1) & (7), the General Duty Clause and the Chemical Accident Prevention Provisions in 40 C.F.R. Part 68. Vopak Terminal St. Charles Risk Management Plan (RMP) is listed as a Program Level Three (3) facility. We 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 Vopak Terminal St. Charles is a non-union facility.

FACILITY DESCRIPTION

Vopak Terminal St. Charles (Vopak SC) is located at 355 Highway 3142 Hahnville, LA 70057. The facility is located on Dow/Union Carbide Corporation (Dow/UCC) St. Charles Operations’ (SCO) property and was purchased by Vopak Industrial Infrastructure Americas, LLC (VIAA) on May 4, 2021. The site was operated and maintained by Dow/UCC SCO until 2021. The facility is in operation 24 hours a day seven days a week and has approximately 48 employees at the St. Charles location. Vopak SC is a for-hire liquid storage terminal which stores, handles and transports chemicals and refined petroleum products. Products are received into and transported from the facility via ship, barge, pipeline, tank car and tank truck.

The facility stores more than the threshold quantity for Risk Management Plan (RMP) regulated substances, of ammonia (anhydrous), ethylenediamine, 1-Pentene, Propylene, 1,3-Butadiene, and propane. Due to the amounts of regulated substances present in each process and their proximity to environmental and public receptors, the facility is designated as a Program level 3 facility.

Section II - OBSERVATIONS

Subpart A – General

40 C.F.R. § 68.10 Applicability – Vopak Industrial Infrastructure Americas, LLC (VIAA) is the owner/operator of a stationary source that has more than a threshold quantity of regulated flammable substances (1-pentene, propane, propylene and 1, 3-butadiene) and toxic substances (ammonia

(anhydrous), and ethylenediamine) in a covered process, as listed in 40 C.F.R. § 68.130; therefore, it is subject to the Chemical Accident Prevention Provisions. VIIA is classified under the North American Industrial Classification System (NAICS) code 49319 (other warehousing and storage). The facility is also subject to the Occupational Safety and Health Administration (OSHA) process safety management (PSM) standard, 29 C.F.R. § 1910.119.

40 C.F.R. § 68.12 General requirements – VIIA submitted their initial 5-year Risk Management Plan submission on February 19, 2021. The next Risk Management Plan registration re-submittal is due on February 19, 2026, unless an update or correction is required by 40 C.F.R. § 68.190 or 40 C.F.R. § 68.195 prior to the five-year renewal date. The Risk Management Plan listed the following chemicals as present in processes in amounts greater than the threshold quantity, prescribed in the standard, and therefore classified as RMP Program 3 regulated substances by rule: 1-pentene, propane, propylene, 1, 3-butadiene, ammonia (anhydrous), and ethylenediamine.

40 C.F.R. § 68.15 Management – VIIA developed a management system but failed to properly identify who oversees the implementation of the risk management program elements at the facility. At the time of the inspection, the individual assigned to implement the RMP program was not the accurate responsible official [**AOC 1 – § 68.15(b)**]. During the inspection, Kelly Phillips (LMR Environmental Engineer) identified herself as the RMP implementor and attempted to submit a correction into CDX to reflect the change, but the correction was not successfully submitted until August 18, 2025. The August 18, 2025, correction did not update the re-submittal due date of February 19, 2026.

Subpart B – Hazard Assessment

40 C.F.R. § 68.20 Applicability – The owner or operator of a stationary source subject to this part shall prepare a worst-case release scenario analysis as provided in § 68.25 of this part and complete the five-year accident history as provided in § 68.42.

40 C.F.R. § 68.22 Off-site Consequence Analysis Parameters – VIIA uses RMP*Comp™ as the technique for modeling the release scenarios. For both the worst-case and alternative case scenarios involving flammables and toxics, the facility used the endpoints provided in Appendix A of 40 C.F.R. Part 68, 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.

40 C.F.R. § 68.25 Worst-case Release Scenario Analysis – VIIA analyzed two worst-case release scenarios, one for ammonia (anhydrous), toxic substance, and one for 1, 3-butadiene, flammable substance. Ammonia (anhydrous) was estimated to create the greatest distance to endpoint, resulting from an accidental release of a regulated substance from a covered process under worst-case conditions.

40 C.F.R. § 68.28 Alternative Release Scenario Analysis – VIIA identified and analyzed three alternative release (Ethylenediamine, Ammonia, and 1, 3-butadiene) scenarios to represent all flammable substances (1, 3-butadiene) and each toxic substance (ammonia (anhydrous) and ethylenediamine) held in covered processes.

40 C.F.R. § 68.30 Defining Offsite Impacts -Population – VIIA used the MARPLOT mapping program to define the affected off-site population, based on a circle with the point of release at the center. VIIA used 2010 Census data, which at the time of the off-site consequence analysis was the most recent Census data. VIIA will need to review and update the off-site consequence analysis, and during that review, 2020 Census data should be used. The estimated population within the endpoint radius was estimated to two significant digits.

40 C.F.R. § 68.33 Defining Offsite Impacts -Environment – VIIA used MARPLOT to identify the environmental receptors within the distance to endpoints, as required by this subpart.

40 C.F.R. § 68.36 Review and Update – VIIA initially registered the facility and submitted their OCA documentation on February 19, 2021. VIIA will need to review and update the off-site consequence analysis on February 19, 2026, or sooner as required by § 68.36 (a) and (b).

40 C.F.R. § 68.39 Documentation – For the worst-case and alternative release scenarios, a description of the vessel or pipeline and substance selected, assumptions and parameters used, the anticipated effect of the administrative controls and passive mitigation on the release quantity, and the release rate was performed and provided. VIIA failed to include the rationale for the selection of scenarios for all worst-case and alternative release scenarios provided in the RMP [**AOC 2 - § 68.39(a)&(b)**].

40 C.F.R. § 68.42 Five-year accident history – VIIA did not have any reportable accidents listed in their five-year accident history in their February 19, 2021, RMP submittal at the time of the inspection.

Subpart D – Program 3 Prevention Program

40 C.F.R. § 68.65 Process Safety Information – VIIA maintains a variety of technical documents used to maintain safe operation of the processes. These documents address chemical properties and associated hazards, limits for key process parameters and specific chemical inventories, and equipment design basis/configuration information. Majority of these documents were still under DOW's name from the transfer made in 2021. The technical maintenance department within the facility is assigned responsibility for maintaining and updating process safety information. Chemical-specific information, including exposure hazards and emergency response/exposure treatment consideration, is provided in safety data sheets (SDSs). In addition, the facility documented safety-related limits for specific process parameters (e.g., temperature, level, composition) in the operation manuals. VIIA ensures that the process is maintained within these limits by using process controls and monitoring instruments, operating procedures, and protective instrument systems (e.g., automated shutdown systems).

The EPA reviewed the P&IDs for the covered processes and noted inconsistencies between the P&IDs, the equipment observed in the field and the industry standard requirements [**AOC 3- 68.65(a) & (d)(1)(ii)**]. The following drawing numbers and associated piping circuits had inaccurate information and notations:

Drawing Number	Incorrect Information	Piping Circuits
VIIASCO-P02-502-Z062-003	1. Missing PSV-3501-46 2. PSV-3501-34 has incorrect set pressure 3. Notes are not numbered correctly. (20=19, etc.)	1. P181037 2. P181037 3. N/a
VIIASCO-P02-502-Z062-004	1. Missing block valve 2. PSV-3401-44R is marked as withdrawn but is included in the P&ID. 3. P&ID notes are identified by letters instead of numbers.	1. P181029 – P181010 2. P181005 3. N/a
VIIASCO-P02-502-Z062-006	1. CSO on 1 ½" GA-1148 on top of TK-6230 2. PVR-3533-100 not removed from P&ID 3. P&ID notes are identified by letters instead of numbers.	1. N/a 2. P181002 3. N/a
VIIASCO-P02-502-Z042-001	1. CSO missing on both 4" GA valves on top of TK-2143 2. Notes are not numbered correctly. (14=11, 16=13, 17=14, etc.)	1. P181031 2. N/a
VIIASCO-P02-502-Z042-002	1. CSO missing on both 4" GA valves on top of TK-2142 2. Notes are not numbered correctly.	1. P181031 2. P181001
VIIASCO-P02-502-Z021-009	1. CSO missing on 4" GA valves on top of TK-2144	1. P181040

During the facility tour, the EPA identified RMP process equipment and piping associated with the Ammonia, Ethylenediamine, Propylene, Butadiene and Propane covered process areas that were not labeled, or color coded to indicate contents, direction of flow and potential hazards, per ASME standard A13.1(2023). As a result, this equipment does not conform with RAGAGEP pursuant to 40 CFR §68.65(d)(2) [AOC 4- 68.65(d)(2)].

40 C.F.R. § 68.67 Process hazard analysis (PHA) – VIIA provided a process hazard analysis (PHA) procedure for review (LMR 0096 Process Safety Management Program) (See Appendix 2). Prior to the sale in 2021, initial PHA's for the site were conducted by Dow. There has not been another PHA

conducted on site since 2021. VIIA failed to conduct a PHA every 5 years. The last PHA was conducted in 2018 by Dow and due to be revalidated in 2023. Recommendations and actions items were completed prior to the sale in 2021. The RMP stated that a PHA was conducted in 2020, but VIIA could not locate this documentation [AOC 5- 68.67(f)]. VIIA also failed to obtain the PHAs from Dow, although VIIA is required to retain PHAs for the life of the process [AOC 6- 68.67(g)].

Dow addressed the PHA facility siting requirement of 68.67(c)(5) for the buildings, now owned by VIIA, by providing facility siting checklists which were included in the Dow PHA's, and facility siting studies conducted in 2015.

40 C.F.R. § 68.69 Operating Procedures – VIIA maintains written procedures that address various modes of operations, such as unit startup, normal operations, temporary operations, emergency shutdown, normal shutdown, and initial startup of a new process. A section of the operating manual contains safe operating conditions and limits for each production area as required which is consistent to process safety information. These procedures can be used as a reference by experienced operators and provide a basis for consistent training of new operators. The written operating procedures are readily available to operators to use as necessary to safely perform their job tasks.

EPA reviewed several operating procedures which included: initial startup, normal operations, temporary, safe work practices, emergency shutdown, emergency operations and normal shutdowns. VIIA's operating procedures, VTSC 0155, VTSC 0166, VTSC 1364 and VTSC 1403 (See Appendix 3) did not address consequences of deviation [AOC 7- 68.69(a)(2)(i)]. VIIA also failed to provide documentation that operating procedures were certified annually for years 2021 through 2024 [AOC 8- 68.69(c)]. Lastly, two of VIIA's procedures for safe work practices reviewed, LMR 0016 and LMR 0009 (See Appendix 3), make incorrect references for procedure use of safe work practices [AOC 9- 68.68(d)].

40 C.F.R. § 68.71 Training – VIIA implemented a comprehensive training program for all employees involved in operating a process. All operations employees receive basic training in the facility operations. After operators demonstrate (e.g., through tests, skills demonstration) having adequate knowledge to perform the duties and tasks in a safe manner on their own, they can work independently. In addition, all operators periodically receive refresher training on the operating procedures to ensure that their skills and knowledge are maintained at an acceptable level. As required per 40 C.F.R. 68.71, refresher training is conducted every three years or more often if determined to be necessary.

VIIA provided EPA with their available training documentation and corresponding policy. This subpart requires each new employee to be trained in an overview of the process, the operating procedures, and provide refresher training at least every three years. The EPA reviewed the training records of eleven (11) selected process operators associated with the tank farm, maintenance and emergency response. VIIA provided initial and refresher training records for multiple employees addressing an overview of the process, operating procedures, HAZWOPER, first responder, and fire brigade training. VIIA uses an automatic system to send a survey to employees immediately after an online training is completed to consult on the frequency of refresher training and any extra training operators feel they may need.

40 C.F.R. § 68.73 Mechanical integrity (MI) – VIIA uses established practices and procedures to maintain pressure vessels, piping systems, relief and vent systems, controls, pumps and compressors, and

emergency shutdown systems in a safe operating condition. The basic aspects of this program include developing written procedures, performing and documenting inspections and tests, correcting identified deficiencies, and applying quality assurance measures. Inspections and tests are completed to evaluate equipment functioning as compared to that intended, and to verify that equipment is within acceptable limits (e.g., adequate wall thickness for pressure vessels). If a deficiency is identified, the deficiency is corrected before placing the equipment back into service (if possible), or a management of change team will review the use of the equipment and determine what actions are necessary to ensure the safe operation of the equipment.

EPA reviewed the written procedures VIIA established to maintain the ongoing integrity of the process equipment. The review was conducted both on site and in further detail after leaving the facility, post-inspection. EPA examined the inspections and tests performed on equipment to ensure that the frequency of inspections and tests of process equipment are consistent with applicable manufacturers' recommendations and recognized and generally accepted good engineering practices (RAGAGEP). VIIA failed to implement their written maintenance procedure, On-site Inspection and Maintenance Standard, for performing inspections and testing on piping circuits and equipment **[AOC 10- 68.73(b)]**. The On-site Inspection and Maintenance Standard requires VIIA to update and keep record of the next inspection interval for each piping system. The following PSVs (pressure safety valves) and PVRV (pressure vacuum relief valves) were not listed in the preventative maintenance (PM) schedule VIIA provided to EPA:

Tank	P&ID Drawing Number	Equipment ID
TK-6210	VIIASCO-P02-502-Z062-003	1. PVRV-162-6210-01; 2. PVRV-162-6210-02; 3. PVRV-162-6210-03; 4. PVRV-162-6210-04; 5. PVRV-162-6210-05
TK-6220	VIIASCO-P02-502-Z062-004	1. PVRV-162-6220-01; 2. PVRV-162-6220-02; 3. PVRV-162-6220-03; 4. PVRV-162-6220-04; 5. PVRV-162-6220-05; 6. PVRV-162-6220-06
TK-6230	VIIASCO-P02-502-Z062-006	1. PSV-162-6230-01; 2. PSV-162-6230-02; 3. PSV-501-92-02; 4. PSV-501-92-03; 5. PSV-501-106-07; 6. PVRV-162-6230-01; 7. PVRV-162-6230-04
TK-2142	VIIASCO-P02-502-Z042-002	1. PSV-501-107-09;
TK-2143	VIIASCO-P02-502-Z042-001	1. PSV-501-107-06;

		2. PSV-501-107-07;
TK-2144	VIIASCO-P02-502-Z021-009	1. PVRV-121-2144-01; 2. PVRV-121-2144-02
TK-2145	VIIASCO-P02-502-Z021-011	1. PSV-121-2145-01; 2. PSV-121-2145-02
TK-2339	VIIASCO-P02-502-Z023-040	1. PVRV-123-2339-01; 2. PVRV-123-2339-02

VIIA also failed to provide inspection and testing documentation for pressure relief devices and safety instrument systems [AOC 11- 68.73(d)(1)]. The following PSVs had missing internal inspections according to the process design:

Equipment ID/Tag #	Testing Frequency	Prior Inspection Date	Missing Inspection Dates
PVRV-162-6210-05	36M or 3 Years	9/22/2020	9/22/2023
PVRV-162-6210-01	48M or 4 Years	5/20/2020	5/20/2024
PVRV-162-6210-04	48M or 4 Years	5/26/2020	5/26/2024
GRL-OL5-PSU-3401-43	24M or 2 Years	5/1/2018	5/1/2020, 5/1/2022, and 5/1/2024
GRL-OL5-3401-47	36M or 3 Years	3/18/2020	3/18/2023
PVRV-162-6220-06	36M or 3 Years	2/5/2019	2/5/2022 and 2/5/2025 (late)
GRL-OL5-3501-35	24M or 2 Years	2/6/2020	2/6/2022 and 2/6/2024
GRL-OL5-3501-44R	12M or 1 Year	5/20/2019	5/20/2020, 5/20/2021, 5/20/2023, and 5/20/2025

Lastly, VIIA failed to provide inspection and testing documentation for the following safety instrument systems (SISs) showing that they were calibrated and inspected annually [AOC 11- 68.73(d)(1)]:

Tank	Equipment Involved	Missing Instrument Inspections
TK-6210	Level Transmitter, Level Switch, Temperature Transmitter, Pressure Transmitter, Pressure Control Valve, Level Control Valve, Hand Valve, Flow Switch, and Flow Valve	2022, 2023, and 2024
TK-6220	Level Transmitter, Level Switch, Temperature Transmitter, Electric Valve, Pressure Control Valve, Level Valve and Flow Valve	2022, 2023, and 2024
TK-6230	Pressure Transmitter, Level Transmitter, Level Switch, Electric Valve, Flow Transmitter, Flow Valve,	2022, 2023, and 2024

	Flow Control Valve, Temperature Transmitter, Hand Valve, and Pressure Control Valve	
TK-2142	No testing provided	2022, 2023, 2024, and 2025
TK-2143	Level Transmitter, Pressure Transmitter, Electric Valve, Emergency Block Valve, Level Alarm, Gas Detector, and Level Control Valve	2022, 2023, and 2024
TK-2144	No testing provided	2022, 2023, 2024, and 2025
TK-2145	Level Transmitter, Pressure Transmitter, Electric Valve, Pressure Indicator, Emergency Block Valve, On/Off Valve, and Level Control Valve	2022, 2023, and 2024
TK-2301	Level Transmitter, Electric Valve, Control Valve, Level Switch, Pressure Transmitter, Temperature Transmitter, Emergency Block Valve	2022, 2023, and 2024
TK-2339	Level Transmitter Work Order was the only one provided. Level Switch, Temperature Indicator, Pressure Indicator, Emergency Block Valve, and Pressure Transmitter	2022, 2023, and 2024

VIIA did not ensure that internal inspections of TK-6210 were completed in 2024, as required by API 510, which had a predicted retirement date of less than 10 years. VIIA provided documentation of ultrasonic testing and internal inspection history for TK-6210, and in 2016 the pressure vessel had a predicted retirement date of 03/16/2032. API 510, 6.5.2.1 (b), states “At the discretion of the inspector, an on-stream inspection may be substituted for the internal inspection in the following situations: b) when a vessel entry for internal inspections is physically possible and all of the following conditions are met: 2) the vessel remaining life is greater than 10 years”. VIIA also failed to document or record the remaining life determination, required thickness, or the long- and short-term corrosion rate for TK-6210 and TK-6220 after completing UT testing for the on-stream inspection in lieu of the 10-year internal inspection **[AOC 12- 68.73(d)(2)]**.

VIIA failed to document a description of the testing and inspection performed during the “12M, Tank Instrumentation and Valve Complete PM Route”, and failed to include the results of the inspection. The work order form VIIA provided does not describe the inspection, nor does it provide information on the results of the inspection for each piece of equipment. The following pressure vessels did not have a description or results for some or all of the inspected safety critical equipment: TK-6210, 6220, 6230, 2142, 2143, 2145, 2301, and 2339 **[AOC 13- 68.73(d)(4)]**.

VIIA failed to correct deficiencies in safety critical equipment which were outside of acceptable limits. Thirteen (13) corrective maintenance work orders describe leaking and faulty safety critical equipment which had no completion date and been marked rejected under status. The following work order numbers were marked rejected in VIIA's corrective maintenance tracking database **[AOC 14-68.73(e)]**:

Work Order	Equipment Involved	Description
10851284	Automatic Block Valve	Valve is not working
10439574	Level Transmitter or Indicator	Tank is having level discrepancies
9714144	Automatic Operated Valve	Needs to be replaced
9599399	Level Transmitter or Indicator	Reading Incorrectly
9553918	Automatic Block Valve	Out of alarm constantly
9154861	Level Transmitter	Not getting power
9105875	Flame Arrestor	Repair outlet valve
8936040	Flare Louvers	Not working
8935463	Level Transmitter	Not reading
8933414	Level Indicator or Transmitter	Turned off
8508633	Pressure Safety Valve	Found leaking
8508620	Pressure Safety Valve	Found leaking
8153553	Pressure Safety Valve	Needs to be repaired/replaced

VIIA failed to appropriately check and inspect PRVs to ensure that they were consistent with design specifications and the manufacturer's instructions. The pressure safety valve, PVRV-162-6210-01, was set at 82 PSIG, which is above the maximum allowable working pressure (MAWP) for the vessel. The process design and ASME Boiler and Pressure Vessel Code, Section VIII, require at least one valve, when a vessel is protected by more than one safety device, to be set below the MAWP which was not identified at the time of the PSV installation or during the 2024 external inspection of TK-6210 **[AOC 15-68.73(f)(2)]**.

40 C.F.R. § 68.75 Management of change (MOC) – VIIA has a system to manage changes to processes. This system requires that changes to items such as process equipment, chemicals, technology (including process operating conditions), procedures, and other facility changes be properly reviewed and

authorized before being implemented. Changes are reviewed to ensure that adequate controls are in place to manage any new hazards and verify that existing controls have not been compromised by the change. Affected chemical hazard information, process technology information, and equipment information, as well as procedures are updated to incorporate these changes.

When reviewing selected MOC's, EPA noted that VIIA failed to initiate an MOC before the removal of PSV-3533-100 from piping circuit 181002, which changed the relief system, design basis, and P&ID. VIIA failed to provide documentation or calculations to justify these changes and confirm that the removal of this pressure safety device could be safely implemented **[AOC 16- 68.75(a)]**.

VIIA also failed to provide documentation that employees affected by the management of change were informed of and trained in changes prior to start-up of the process. Operations, Maintenance, and Engineering employees are checked off on the MOC checklist provided as needing training on or before the target date but were not provided for MOC SCO-20210002, SCO-20210020, SCO-20210022, and SCO-20220031 **[AOC 17- 68.75(c)]**.

Lastly, VIIA failed to update the process safety information for MOC SCO-20210020. P&ID 1225759-01A for the Storage/Pump Area Crude Butadiene Pipeline was attached but was not updated or redlined to show the change **[AOC 18- 68.75(d)]**.

40 C.F.R. § 68.77 Pre-startup safety review (PSSR) – VIIA provided documentation regarding PSSR, which were reviewed alongside the MOCs. VIIA personnel initiate a PSSR for the construction of any new process, or for any changes to an existing process that have been shut down for turnaround or modification (other than a replacement in kind) and requires management of change procedures. The review ensures that adequate safety features, procedures, personnel, and the equipment are appropriately prepared for start-up prior to placing the equipment into service. This review provides an additional check to confirm the construction is in accordance with the design specifications, operator training has been complete, and that all PHA recommendations have been resolved and implemented prior to start up.

VIIA failed to perform a pre-startup safety review for MOC-SCO20210020 when there was a change in process safety information. The FI&E Pre-startup Review Checklist was attached to the MOC. However, the checklist was blank and not used **[AOC 19 – 68.77(a)]**.

VIIA failed to include updated procedures, training documentation and documentation that construction and equipment is in accordance with design specifications for MOC SCO-20210002. Some of the PSSR's were completed after the MOC was closed **[AOC 20 – 68.77(b)]**.

40 C.F.R. § 68.79 Compliance Audits – The standard requires evaluation of compliance with the provisions of this subpart, at least every three years to verify that the procedures and practices developed under this subpart are adequate and are being followed. VIIA conducted a PSM compliance audit after the sale in 2021, but the audit did not meet the requirements in 40 C.F.R. § 68.79. Therefore, VIIA failed to conduct a compliance audit every three years **[AOC 21- 68.79(a)]**. VIIA completed a full RMP PSM compliance audit on August 12, 2024, to ensure that the accident prevention program is functioning properly. This compliance audit provided was conducted by at least one person

knowledgeable in the process. VIIA utilizes the Enablon system to log the compliance audit findings. This system is where the findings are tracked to completion and assigned to the appropriate individual to carry out the tasks generated from the audit findings.

The facility also performs a terminal health assessment to evaluate the entire facility for compliance with Global Vopak Standards, covering anything from human resources to PSM.

40 C.F.R. § 68.81 Incident investigation – VIIA is required to investigate each incident which resulted in, or could reasonably have resulted in, a catastrophic release of a regulated substance. VIIA has an incident investigation procedure that requires investigation for an employee injury/accident, equipment failure, loss of product containment, fire, explosion, and in some cases, near misses. The facility uses Enablon for all incident investigation reports to document and track detailed information about the incident. Facility representatives noted that initial incident investigation reports are generated and filed electronically in Enablon within 48 hours of the incident, and incidents resulting in fire, injury, or fatality would undergo a formal root cause investigation led by the EH&S manager. Appropriate investigation team members are determined based on the nature of the incident, such as a person knowledgeable in the process or a contract employee if the incident involved a contractor. VIIA uses a root cause investigation methodology to identify probable causes, corrective actions or recommendations, and lessons learned. Recommendations are tracked in Enablon and may lead to development of action items in other systems, such as MOCs, training assignments, SOP modifications, and generated Work Orders.

40 C.F.R. § 68.83 Employee participation – VIIA tries to keep employees informed and involved as much as possible to create a team unity atmosphere. Since VIIA has not completed a PHA since the sale in 2021, EPA was unable to verify if employees participate on PHA teams and have access to all PHA recommendations and information. Operation manuals are developed, updated and reviewed by operations personnel and the training department. Safety meetings are held regularly for operations, maintenance, terminal, administration and contract personnel. Selected topics are relevant to respective personnel assigned duties and general and specific information is provided as informational instruments to enhance employee participation in facility-wide safety performance. VIIA provided EPA with their written employee participation plan.

During the facility tour, EPA requested an operator to show how they access the 2018 PHA and corresponding information in which the operator and management present verified that this information was not made available to employees. This finding was also noted in the 2024 RMP compliance audit [AOC 22- 68.83(f)].

40 C.F.R. § 68.85(b) Hot Work Permit – VIIA's hot work procedure requires that permitting takes place before, during and after any job that has the potential to provide a source of ignition. The permit is followed through to completion of the work, and those permits are maintained by the EH&S Manager. The facility implements other work permits as necessary to assure safe work conditions are communicated to maintenance and contract personnel.

EPA reviewed hot work permits and the corresponding hot work policy, LMR 0015. The facility has developed and implemented a hot work safety procedure for any work that involves burning, welding, brazing, soldering, grinding and creating sparks in areas where flammable liquids or gases may be

present. This procedure is applicable to all VIIA employees and contractors, and it outlines the responsibilities of the operations supervisor, process operator, and maintenance supervisors. The procedure delineates the different types of hot work permits, pre-requisites and procedures for conducting hot work, and duties of the fire watch which align with the fire prevention and protection requirements in 29 CFR 1910.252(a).

EPA reviewed hot work permits for May through August 2025 that included cutting, grinding, welding and torching activities. Sixteen (16) permits reviewed failed to document fire prevention and protection requirements were implemented prior to beginning hot work operations. Sixteen (16) permits had no documentation of a fire watch being maintained for a half hour after completion of welding or cutting. One (1) permit failed to have suitable fire extinguishing equipment maintained in a state of readiness for instant use. And one (1) permit failed to document fire extinguishing equipment for use by fire watch in the event of fire [AOC 23- 68.85(b)].

40 C.F.R. § 68.87 Contractors – VIIA uses contractors to supplement its workforce as needed. The facility has procedures in place to ensure that contractors perform their work in a safe manner and are aware of the procedures to take during an emergency. This is accomplished by providing contractors with a process overview, information about safety and health hazards, emergency response plan requirements, and safe work practices.

VIIA utilizes Avetta for the selection of contractors, who are required to go through a screening process, meeting the training credential qualifications outlined by the facility and receive a grade prior to selection. VIIA performs an evaluation of contractors through Avetta during the PO process.

Subpart E – Emergency Response

40 C.F.R. § 68.90 Applicability – VIIA claims to be a non-responding stationary source, but during the inspection it was discovered that VIIA had in fact responded to several releases. VIIA and Dow/Union Carbide (UCC/Dow) have a tenant agreement that requires VIIA to send Vopak St. Charles employees to UCC/Dow SCO's Emergency Response Team (ERT) training and responses. Although the training and response team is organized and run by SCO, the VIIA employees that are a part of the ERT are being paid by VIIA to respond. After further review of the given circumstances, EPA determined Vopak St. Charles to be a responding stationary source and is subject to comply with the requirements of § 68.95 of this subpart.

40 C.F.R. § 68.93 Emergency response coordination activities – VIIA employees participate in DOW/UCC's response coordination activities on a quarterly basis. VIIA and DOW/UCC are members of the local Community Awareness Emergency Response (OHSEP) committee, that also provides aid to other local facilities. Meetings with St. Charles Local Emergency Planning Committee (LEPC) and the parish Hazmat response team are coordinated on an annual basis as required by 40 C.F.R. § 68.93(a). VIIA also performs tabletop drills on an annual basis alongside DOW/UCC and include the LEPC and the local fire department.

40 C.F.R. § 68.95 Emergency Response Program – Due to the understanding that the facility was a non-responding stationary source, VIIA did not have an emergency response program in place. Originally, VIIA participated on SCO's ERT and operated under SCO's emergency response program. But EPA has determined based on information gathered during the inspection that Vopak St. Charles is considered a responding stationary source. Therefore, VIIA failed to implement an emergency response program for the purpose of protecting public health and the environment for the Vopak St. Charles site **[AOC 24-68.95(a)]**.

EPA reviewed quarterly and annually inspection records for the deluge system from 2021 through 2025 and noted multiple reoccurring deficiencies including but not limited to; missing hydraulic nameplates, broken pipes, alarms not reporting to the board, alarm not creating sound, broken nipples, leaking sprinkler heads and poor condition of system piping and hangers **[AOC 25- 68.95(a)(2)]**.

EPA also noted that several pieces of equipment associated with the sprinkler system had not been tested for various months including:

- 2nd, 3rd and 4th quarter of 2021 and 2nd quarter of 2022 for the entire deluge system of Tank 6220.
- Sprinkler system 6220-8473 for the 4th quarter of 2022.
- Sprinkler system 6220-2271 for the 1st quarter of 2024.
- Sprinkler system 6210-7950 for the 1st quarter of 2024.
- Sprinkler system 6210-8472 for the 4th quarter of 2024.
- 2nd quarter of 2022 for the entire deluge system of Tank 6210, 6230 & Truck Rack 1601.
- Sprinkler system 6230-1616 for the 3rd and 4th quarter of 2022.
- Sprinkler system 6230-1615 for the 4th quarter of 2024.
- 1st and 4th quarter of 2023 & 1st, 2nd and 4th quarter of 2024 for the entire deluge system of Truck rack-1601.

Subpart G – Risk Management Plan

40 C.F.R. § 68.150 Submission – VIIA submitted their RMP on February 19, 2021, and included information on all the covered processes as required by 40 C.F.R. § 68.150.

40 C.F.R. § 68.160 Registration – VIIA included in their RMP all regulated substances present at the site above their designate threshold quantity as required by 40 C.F.R. § 68.160.

40 C.F.R. § 68.195 Required Corrections – VIIA is required to make corrections to the RMP within six months if there is new accident history information, and within one month if there has been a change in emergency contact information. VIIA failed to update the emergency contact information within one month of the change. However, the facility was able to submit a correction during the time of the inspection **[AOC 26 - §68.195(b)]**.

Section III – AREAS OF CONCERN

AOC 1 - 40 C.F.R. §68.15 Management

(b) The owner or operator shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements.

VIIA failed to properly identify who oversees the implementation of the risk management program elements at the facility.

AOC 2 - 40 C.F.R. §68.39(a) & (b) Documentation

(a) For worst-case scenarios, a description of the vessel or pipeline and substance selected as worst case, assumptions and parameters used, and the rationale for selection; assumptions shall include use of any administrative controls and any passive mitigation that were assumed to limit the quantity that could be released. Documentation shall include the anticipated effect of the controls and mitigation on the release quantity and rate.

(b) For alternative release scenarios, a description of the scenarios identified, assumptions and parameters used, and the rationale for the selection of specific scenarios; assumptions shall include use of any administrative controls and any mitigation that were assumed to limit the quantity that could be released. Documentation shall include the effect of the controls and mitigation on the release quantity and rate.

VIIA failed to include the rationale for the selection of specific scenarios for all worst case and alternative case scenarios provided in the RMP.

AOC 3- 40 C.F.R. §68.65(a)&(d)(1)(ii) Process Safety Information

(a) The owner or operator shall complete a compilation of written process safety information before conducting any process hazard analysis required by this part and shall keep process safety information up to date. The compilation of written process safety information is to enable the owner or operator and the employees involved in operating the process to identify and understand the hazards posed by those processes involving regulated substances. This process safety information shall include 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. (d) Information pertaining to the equipment in the process. (1) Information pertaining to the equipment in the process shall include: (ii) Piping and instrument diagrams (P&ID's);

VIIA failed to update and keep accurate information in their piping and instrument diagrams (P&ID's).

AOC 4- 40 C.F.R. §68.65(d)(2) Process Safety Information

(d)(2)The owner or operator shall document that equipment complies with recognized and generally accepted good engineering practices.

VIIA failed to ensure that the process equipment and piping were labeled, or color coded to indicate contents, direction of flow, and potential hazards, per ASME standard A13.1(2023).

AOC 5- 40 C.F.R. §68.67(f) Process Hazard Analysis

At least every five (5) years after the completion of the initial process hazard analysis, the process hazard analysis shall be updated and revalidated by a team meeting the requirements in paragraph (d) of this section, to assure that the process hazard analysis is consistent with the current process. Updated and revalidated process hazard analyses completed to comply with 29 CFR 1910.119(e) are acceptable to meet the requirements of this paragraph.

VIIA failed to conduct a process hazard analysis (PHA) every 5 years. The last PHA was conducted in 2018 by the previous owner and due to be revalidated in 2023.

AOC 6- 40 C.F.R. §68.67(g) Process Hazard Analysis

The owner or operator shall retain process hazards analyses and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in paragraph (e) of this section for the life of the process.

VIIA failed to retain process hazard analyses and updates or revalidations for each process for the life of the process. The facility gained ownership of the St. Charles site in 2021 and did not obtain prior PHA documentation from DOW.

AOC 7- 40 C.F.R. §68.69(a)(2)(i) Operating Procedures

(a)The owner or operator shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and shall address at least the following elements.(2) Operating limits: (i) Consequences of deviation.

VIIA failed to address consequences of deviation from the following operating procedures:

- VTSC 0155
- VTSC 0166
- VTSC 1364
- VTSC 1403

AOC 8- 40 C.F.R. §68.69(c) Operating Procedures

The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and accurate.

VIIA failed to provide documentation that operating procedures had been certified annually for years 2021 through 2024.

AOC 9- 40 C.F.R. §68.69(d) Operating Procedures

The owner or operator shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a stationary source by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees

VIIA failed to develop and implement safe work practices in their operating procedures. Two procedures, LMR 0016 and LMR 0009 make incorrect references for procedure use of safe work practices.

AOC 10-40 C.F.R. §68.73(b) Mechanical Integrity

Written procedures. The owner or operator shall establish and implement written procedures to maintain the on-going integrity of process equipment.

VIIA failed to implement their written maintenance procedure, On-site Inspection and Maintenance Standard, for performing inspections and testing on piping circuits and equipment.

AOC 11-40 C.F.R. §68.73(d)(1) Mechanical Integrity

(d) Inspection and testing. (1) Inspections and tests shall be performed on process equipment.

VIIA failed to provide inspection and testing documentation for pressure relief devices and safety instrument systems. PSVs and SISs had missing preventative maintenance inspections according to the process design and designated inspection frequency.

AOC 12-40 C.F.R. §68.73(d)(2) Mechanical Integrity

(2) Inspection and testing procedures shall follow recognized and generally accepted good engineering practices.

API 510, 6.5.2.1 (b) states “At the discretion of the inspector, an on-stream inspection may be substituted for the internal inspection in the following situations: b) when a vessel entry for

internal inspections is physically possible and all of the following conditions are met: 2) the vessel remaining life is greater than 10 years”

VIIA failed to perform an internal inspection of TK-6210 in 2024, as required by API 510. VIIA also failed to document or record the remaining life determination, required thickness, or the long- and short-term corrosion rate for TK-6210 and TK-6220 after completing UT testing during the 2024 on-stream inspection in lieu of the 10-year internal inspection.

AOC 13-40 C.F.R. §68.73(d)(4) Mechanical Integrity

(4) The owner or operator shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

VIIA failed to document a description of the testing and inspection performed during the “12M, Tank Instrumentation and Valve Complete PM Route”, and failed to include the results of the inspection. The work order form VIIA provided does not describe the inspection, nor does it provide information on the results of the inspection for each piece of equipment. The following pressure vessels did not have a description or results for some or all of the inspected safety critical equipment: TK-6210, 6220, 6230, 2142, 2143, 2145, 2301, and 2339.

AOC 14 - 40 C.F.R. §68.73(e) Mechanical Integrity

(e)Equipment deficiencies. The owner or operator shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in § 68.65) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

VIIA failed to correct deficiencies in safety critical equipment which were outside of acceptable limits. Thirteen (13) corrective maintenance work orders describe leaking and faulty safety critical equipment which had no completion date and been marked rejected under status.

AOC 15-40 C.F.R. §68.73(f)(2) Mechanical Integrity

(f) Quality assurance. (2) Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions.

VIIA failed to appropriately check and inspect pressure relief valves to ensure that they were consistent with design specifications and the manufacturer’s instructions.

AOC 16- 40 C.F.R. §68.75(a)&(d) Management of Change

(a)The owner or operator shall establish and implement written procedures to manage changes (except for “replacements in kind”) to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process.

(d) If a change covered by this paragraph results in a change in the process safety information required by § 68.65 of this part, such information shall be updated accordingly.

VIIA failed to initiate an MOC before the removal of PSV-3533-100 from piping circuit 181002, which changed the relief system, design basis, and P&ID. VIIA failed to provide documentation or calculations to justify these changes and confirm that the removal of this pressure safety device could be safely implemented.

AOC 17- 40 C.F.R. §68.75(c) Management of Change

Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to start-up of the process or affected part of the process.

VIIA failed to provide documentation that employees affected by the management of change were informed of and trained in changes prior to start-up of the process.

AOC 18- 40 C.F.R. §68.75(d) Management of Change

If a change covered by this paragraph results in a change in the process safety information required by § 68.65 of this part, such information shall be updated accordingly.

VIIA failed to update the process safety information for MOC SCO-20210020. P&ID 1225759-01A for the Storage/Pump Area Crude Butadiene Pipeline was attached but was not updated or redlined to show the change.

AOC 19- 40 C.F.R. §68.77(a) Pre-Startup Review

The owner or operator shall perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information.

VIIA failed to perform a pre-startup safety review for MOC-SCO20210020 when there was a change in process safety information. The FI&E Pre-startup Review Checklist was attached to the MOC. However, the checklist was blank and not used.

AOC 20- 40 C.F.R. §68.77(b) Pre-Startup Review

The pre-startup safety review shall confirm that prior to the introduction of regulated substances to a process:

- 1) Construction and equipment is in accordance with design specifications;**
- 2) Safety, operating, maintenance, and emergency procedures are in place and are adequate;**
- 3) Training of each employee involved in operating a process has been completed.**

VIIA failed to include updated procedures, training documentation and documentation that construction and equipment is in accordance with design specifications for MOC SCO-20210002. Some of the PSSR's were completed after the MOC was closed.

AOC 21- 40 C.F.R. §68.79(a) Compliance Audits

The owner or operator shall certify that they have evaluated compliance with the provisions of this subpart, at least every three years to verify that the procedures and practices developed under this subpart are adequate and are being followed. When required as set forth in paragraph (f) of this section, the compliance audit shall be a third-party audit.

VIIA failed to conduct a compliance audit every three years. A compliance audit evaluating compliance with the provisions of this subpart was conducted in 2024. However, a compliance audit was not conducted in 2021.

AOC 22- 40 C.F.R. §68.83(f) Employee Participation

The owner or operator shall provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under this part.

VIIA failed to provide access of the 2018 PHA and corresponding documentation to employees. This finding was also noted in the 2024 RMP compliance audit.

AOC 23- 40 C.F.R. §68.85(b) Hot Work Permits

The permit shall document that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations; it shall indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed.

1910.252(a)(2)(ii) Suitable fire extinguishing equipment shall be maintained in a state of readiness for instant use.

1910.252(a)(2)(iii)(B) Fire watchers shall have fire extinguishing equipment readily available and be trained in its use. They shall be familiar with facilities for sounding an alarm in the event of a fire. They shall watch for fires in all exposed areas, try to extinguish them only when obviously within the capacity of the equipment available, or otherwise sound the alarm. A fire watch shall be maintained for at least a half hour after completion of welding or cutting operations to detect and extinguish possible smoldering fires.

VIIA failed to document fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning hot work operations.

AOC 24- 40 C.F.R. §68.95(a) Emergency Response Program

The owner or operator shall develop and implement an emergency response program for the purpose of protecting public health and the environment

VIIA failed to develop and implement an emergency response program for the purpose of protecting public health and the environment.

AOC 25- 40 C.F.R. §68.95(a)(2) Emergency Response Program

(a) The owner or operator shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements: (2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance.

VIIA failed to manage the deluge system appropriately.

AOC 26- 40 C.F.R. §68.195(b) Required Corrections

Emergency contact information—Beginning June 21, 2004, within one month of any change in the emergency contact information required under § 68.160(b)(6), the owner or operator shall submit a correction of that information.

VIIA failed to update the emergency contact information within one month of the change. However, the facility was able to submit a correction during the time of the inspection.

Closing Conference

EPA Region 6 inspectors Michael Spillman, and I, Kristen Latiolais conducted a closing conference at Vopak Terminal St. Charles at 10:30 AM CST on August 15, 2025, for the inspection. During the closing conference, Michael Spillman, and I reviewed the eighteen (18) Areas of Concern noted during the inspection, fielded questions from facility personnel, and provided information about the next steps in the inspection process. Additionally, AOCs 2, and 10 through 26 were determined after the conclusion of the inspection and were not included in the closing conference.

Section IV – FOLLOW UP

No additional information was requested or received by EPA after exiting the Facility on August 15, 2025.

Section V – LIST OF APPENDICES

All Appendices are classified as Confidential Business Information (CBI) or Sensitive Appendices and are not included in the online published inspection report. CBI Appendices include documents that are claimed CBI by the facility. Sensitive Appendices may include appendices that will not be posted but are not explicitly CBI. These could include Personally Identifiable Information (PII) or Homeland Security sensitive information.

Appendix 1 – Opening and closing conference sign-in sheets.

Appendix 2- LMR 0096 Process Safety Management Program Policy

Appendix 3- Procedures VTSC 0155, VTSC 0166, VTSC 1364, VTSC 1403, LMR 0016 & LMR 0009