

Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	February 25 – 27, 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:	Southern Ionics Incorporated	
Facility Name:	Southern Ionics, Incorporated - Pasadena Facility	
Facility Physical Location:	12901 Bay Park Road	
(city, state, zip code)	Pasadena, Texas 77507	
Mailing address:	579 Commerce Street, P.O. Drawer 1217	
(city, state, zip code)	West Point, Mississippi 39773	
County/Parish:	Clay County	
Facility Contact	Joey Boyd, Plant Manager	(281) 474-4826
	jboyd@southernionics.com	
RMP ID:	1000 0022 3858	
Identification/Permit Number:	N/A	
FRS:	110070358271	
NAICS:	325180 – Other Basic Inorganic Chemical Manufacturing	
Personnel participating in inspection:		
Charese Simpson	EPA Region 6	Lead Inspector
Julia Torres	EPA Region 6	Inspector
Joey Boyd	Southern Ionics – Pasadena	Plant Manager
John Craig	Southern Ionics Corporate	Manager
Joey Thibodeaux	Southern Ionics	Production Coordinator
Curt Huffman	Southern Ionics – Pasadena	Operations Manager
George Hogancamp	Southern Ionics Corporate	Environmental Manager
Belinda Dunkel	Southern Ionics – Pasadena	Admin. Support
Chandler Faciane	Southern Ionics – Pasadena	Process Engineer
Kirk Wilson	Southern Ionics – Pasadena	Maintenance Supervisor
Susan Miller	Southern Ionics – Pasadena	Office Administrator
EPA Lead Inspector Signature/Date	<i>Charese Simpson</i> Charese Simpson	4.29.2025 Date
Supervisor Signature/Date	<i>Kayla Buchanan</i> Kayla Buchanan	4/29/2025 Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

The United States Environmental Protection Agency (EPA) Region 6 Inspectors Charese Simpson and Julia Torres (“we”) arrived at the Southern Ionics facility at 9:00 AM on Tuesday, February 25, 2025, for an announced inspection. We met with Joey Boyd (Plant Manager) and other Southern Ionics employees for an opening meeting. I, Charese Simpson, presented my credentials and informed Southern Ionics Incorporated 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. Southern Ionics Risk Management Plan (RMP) is listed as a Program Level Three (3) facility. 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 Southern Ionics is a non-union facility.

FACILITY DESCRIPTION

Southern Ionics is located at 12901 Bay Park Road Pasadena, Texas 77507. Southern Ionics’ site is in Harris County and operates an inorganic chemicals manufacturing plant.

Southern Ionics’s regulated process includes two Program Level 3 RMP-Covered Processes: Ammonium Hydroxide Toting Operation and Anhydrous Ammonia Storage/Ammonium Hydroxide Manufacturing. The facility handles two regulate toxic chemicals under the Risk Management Program: Ammonia (anhydrous) and ammonium hydroxide. Southern Ionics has approximately 66 full-time employees that work at the site, in addition to independent contractors that work at the plant.

Section II – OBSERVATIONS

On Wednesday, February 26, 2025, EPA inspectors were accompanied by Joey Boyd, Kirk Wilson, and other Southern Ionics representatives to conduct a tour of the site, specifically the Anhydrous Ammonia Storage/Ammonium Hydroxide Manufacturing and Ammonium Hydroxide Toting areas. EPA observed the covered processes, emergency equipment, hot work permits, and the control room. Southern Ionics operators can access standard operating procedures (SOPs) electronically. Prior to the tour, EPA was provided with piping and instrumentation diagrams (P&IDs) of the process unit that assisted in the tour.

Subpart A – General

40 C.F.R. § 68.10 Applicability – Southern Ionics is subject to the Occupational Safety and Health Administration (OSHA) process safety management (PSM) standard, 29 C.F.R. § 1910.119, and has two Program Level 3 processes under OSHA PSM.

40 C.F.R. § 68.12 General Requirements– EPA reviewed Southern Ionics RMP registration submitted on October 27, 2021. It listed the toxic chemical(s) for its Program 3 processes.

40 C.F.R. § 68.15 Management – Southern Ionics developed a management system to oversee the implementation of risk management program elements, documented the positions for implementing

the individual requirements of the risk management program, and defined the lines of authority using its RMP Management Organizational Chart, which lists responsibilities.

Subpart B – Hazard Assessment

40 C.F.R. § 68.20 Applicability – Southern Ionics has two Program Level 3 processes subject to this subpart. Southern Ionics is required to prepare an off-site consequence analysis and complete the five-year accident history.

40 C.F.R. § 68.22 Off-Site Consequence Analysis Parameters – Southern Ionics used parameters required in this part to calculate toxic worst-case and alternative release scenarios. Southern Ionics utilizes RMP*Comp™ as the technique for modeling the release scenarios. For the worst-case and alternative case scenarios involving the toxic chemicals, 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 Worse-Case Release Scenario Analysis – During the inspection, EPA reviewed documentation from Southern Ionics regarding the worst-case release scenario analysis for their toxic process. This analysis used RMP*Comp™ which is a dispersion modeling suite that includes toxic dispersion, fire, and explosion models. Southern Ionics analyzed and reported in the RMP their worst-case release scenario, estimated to create the greatest distance to endpoint, and resulting from an accidental release of a regulated toxic substance from a covered process under worst-case conditions. The worst-case release quantity was determined by the greatest amount held in a single vessel, considering administrative controls that limit the maximum quantity released.

40 C.F.R. § 68.28 Alternative Release Scenario Analysis – Southern Ionics identified and documented the alternative release scenario to represent all toxic substances held in a covered process, using a scenario that is likely to occur. Southern Ionics utilizes RMP*Comp™. They maintain aerial photos showing the alternative release scenario endpoint distance radius and a circle centered on the approximate location of the unit that is considered in the alternative release scenario; therefore, meeting the requirements of the regulation.

40 C.F.R. § 68.30 Defining Off-Site Impacts - Population – Southern Ionics used the most current Census Bureau population data and the distances to endpoints, as specified in the regulation, to calculate the population numbers reported in their RMP.

40 C.F.R. § 68.33 Defining Off-Site Impacts - Environment – Southern Ionics identified environmental receptors in the distance to the endpoint or in the vicinity of the facility, as appropriate, in the area maps used for the modeling.

40 C.F.R. § 68.36 Review and Update – Southern Ionics reviewed and updated the off-site consequence analyses at least once every five years, as required by this subpart.

40 C.F.R. § 68.39 Documentation – Southern Ionics maintained records of the off-site consequence analyses, in accordance with this subpart. These records included:

- documentation of vessels or pipelines;
- substances selected for worse case and alternative release scenarios;

- documentation of estimated quantity released, release rate, and duration of release;
- methodology used to determine distance to endpoint; and,
- data used to estimate population and environmental receptors.

40 C.F.R. § 68.42 Five-year accident history – EPA reviewed Southern Ionics five-year accident history and OSHA logs for 2022 – 2024. EPA did not identify accidental releases from the covered process that resulted in one or more of the following: on-site deaths, injuries, significant property damage on-site, known off-site deaths, evacuations, sheltering in place, property damage, or environmental damage in its accident history.

Subpart D – Program 3 Prevention Program

40 C.F.R. § 68.65 Process Safety Information – Southern Ionics compiled written process safety information, which included 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. Safety Data Sheets (SDSs) for the process chemicals were provided and detailed process safety information was provided that contained the following data for the hazards of the substances used: 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. EPA reviewed documentation concerning the technology of the process, which included a block flow diagram, process chemistry, maximum intended inventory, safe upper and lower limits for such items as: temperatures, pressures, flows or compositions, and an evaluation of the consequences of deviation for each covered process. EPA reviewed documentation pertaining to the equipment of the process, including materials of construction, piping and instrumentation diagrams (P&IDs), electrical classification, relief system design and design basis, ventilation system design, design codes and standards employed, material and energy balances, and safety systems.

40 C.F.R. § 68.67 Process hazard analysis (PHA) – Southern Ionics has a comprehensive program to help ensure that hazards associated with the various processes are identified and controlled. Within this program, each covered process is systematically examined to identify hazards and ensure that adequate controls are in place to manage these hazards. Southern Ionics primarily uses the hazard and operability (HAZOP) and Layer of Protection Analysis (LOPA) techniques to perform these evaluations. The analyses are conducted using a team of people who have operating, maintenance, and engineering expertise. The PHA was performed by a team with expertise in engineering and process operations. The team included at least one employee who had experience and knowledge that was specific to the process being evaluated and one employee who was knowledgeable in the specific PHA methodology used.

EPA reviewed Southern Ionics 2020 PHA for Ammonia Storage and Aqua Ammonia Production/Distribution and the facility siting checklist. The PHA addressed the hazards of the process and included: identification of any incident that had a likely potential for catastrophic consequences; engineering and administrative controls applicable to hazards and their interrelationships; human factors; and an evaluation of a range of the possible safety and health effects of failed controls. However, the PHA failed to properly address stationary source siting related to toxic releases and occupied buildings that are deemed as shelter-in-place (SIP). Currently, there are 3 shelter-in-place areas that are SIPs (SDS control room, maintenance shop, and the main office building). It was noted during the inspection that there was no facility siting studies conducted to deem these buildings as safe places in the event of an accidental release/incident. In addition, there were no consequence modeling to

evaluate toxic gas dispersion risks. Southern Ionics did indicate that a facility siting study is currently being conducted. [AOC #1 - 40 C.F.R. § 68.67(c)(5)]. Without a proper facility siting analysis and consequence modeling, individuals could be exposed to toxic, hazardous chemicals (i.e., ammonia).

Southern Ionics currently utilizes an excel spreadsheet to track and promptly address the PHA team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions. During the inspection, EPA reviewed the facility's excel spreadsheet that contained action items from the PHA. The action items (N1D1.1 through N15D19.1) were deemed as "closed", however, Southern Ionics failed to indicate a completion date to ensure action items were consistently tracked to completion [AOC #2 - 40 C.F.R. § 68.67(e)].

40 C.F.R. § 68.69 Operating Procedures – Southern Ionics developed and implemented written operating procedures that provide instructions or steps for conducting activities associated with each covered process, consistent with the safety information. The standard operating procedures (SOPs) EPA reviewed addressed: the steps for each operating phase (initial and normal startup, normal operations, temporary operations, emergency operation and shutdown, normal shutdown, and startup following a turnaround or after emergency shutdown); the consequences of deviation and mechanisms to correct and/or avoid deviation; safety and health considerations; the properties of, and hazards presented by, chemicals used in the process; the precautions necessary to prevent exposure; quality control for raw materials; and, the safety systems and their functions. Operating procedures are accessible to process operators and other employees electronically through SharePoint. In addition, hard copies of SOPs are kept in the control room and are updated whenever a change is made. During the inspection, EPA reviewed Southern Ionics safe work procedures, including lock out/tag out procedures and confined space entry procedures. The company utilizes safe work permits, which are required prior to any contractor entering a confined space. Southern Ionics is required to annually certify that operating procedures are current and accurate. EPA reviewed Southern Ionics operating procedure certifications which were kept in the Sharepoint site. The operating procedures and certifications were current and accurate.

40 C.F.R. § 68.71 Training – EPA reviewed Southern Ionics training program procedure and employee training records. The facility's training program ensured that each employee presently operating the covered process, and each employee newly assigned to a covered process are trained or tested to qualify as competent in an overview of the process and in the operating procedures that pertain to their duties. In addition, Southern Ionics operators must go through a training program, which includes the following: on- the-job training, a testing process that is written and computer-based, and a series of field demonstration tests. The "SafetyAmp" database is Southern Ionics online system to house training documents and certifications. EPA reviewed several individuals training documents. During the inspection, some operators were missing PSM/RMP, Ammonia Process Loader, and Ammonia Process Operator Initial Trainings, *see table 1 below* [AOC #3 - 40 C.F.R. § 68.71(a)(1)]. Southern Ionics is required to provide refresher training every three years, and more often, if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. Southern Ionics failed to provide refresher training to operators. Some operators were missing their "Ammonia Process Operator", "Aqua Ammonia Operator", and "Ammonia Loader" refresher trainings, *see table 2 below* [AOC #4 - 40 C.F.R. § 68.71(b)]. In addition,

there were several operators that were missing documentation for the means of verification that they understood the training for PSM/RMP training [AOC #5 – 40 C.F.R. § 68.71(c)].

40 C.F.R. § 68.73 Mechanical Integrity – EPA reviewed the written procedures Southern Ionics established to maintain the ongoing integrity of its process equipment. EPA spoke with Southern Ionics Maintenance Supervisor who explained the facility’s mechanical integrity program and procedures. EPA reviewed the facility’s inspection records for several vessels, pressure relief valves, and other RMP covered equipment. Southern Ionics failed to inspect their Pressure Safety Valves (PSVs) in August 2024: PSV-1005B and PSV-1007 according to “inspection form #8”. According to Southern Ionics mechanical integrity procedure, PSVs are to be maintained and inspected monthly. In addition, the Anhydrous and Aqua Ammonia Tank was not visually inspected according to the “Weekly Anhydrous and Aqua Ammonia Tank” inspection form #3. The inspection was not completed for the week of December 27, 2024, initially. However, during the inspection, Southern Ionics filled in the tank levels and pressures on inspection form #3 for the week of December 27, 2024 [AOC #6 - 40 C.F.R. § 68.73(b)]. During the inspection, EPA requested to review the ammonia detectors/sensors calibrations; however, Southern Ionics failed to provide the ammonia detectors calibrations or testing [AOC #7 - 40 C.F.R. § 68.73(d)(1)]. Ammonia detectors serve as a critical safety control because they monitor for hazardous ammonia leaks to prevent toxic exposure and trigger alarms and automated safety responses, such as ventilation or system shutdowns. Therefore, calibration or testing must be performed at manufacturer-recommended intervals, and records must be maintained.

Southern Ionics uses a third-party contractor who conducts the facility’s mechanical integrity inspection and testing. The facility is currently transitioning to house records of scheduled, completed, and future inspections, preventative maintenance tasks, and work orders to the “SafetyAmp” database.

40 C.F.R. § 68.75 Management of Change (MOC) – EPA reviewed Southern Ionics MOC procedure. The written MOC procedure assured the facility managed changes to process chemicals, technology, equipment, procedures, and changes to stationary sources that effect a covered process. The procedure assured that the following considerations were addressed prior to any change: technical basis for change, impact of change on safety and health, modifications to operating procedures, necessary time period for the change, and authorization requirements for a proposed change. Southern Ionics failed to assure a necessary time period for a change. Southern Ionics MOCs did not indicate a necessary time period (or a due date) for a change, which is reflected in the 2025 MOCs documented in SafetyAmp and the MOC status log [AOC #8 – 40 C.F.R. § 68.75(b)(4)]. After EPA reviewed several MOCs, we followed through to ensure Southern Ionics employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change were trained prior to start up.

40 C.F.R. § 68.77 Pre-startup Safety Review (PSSR) – EPA reviewed Southern Ionics selected pre-startup safety reviews for the associated MOCs. The PSSRs documented that, when the facility installed a new stationary source, or significantly modified an existing source, a review was conducted prior to the introduction of a regulated substance into the process, the construction and equipment design were completed in accordance with design specifications, and the required safety, operating, and maintenance and emergency procedures are in place.

40 C.F.R. § 68.79 Compliance Audits – Southern Ionics provided their two most recent certified RMP Compliance Audits conducted in May 2021 and May 2024. Both compliance audits were conducted by at least one person knowledgeable in the process. The audit team consists of Southern Ionics employees. When conducting its RMP compliance audits, Southern Ionics uses procedural reviews, interviews, field

verifications, and a representative sampling of records which provided insight into the adequacy of the design and implementation of the program relative to the requirements of EPA's RMP rule and OSHA PSM standards. Southern Ionics failed to provide their 2021 compliance audit certification [**AOC #9 - 40 C.F.R. § 68.79(a)**]. In addition, Southern Ionics is required to promptly determine and document an appropriate response to each of the findings of the compliance audit. There is one repeat finding (i.e. opportunities for improvement) from the 2021 Compliance Audit that is in the 2024 Compliance Audit. The repeat finding was not closed promptly [**AOC #10 - 40 C.F.R. § 68.79(d)**].

40 C.F.R. § 68.81 Incident Investigation – Southern Ionics provided a list of all incident investigations that occurred within the past five years. Of those reviewed, the incident investigation team consisted of at least one person knowledgeable in the process involved. Southern Ionics has an incident management standard work practice procedure for both near-miss and incident reporting. Southern Ionics investigated each incident that resulted in, or could reasonably have resulted in, a catastrophic release of a regulated substance.

40 C.F.R. § 68.83 Employee Participation – Southern Ionics developed a written plan of action regarding the implementation of the employee participation required by this section, which is integrated into the program elements. Southern Ionics written plan describes how they consult with employees on the performance and development of process hazard analyses, and on the development of the other elements of process safety management required under the rule. The action plan provides employees access to process hazard analyses and to all other information that must be developed under this rule.

40 C.F.R. § 68.85 Hot Work Permit – Southern Ionics provided their hot work and safe work procedure that detailed guidance for hot work/safe work activities at the site. The facility discussed the process for conducting hot work onsite. EPA requested and reviewed a sample of hot work permits. There were no areas of concern noted from the review and follow up on implementation of hot work permits.

40 C.F.R. § 68.87 Contractors – EPA reviewed Southern Ionics contractor procedure. Southern Ionics utilizes the ISNetWorld contractor database to evaluate information regarding a contractor's safety performance and programs. The program requires each contractor to be evaluated based on the risk category of their work. The information and documentation that is housed in ISNetWorld for each contractor will be used to evaluate the contractor's safety performance and programs. All contractors that will perform work at the facility shall receive and maintain the following training prior to work: OSHA Training, Southern Ionics Site Specific Training, Unit Specific Training, and Contractor Specific Training. Contractors are also informed of known potential hazards, provisions of the Emergency Action Plan (EAP), and health and safety procedures through the work permit procedure. The Southern Ionics site implements safe work practices consistent with 40 C.F.R. § 68.69(d), to control the entrance and exit of the contract employees via the security gate and badging system.

Subpart E – Emergency Response

40 C.F.R. § 68.90 Applicability – Southern Ionics is designated as a “non-responding” stationary source in case of an accidental release of a regulated substance; therefore, the facility shall comply with the requirements of 40 C.F.R. § 68.95.

40 C.F.R. § 68.93 Emergency Response Coordination Activities – Southern Ionics coordinates with Pasadena Fire Department and other local emergency planning and response organizations. At the time of the inspection, Southern Ionics provided documentation of coordination with local authorities that

included the names of the individuals involved, their contact information, and the nature of the coordination for the recent coordination activities that took place.

40 C.F.R. § 68.96 Emergency Response Exercises – As part of coordination with local emergency response officials required by §68.93, Southern Ionics consulted with officials to establish an appropriate frequency for field exercises.

Subpart G – Risk Management Plan

40 C.F.R. § 68.190 Updates – Southern Ionics RMP was re-submitted on October 27, 2021.

40 C.F.R. § 68.195 Required corrections – Southern Ionics next RMP registration re-submission is due by October 27, 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 deadline.

Section III – AREAS OF CONCERN

AOC 1 – 40 C.F.R § 68.67(c)(5) Process Hazard Analysis

“(c) The process hazard analysis shall address: (5) Stationary source siting.”

Southern Ionics PHA failed to properly address stationary source siting related to toxic releases and occupied buildings that are deemed as shelter-in-place (SIP). Currently, there are 3 shelter-in-place areas that are SIPs (SDS control room, maintenance shop, and the main office building). It was noted during the inspection that there was no facility siting studies conducted to deem these buildings as safe places in the event of an accidental release/incident. In addition, there were no consequence modeling to evaluate toxic gas dispersion risks.

AOC 2 – 40 C.F.R § 68.67(e) Process Hazard Analysis

“(e) The owner or operator shall establish a system to promptly address the team’s findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.”

During the inspection, EPA reviewed the facility’s excel spreadsheet that contained actions items from the PHA. The action items (N1D1.1 through N15D19.1) were deemed as “closed”, however, Southern Ionics failed to indicate a completion date to ensure action items were consistently tracked to completion.

AOC 3 – 40 C.F.R. § 68.71(a)(1) Training

“(a) Initial training. (1) Each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in § 68.69. The training shall include emphasis on

the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks."

Southern Ionics failed to provide initial training. Some operators were missing PSM/RMP, Ammonia Process Loader, and Ammonia Process Operator Initial Trainings.

Table 1.

Operator	Notes
DF	Missing initial training for "Ammonia Process Operator".
JG	Missing initial training for "Ammonia Process Operator".
WR	Missing initial training for "Ammonia Process Loader".
CG	Missing initial training for PSM/RMP.
LW	Missing initial training for PSM/RMP.
SR	Missing initial training for PSM/RMP.

AOC 4 – 40 C.F.R § 68.71(b) Training

"(b) Refresher training. Refresher training shall be provided at least every three years, and more often, if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training."

Southern Ionics failed to provide refresher training. Some operators were missing their "Ammonia Process Operator", "Aqua Ammonia Operator", and "Ammonia Loader" refresher trainings.

Table 2.

Operator	Notes
AS	No refresher training for "Aqua Ammonia Operator" for the past 6 years. Initial training was completed on 5/21/2018.
JG	No refresher training for "Ammonia Process Operator" for the past 3 years.
JF	No refresher trainings for "Ammonia Process Operator" and "Ammonia Loader" for the past 3 years.

AOC 5 – 40 C.F.R § 68.71(c) Training

“(c) Training documentation. The owner or operator shall ascertain that each employee involved in operating a process has received and understood the training required by this paragraph. The owner or operator shall prepare a record which contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training.”

Southern Ionics failed to provide documentation for the means of verification that operators understood the training for PSM/RMP training.

AOC 6 – 40 C.F.R § 68.73(b) Mechanical Integrity

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

Southern Ionics failed to inspect their Pressure Safety Valves (PSVs) in August 2024: PSV-1005B and PSV-1007. According to Southern Ionics mechanical integrity procedure, PSVs are to be maintained and inspected monthly. In addition, the Anhydrous and Aqua Ammonia Tanks were not visually inspected according to the “Weekly Anhydrous and Aqua Ammonia Tank” inspection form #3. The inspection was not completed for the week of December 27, 2024, initially. However, during the inspection, Southern Ionics filled in the tank levels and pressures on inspection form #3 for the week of December 27, 2024.

AOC 7 – 40 C.F.R § 68.73(d)(1) Mechanical Integrity

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

During the inspection, EPA requested to review the ammonia detectors calibrations. However, Southern Ionics failed to provide the ammonia detectors calibrations or testing.

AOC 8 – 40 C.F.R § 68.75(b)(4) Management of Change

“(b) The procedures shall assure that the following considerations are addressed prior to any change: (4) Necessary time period for the change.”

Southern Ionics failed to include a time period for when a change is supposed to be made. The MOC procedure does not indicate a time period (or a due date) which is reflected in the 2025 MOCs documented in SafetyAmp.

AOC 9 – 40 C.F.R § 68.79(a) Compliance Audits

“(a) 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 procedures and practices developed under this subpart are adequate and are being followed.”

Southern Ionics failed to provide their 2021 compliance audit certification.

AOC 10 – 40 C.F.R § 68.79(d) Compliance Audits

“(d) 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.”

Southern Ionics is required to promptly determine and document an appropriate response to each of the findings of the compliance audit. There is one repeat finding (i.e. opportunities for improvement) from the 2021 Compliance Audit that is in the 2024 Compliance Audit. The repeat finding was not closed promptly.

Closing Meeting – EPA conducted a closing conference at Southern Ionics on February 27, 2025. During the closing conference, I (Charese Simpson) reviewed the Areas of Concern noted during the inspection.

Section IV – FOLLOW UP

Several documents were received by EPA after exiting the Facility on February 27, 2025.

Section V – LIST OF APPENDICES

There are no photos, videos, or other appendices to this report.