

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	August 23-26, 2022	
Media Program:	Air	
Regulatory Program(s)	Clean Air Act Section 112(r) and 40 C.F.R. Part 68 Chemical Accident Prevention Provisions (Risk Management Plan)	
Company Name:	Honeywell International Inc.	
Facility Name:	Honeywell International Inc. Baton Rouge Plant	
Facility Physical Location:	2966 Lupine Ave	
(city, state, zip code)	Baton Rouge, LA 70805	
Mailing address:	2966 Lupine Ave	
(city, state, zip code)	Baton Rouge, LA 70805	
County/Parish:	East Baton Rouge Parish	
Facility Phone Number	(225) 383-5222	
Facility Contact:	Nicholas Pizzolato	Health and Safety Manager
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FRS Number:	110003266849	
Identification/Permit Number:	N/A	
Media Identifier Number:	RMP ID: 1000 0006 1069	
NAICS:	325199 (All Other Basic Organic Chemical Manufacturing)	
SIC:	2869	
Personnel participating in inspection:		
Justin McDowell	US EPA Region 6	Inspector
Keri Meyers	LDEQ	Inspector
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Mark Bankston	Honeywell Baton Rouge	Union (Local #5)
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EPA Lead Inspector Signature/Date		
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Supervisor Signature/Date		
	Samuel Tates	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

I, United States Environmental Protection Agency (EPA) Region 6 inspector Justin McDowell, and the Louisiana Department of Environmental Quality (LDEQ) inspectors Keri Meyers, Jamie Vicknair, and Glen Jenkins, arrived at the Honeywell International Inc. Baton Rouge Plant (Honeywell BR) at 8:30 AM on Tuesday, August 23, 2022, for an announced inspection. I met with Ryan Varnado (Plant Manager), Nick Pizzolato (HSE Manager), Jason Ayres (Sr. HSE Manager), Joshua dos Ramos (Maintenance Manager), Greg Panger (HR Manager) and Michael Noskeau (Technical Manager) for an opening meeting. I presented my credentials and informed Honeywell BR 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) and the Chemical Accident Prevention Provisions in 40 C.F.R. Part 68 and the General Duty Clause. Honeywell BR's Risk Management Plan (RMP) is listed as a Program Level Three (3), Title V facility. Mark Bankston (Union Local #5) is an employee representative pursuant to section 112(r)(6)(L) of the CAA who participated in this inspection.

FACILITY DESCRIPTION

The Honeywell Baton Rouge Fluorine Products facility is operated in a large petrochemical manufacturing district in northern Baton Rouge, LA. The facility is a member of the Performance Materials and Technologies Strategic Business Unit of Honeywell International Inc. Honeywell International, Inc. (Honeywell.com) is the parent company of Honeywell Performance Materials and Technologies, and is a Fortune 100 diversified technology and manufacturing leader serving customers worldwide with: aerospace products and services; control technologies for buildings, homes and industry; automotive products; turbochargers; and, specialty materials. The facility produces fluorinated organic chemicals used in the refrigerant and specialty chemicals markets. Honeywell BR uses or produces five chemicals identified on the EPA list of highly hazardous chemicals, and the on-site storage and use exceeds the RMP Rules specified threshold quantities. These chemicals include chlorine, hydrogen fluoride (HF), hydrochloric acid (HCl), difluoroethane and trifluorochloroethylene. The RMP-listed chemicals, along with non-RMP chemicals manufactured or consumed, are stored in a variety of tanks and vessels specially designed for the individual chemicals and the various processing steps. This manned facility operates 24 hours a day, 7 days a week and employs approximately 140 full time employees, in addition to 110 nested (i.e. on-site dedicated) contractors.

Section II – OBSERVATIONS

On Wednesday August 24, 2022, the EPA and LDEQ inspectors were accompanied by Honeywell BR personnel to conduct a site tour of selected RMP covered processes. I toured the Chlorotrifluoroethylene (CTFE) and 1234ze units, which were the focus of this audit. In the CTFE-1113 unit, the EPA team observed many obstructions that make egress difficult and create challenges for working throughout the unit. Honeywell encourages discussion during weekly risk assessment meetings on the continued identification of hazards and safety concerns that may be present within the unit.

Subpart A – General

40 C.F.R. § 68.10 Applicability – Honeywell BR is the owner/operator of a stationary source that has more than a threshold quantity of two regulated toxic substances (hydrogen fluoride and chlorine) and regulated flammable mixtures in a covered process, as listed in 40 C.F.R. § 68.130; therefore, is subject to the Chemical Accident Prevention Provisions. Honeywell BR is classified under the North American Industrial Classification System (NAICS) code 325199 (All Other Basic Organic Chemical Manufacturing). Honeywell BR 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. § 68.10 Program Eligibility – Honeywell BR re-submitted an RMP registration voluntary update, under 40 C.F.R. § 68.190 on June 30, 2022. Honeywell BR's next registration re-submittal is due on June 30, 2027, 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.

40 C.F.R. § 68.12 General requirements – The re-submitted RMP plan requires the facility to: develop and implement a management system; conduct a hazard assessment; implement the prevention requirements of 40 C.F.R. § 68.65 - § 68.67; develop and implement an emergency response program; and, include the data elements from 40 C.F.R. § 68.175 in their RMP.

40 C.F.R. § 68.15 Management – Honeywell BR has developed a management system to oversee the implementation of the risk management program elements and provided an organizational chart that documents the lines of authority. The lines of authority are also listed on the facility's maturity planning document.

Subpart B – Hazard Assessment

40 C.F.R. § 68.20 Applicability – Honeywell BR has four Program Level 3 process subject to this subpart. The facility 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 (OCA) Parameters – Honeywell BR used RMP*Comp™ as the technique for modeling the release scenarios. For both the worst-case and alternative case scenarios involving toxics and flammables, 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 – Honeywell BR analyzed and reported in the RMP one worst-case release scenario for hydrogen fluoride, estimated to create the greatest distance to endpoint, and resulting from an accidental release from a covered process under worst-case conditions. Honeywell BR also reported one worst-case release scenario for trifluorochloroethylene, estimated to create the greatest distance to endpoint, resulting from an accidental release of a regulated flammable substance from a covered process under worst-case conditions.

40 C.F.R. § 68.28 Alternative Release Scenario Analysis – Honeywell BR identified and analyzed at least one alternative release scenario for each regulated toxic substance (chlorine and hydrogen fluoride) held in covered processes, and at least one alternative release scenario to represent all flammable substances held in covered processes (trifluorochloroethylene).

40 C.F.R. § 68.30 Defining Off-site Impacts - Population – The facility used the most recent Census data, estimated to two significant digits, in the OCA documentation. Honeywell BR used the MARPLOT mapping program to define the affected off-site population. However, the documentation did not describe how the facility estimated the population that would be affected in the distance to endpoint in each map for the different chemical release scenarios, based on a circle with the point of release at the center. The scenarios all used the same map [**Area of Concern (AOC) 1 – § 68.30 (a)**]

40 C.F.R. § 68.33 Defining Off-site Impacts - Environment – Honeywell BR has identified environmental receptors in the OCA, as determined by the distance to endpoint using methods such as local U.S. Geological Survey (U.S.G.S.) maps or any other data source containing U.S.G.S. data to identify environmental receptors.

40 C.F.R. § 68.36 Review and Update – Honeywell BR has reviewed and updated the off-site consequence analyses at least once every five years.

40 C.F.R. § 68.39 Documentation – For the worst-case scenario, a description of the specific vessel or pipeline and substance selected was not provided. The documentation only stated that worst case includes two identical storage tanks. [**AOC 2 – § 68.39 (a)**] For the worst-case and alternative release scenarios, the rationale for selection was not documented. [**AOC 3 – § 68.39 (b)**]

40 C.F.R. § 68.42 Five-year accident history – Honeywell BR has not reported any 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, injuries, 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 – Honeywell BR compiled 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 Safety Data Sheets (SDSs) for the process chemicals and final products (Genetron 1113, Solstice 1234ze (trans-1333 tetrafluoroprop-1-ene) and hydrogen fluoride. The SDSs detailed process safety information that includes the following data for the hazards of the substance 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. I reviewed documentation concerning the technology of the process, which included the process chemistry, a block flow diagram, maximum intended inventory, safe upper and lower limits for such parameters as temperature, pressure, flow, or composition, and an evaluation of the consequences of deviation. I 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 for pressure safety valve (PSV) systems, design codes and standards employed, material and energy balances, and safety systems (i.e., process interlocks and safety instrumentation systems).

40 C.F.R. § 68.67 Process hazard analysis (PHA) – Honeywell BR has performed initial PHAs that identified, evaluated, and controlled the hazards involved in the processes. The facility completes each RMP PHA based on the five-year cycle from the previous PHA date. The covered PHAs are divided into:

the 1233zd Unit (January 30, 2014, to January 23, 2019); the G-113/114 Process (January 15, 2016, to January 15, 2021); the G-1113 CTFE Process (April 29, 2016, to April 28, 2021); the Combustible Dust Survey (July 27, 2016, to April 29, 2021); HF Storage (August 9, 2016, to July 28, 2021); and the 1234ze Unit (January 13, 2017, to January 13, 2022). For the CTFE PHA, the facility uses the *What-If* methodology to determine and evaluate the hazards of the processes being analyzed. The 2016 CTFE PHA had several recommendations to *“Perform Layers of Protection Analysis (LOPA) to determine if Hazard and Operability Study (HAZOP) likelihood is appropriate.”* During the facility tour, I noted that the control room was located on the 2nd floor of a structure immediately adjacent to the process units. The PHA schedule states: *“A review of plant changes since the previous Facility Siting Study (also known as a Quantitative Risk Assessment or QRA) shall be conducted by the local leadership team to assess the need to revise the Facility Siting Study. The local review shall be approved by a qualified PMT PSM representative. When deemed necessary, the Facility Siting Study shall be revised by a qualified party.”* **[AOC 4 – § 68.67(c)(5)]** The PHAs reviewed were performed by a team with expertise in engineering and process operations as well as experience and knowledge specific to the process being evaluated. The 2016 1234ze and CTFE PHAs had action items that were still open or not completely promptly. (Action Items 347817, 347818, 347819, 347784, 347785, 347786, 347787 and 347788). **[AOC 5 – § 68.67(e)]** See Table 1. PHAs have been revalidated at least every five years after the completion of the initial or previous PHA. The facility has retained the PHA updates and revalidations for the life of each process.

Table 1

PHA	PHA #	Recommendation Summary	Status
1234ze (2016)	347818	[Workflow Number]: 4240 [Sev/BL*]: 1/3 [Study] 1234ze PHA Study (2016) [Recommendation]: Calculate heat loss from the hot oil relief devices through the outlet piping and catch tank to determine if enough material condenses to prevent the significant effects of the vapor cloud dispersing to the nearest occupied building...	In Progress
1234ze (2016)	347817	[Workflow Number]: 4239 [Sev/BL]: 2/3 [Study] 1234ze PHA Study (2016) [Recommendation]: Calculate heat loss from the hot oil relief devices through the outlet piping and catch tank to determine if enough material condenses to prevent the significant effects of the vapor cloud dispersing to the nearest occupied building...	Completed: 12/21/2021
1234ze (2016)	347819	[Workflow Number]: 4241 [Sev/BL]: 2/4 [Study] 1234ze PHA Study (2016) [Recommendation]: Calculate heat loss from the hot oil relief devices through the outlet piping and catch tank to determine if enough material condenses to prevent the significant effects of the vapor cloud dispersing to the nearest occupied building.	Completed: 12/21/2021
CTFE (2016)	347787	[Workflow Number]: 2600 [Sev/BL]: 2/3 [Study]: G-1113 PHA Study (2016) [Recommendation]: Implement ADLA recommendation (Proposed recommendation is to send RV-307/336 to new elevated and purged stack)	In Progress
CTFE (2016)	347788	[Workflow Number]: 2601 [Sev/BL]: 3/2 [Study]: G-1113 PHA Study (2016) [Recommendation]: Implement ADLA recommendation (Proposed recommendation is to send RV-307/336 to new elevated and purged stack)	In Progress
CTFE (2016)	347784	[Workflow Number]: 2689 [Sev/BL]: 1/4 [Study]: G-1113 PHA Study (2016) [Recommendation]: Two safeguard Credit(s) – Consider providing ROVs on both sides of the G-1113 ISO vapor equalization and	Completed: 12/1/2021

PHA	PHA #	Recommendation Summary	Status
		recovery hoses to close at SIL-2 reliability based on leak detection via ambient air monitors.	
CTFE (2016)	347785	[Workflow Number]: 2665 [Sev/BL]: 1/5 [Study]: G-1113 PHA Study (2016) [Recommendation]: Consider replacing LG-601 on the G-1113 Column Reboiler with a magnetic gauge that is rated for pressure at least as high as the reboiler is rated.	Completed: 12/22/2021
CTFE (2016)	347786	[Workflow Number]: 2717 [Sev/BL]: 2/3 [Study]: G-1113 PHA Study (2016) [Recommendation]: Consider revising ISO Loading checklist to require that the storage tank level check of load amount and the subsequent weight check at the truck scale be performed by independent operators AND provide a liquid detection instrument in the vent equalization line from the ISO back to the storage to alarm and alert board operator that the ISO has been overfilled with documented operator response.	Completed: 2/15/2022

*Sev/BL denotes a finding that is <define abbreviation>

40 C.F.R. § 68.69 Operating Procedures – Honeywell BR has developed and implemented written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and which addresses the required elements. Honeywell BR has also developed and implemented safe work practices to provide for the control of hazards during operations such as lockout/tagout and confined space entry. Operating procedures are maintained electronically in the facility's online document database. The procedures consisted of steps for each operating phase: initial startup; normal operations; temporary operations; emergency shutdown, including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner; emergency operations; normal shutdown; and, startup following a turnaround, or after an emergency shutdown. The following procedures were reviewed:

- HFC 245fa Feed Pumps I180PU-E and W, #PRC-ZUS-161 – Provide operator instructions for the safe and proper normal operation of the HFC 245fa feed pumps;
- Swapping HFC 245fa Feed Pumps I180PU-and W, #PRC-ZUS-162;
- Shut down the HFC 245fa Feed Pumps I180PU-E and W, #PRC-ZUS-175;
- Reactor D80RX/D89RX Normal Operation, #PRC-Zus-159 – Provide operator instruction for the safe and proper normal operation for the 1234ze Reactor, Rev. 3.0, Effective date 8/22/2022;
- Utilize the Baton Rouge Credited Administrative and Engineering Safeguards table (TBL-PSM170) to determine process safety critical systems established by PHA - Previous revisions: 1.0 – 8/15/14, 2.0 - 3/23/21 (revised per MOC 1773);
- Shut down the Vaporizer, Economizer, and Reactor, #PRC-ZUS-176, Rev. 3.0, Effective Date 8/22/2022 (Add 1234ze 2.0 Reactor and Economizer) - Previous revisions: 1.0 - 8/15/14, 2.0 - 11/21/19;
- Shut down the Hot Oil Heater Burner K90HE, #PRC-ZUS-171, Rev. 1.0, Effective Date 8/15/14;
- Lites Column System, #PRC-ZUS-145 – Provide operator instruction for the safe and proper normal operation of the Lites Column (D85CN), Rev. 2.0, Effective Date 8/22/2022 (update D85CN per MOC 1773), Rev. 1.0 - 8/15/14;
- Shut Down the Lites Column System, #PRC-ZUS-169, Rev. 2.0, effective 8/22/2022 (per MOC 1773), Rev. 1.0 - 8/15/14;
- 1234ze Unit Start Up Sequence, #PRC-ZUS-135, Rev. 2.0, Effective 7/26/22, Rev. 1.0 -8/15/14;

- 1234ze Controlled Extended Shut Down, #PRC-ZUS-243. Rev. 2.0, Effective 8/22/22 (revised per MOC 1773);
- Emergency Shutdown of the 1234ze Process, #PRC-ZUS-177 – To bring the plant down in a controlled manner for normal planned shutdown or any shutdown scenario identified in the control plan or during power outage, loss of network/DCS systems, or any other situation which the operator feels the plant cannot be safely operated. Contains an Emergency Operations section (6.4). Rev. 3.0, Effective 11/21/19, Rev. 1.0 - 8/15/14, Rev. 2.0 -10/2/18;
- Startup the Reactor Column Reboiler, #PRC-E13-281;
- Startup the Front End of G-1113, #PRC-E13-689;
- MPD G1113 – Startup – Reactor Column Equipment F03CN, #PRC-E13-244, Rev. 1.0 Effective 10/30/13;
- G-1113 Normal or Power Outage Shut Down Operations, #PRC-E13-051, Rev. 7.0 Effective 8/22/2022, Rev. 1.0 - 10/27/01;
- MPD G1113 – Emergency Shutdown – Flash Receiver System, #PRC-E13-582, Rev. 1.0 Effective 9/17/13. Shutdown responsibilities stated in Section 4.0 – Authority and Responsibilities;
- Clearing the G1234a Column Reboiler Draw Lines, PRC-E13-130, Rev. 1.0 Effective 2/13/06;
- Normal Operation of the G-1113 Flash Hold Tank, #PRC-E13-318, Rev. 2.0 Effective 1/31/20;
- Start up the Feed to Flash Recovery, #PRC-E13-113, Rev. 4.0 Effective 5/20/19;
- MPD G1113 – Start-up Operation, #PRC-E13-010, Used to start up after a shutdown (planned or unplanned). This procedure requires a G-1113 Pre-Startup Checklist (FRM-E13-201) each time a shut-down occurs, Rev. 1.0 Effective 10/17/16;
- CTFE Pre-Startup Checklist – PHA Credited Safeguard, #FRM-E13-201.

Honeywell BR failed to provide the 2021 annual certification for the MPD G1113 Operations. [AOC 6 – § 68.69(c)]

40 C.F.R. § 68.71 Training – Honeywell BR provided two training procedures: Multi-Products Fluorochemicals (MPF) Process Operator Learning Plan and Monomers Process Derivatives (MPD) Process Operator Learning Plan. Training in unit each consists of: classroom training and field exercises; documentation review, including procedures, control plans, tables, forms, etc.; and, unstructured field time where the trainee will focus on process line tracing, identifying equipment, and following process flow paths. All exams may have both a written and practical section. The practical section can consist of procedure demonstrations, field identification of equipment and process flows, or troubleshooting scenarios covered during training. Trainees are allowed to reattempt one failed exam with a score of less than 80% for each qualification area. Two failures of the same exam results in disqualification. Recertification is required every three years, and consists of a review of the process steps, flow diagrams, hazardous materials involved, operating procedures, plant safety and health considerations, plant safety systems and functions, safe work practices, and PHA credited safeguards. Recertification includes a comprehensive exam similar to the initial qualification exam. The EPA team requested training records for 10 operators: Table 2 provides examples of the scope of operator training for several processes.

Table 2

Operator Training Levels Summary Chart
General Technician – 3 weeks to complete. Covers Documentum and procedures, BR Plant Safety Procedures, BR Plant Environmental Procedures, Utilities, MPF Common Systems, Plant Safety Systems and Functions/PHA Credited Safeguards, Maintenance Excellence, Process Safety Management, SAP, Basic Operator Responsibilities.

1233zd Unit – 8 weeks to complete. Process Overview, 1233zd General Safety Procedures, Feed Systems, Reaction, Low Pressure System, Product Purification, Troubleshooting, Standard Work.
G-113/G-114 Front End – 7 weeks to complete. Process Overview, G-113 General Safety Procedures, Feed Systems, Reaction, Low Pressure System, Troubleshooting, Standard Work.
G-113/G-114 Back End – 6 weeks to complete. Process Overview, General Safety Procedures, Low Pressure System, 114 Distillation, 113 Distillation, Troubleshooting, Standard Work.
1234ze Unit – 6 weeks to complete. Process Overview, 1234ze General Safety Procedures, Feed Systems, Reaction, Low Pressure System, Product Purification, Troubleshooting, Standard Work.

The facility failed to initially train one employee presently involved in operating a process, and before being involved in operating a newly assigned process provide an overview of the process and in the operating procedures. The initial training records for one operator in the 1234ze Unit could not be found. **[AOC 7 – § 68.71(a)(1)]** The facility failed to provide refresher training at least every three years, or more often, if necessary, to several employees involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. One operator in the 1234ze Unit completed refresher training on December 15, 2017, and then again on 7/20/21, 7 months late. One operator completed refresher training on October 24, 2017, and then again on December 9, 2017, 1.5 months late. The facility also failed to consult with employees involved in operating the 1234ze and G-1113 processes to determine the appropriate frequency of refresher training. This was a finding of the 2020 Compliance Audit. **[AOC 8 – § 68.71(b)]**

40 C.F.R. § 68.73 Mechanical Integrity (MI) – Honeywell BR provided the following MI procedures for EPA's review:

- Honeywell Guidelines for In-Service Inspection on of Rotating Equipment, Doc Mod: PRC-MTN-660 Effective Date 07/16/2018, Revision 1.2 (PRC – local procedure);
- Honeywell PM Inspection Deferral Process, Doc Mod: PRC-FLU-440, Effective Date 8/20/2022, Revision 7.0 (local procedure);
- Honeywell Performance Materials and Technologies Health, Safety, and Environment, PM Compliance Inspection Deferral Process, Release Date 10/1/2012, Last Minor Revision 8/19/2022, Procedure number PMTHSE841WI-1 (corporate procedure); and,
- Honeywell General Hose Specification Doc Mod: SPC-MTN-005, Effective Date 09/18/18, Revision 7.4.

Contractors conduct maintenance inspections of process equipment and Honeywell acts in an oversight capacity for the records review process. The frequencies of inspections and tests of process equipment have not been consistent with the facility's recommended good engineering practices for the anhydrous hydrogen fluoride (AHF) loading/unloading hoses. The facility's procedure states that they hoses shall be replaced annually (i.e every 365 days). The hose on the AHF railcar load station track 4/6 was replaced February 3, 2022, and December 21, 2020. The hose on the AHF railcar load station track 5/6 was replaced April 13, 2021, and February 16, 2020. I was not provided a 2022 replacement record for the hose on track 5/6. This was also a finding of the 2020 compliance audit. The D58HE heat exchanger was installed in 2013. I was provided only an internal inspection record dated August 21, 2019, and an external inspection record dated November 6, 2019. (5-year API requirement) **[AOC 9 – § 68.73(d)(3)]**

Relief valves do not release to safe locations. This was seen visually during the facility tour above vessel E- 05RB on the 2nd platform. The facility is undergoing a study to mitigate this issue based on a finding in previous audit report. The relief valve set points are currently used to inspect, test and evaluate relief valves after they are removed and decontaminated on site. **[AOC 10 – § 68.73(e)]**

Table 3 summarized the following equipment MI records that EPA requested for review:

Table 3

Equipment			
Equipment ID	In Service year	Specification Identification	Class
D85RB (reboiler)	No data	PRF	3
D80RX	2012	PRBH, PIBH, HOL	1
D84HE (heat exchanger)	2012	PRF	3
E05RB (reboiler)	No data	PRF	3
F02HE (heat exchanger)	1983	PRF	3
F03CN	1989	PRF	3
F04RB (reboiler)	1989	PRF	3
F06CN	1998	PRF	3
F06RB (reboiler)	1986	PRF	3
F08RB (reboiler)	1996	PRF, PRFH, PP	2
F10CN	1998	PRF	3
F16HE-A (heat exchanger)	2018	PP	2
I42ST (storage tank)	1954	PRR	3
I43ST (storage tank)	1993	PRR	3
M300TO	No data	CA, PRR, FGL	2

Deferrals are used for risk-based inspections, per American Petroleum Institute (API) Standard 580. To place a piece of equipment in deferral, all previous data is evaluated to determine risk. Management of Change is required to defer equipment, with a maximum of 20% extension of the time period past the deadline allowed.

40 C.F.R. § 68.75 Management of Change (MOC) – Honeywell BR has implemented written procedures to manage changes, except for “replacements in kind”, to process chemicals, technology, equipment, and procedures or to changes to stationary sources that affect a covered process. Honeywell’s MOC procedure section 1.10 describes criteria for MOC implementation.

The MOC procedure does assure that the following considerations are addressed prior to any change: (1) the technical basis for the proposed change; (2) impact of change on safety and health; (3) modifications to operating procedures; (4) necessary time period for the change; and, (5) authorization requirements for the proposed change. Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process are informed of, and trained in, the change prior to start-up of the process or affected part of the process by one-way training, two-way training, or classroom training. None of the MOCs reviewed involved a change in the operating procedures or practices which required updates under § 68.69. One MOC reviewed, permanent MOC #2242 in the CTFE unit, was initiated for relief valves (RV) 795 and 796 to have block valves changed to a modern design. P&ID #44155 was redlined to show the modification during the MOC, but the drawing was not updated. **[AOC 11 – § 68.75(d)]**

40 C.F.R. § 68.77 Pre-startup Safety Review – Honeywell BR provided pre-startup safety review records for the associated MOCs, which were also reviewed. 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 the newly regulated substances, including the appropriate communication elements and training.

40 C.F.R. § 68.79 Compliance Audits – Honeywell BR conducted its two most recent compliance audits on April 24-28, 2017, and March 30, 2020. The facility has not certified that it has evaluated compliance with the provisions of the prevention program at least every three years for all covered processes to verify that the developed procedures and practices are adequate and being followed. The 1234ze and CTFE units were not audited during the 2020 audit, and the OMNI Unit was not audited in 2017. The 2020 audit that was certified on May 11, 2020, by the Honeywell's <certifier's title> was conducted on the OMNI Unit, 1233zd Unit, and Tank Farm Unit. The 2017 audit was certified on May 12, 2017, by the <title of certifier>. This audit included the 1233zd, OMNI, Tank Farm, CTFE, 1233zd, and 1234ze Units. An audit conducted in 2014 included the OMNI, Tank Farm, and Thermal Oxidation Units. **[AOC 12 – § 68.79(a)]** The audits were conducted by at least one person knowledgeable in each process. Additionally, Honeywell BR has not promptly determined and documented an appropriate response to a number of audit findings, nor documented that the deficiencies had been corrected. Many findings from previous audits have been repeated during the most recent 2020 audit. **[AOC 13 – § 68.79(d)]**

40 C.F.R. § 68.81 Incident Investigation – I reviewed five incident investigations that occurred on April 8, 2020, July 3, 2020, August 28, 2020, February 17, 2021, and April 8, 2021. Each of these incidents had investigations initiated no later than 48 hours following the incident. For each investigation reviewed, the investigation team consisted of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience, who thoroughly investigated and analyzed each incident. The Honeywell intranet SharePoint site tracking system has allowed the facility to promptly address and resolve incident report findings and recommendations, as well as to document the resolutions and corrective actions.

40 C.F.R. § 68.83 Employee Participation – Honeywell BR has developed a written plan of action to meet the employee participation rule requirement, Honeywell Employee Participation Doc Mod: PRC-PSM-010, Effective Date October 21, 2020, Revision 6.0. The facility has consulted with employees and their representatives on the methods to be used for development of process hazard analyses, and on the development of the other elements of process safety management in the Chemical Accident Prevention Provisions. The plant has provided employee access to the process hazard analyses and all other information required to be developed under this rule.

40 C.F.R. § 68.85 Hot Work Permit – Honeywell BR provided its hot work policy document for EPA's review - Hot Work, #PRC-SAF-019. The following hot work permits were reviewed: #4885, #4819, #4806, #4825, #4815, #4822, #4818, #4823, #4817 and #4813. Hot work permits #4825 and #4813 failed to: include implementation of the fire prevention and protection requirements outlined in 29 CFR 1910.252(a) prior to beginning the hot work operations; indicate the date(s) authorized for the hot work performed; and, identify the equipment on which the hot work was performed. **[AOC 14 – § 68.85(b)]**

Table 4

Hot Work Permits Reviewed		
Permit	Summary of Hot Work Performed	Deficiency
4825	MPF Area – I-58 Storage. Cutting/grinding/welding. Fire watch marked as being needed but nobody	The permit failed to document that the fire prevention and protection

Hot Work Permits Reviewed		
Permit	Summary of Hot Work Performed	Deficiency
	signed on the back that a fire watch was used. Fire monitor signed and marked end time of 1:50pm.	requirements in 29 CFR 1910.252(a) had been implemented.
4813	MPF Area – Equipment/Location and the Object hot work is to be performed on were not identified. Work description: power tools and welding machine used for cutting, welding, and installing pipe. Fire watch and fire monitor signed off properly.	The permit failed to identify the equipment on which hot work is to be performed. The permit only identified the process unit location.

40 C.F.R. § 68.87 Contractors – Honeywell BR uses the *ISNetWorld* contractor database to evaluate information regarding a contractor’s safety performance and programs. Contractors are vetted through this database and marked as acceptable to use on site or requiring a waiver. Prior to working on site, contractors receive training at the Alliance Safety Council. This council provides basic training as well as site-specific training, including work permits, life-critical, general safety and emergency response. Site-dedicated contractors are given a badge for facility entry and exit which expires on the anniversary date of the previous annual training. Non site-dedicated contractors must sign in and out at the visitor’s office daily. Contractors are periodically evaluated by either checking their *ISNetWorld* status or by Honeywell BR Capital Department’s safety review when new purchase orders are processed. The following contractor records were reviewed: Turner (TSS), Rescar and AC Plastics.

Subpart E – Emergency Response

40 C.F.R. § 68.90 Applicability – Honeywell BR is designated as a responding stationary source and is subject to the requirements of 68.93 to 68.95.

40 C.F.R. § 68.93 Emergency Response Coordination Activities – Honeywell BR has not consistently performed the annual emergency response coordination activities with the local emergency planning commission (LEPC) or local response organizations. The facility provided a document dated September 30, 2020, that states, *“Conducted a Tabletop of Site Emergency Management Plan and Field Gemba with Baton Rouge Fire Department and HAZMAT Team. Tabletop was a round discussion of events and exchange of new contacts for both parties. Site HSE Manager and Baton Rouge HAZMAT Team conducted a field walk of plant to look at ERT equipment, layout of plant, etc. Note: East Baton Rouge Parish Sheriff’s Office was invited, but they were unable to make it. A future event is currently being scoped.”* On September 29, 2020, the site requested the East Baton Rouge Sheriff’s Office to visit the Honeywell facility to tour and view the security controls and emergency management plan. There were no meetings conducted in 2021. On August 18, 2022, a Honeywell representative attended a Baton Rouge Area Mutual Aid Systems (BRAMAS) meeting. The facility provided emails confirming that Honeywell BR’s Contingency Plan was provided to the LEPC. **[AOC 15 – § 68.93 (a)(b)(c)]**

40 C.F.R. § 68.95 Emergency Response Program – Honeywell BR provided the emergency response plan for EPA’s review - Honeywell Fluorine Products Baton Rouge Louisiana Operations Emergency Management Plan, Baton Rouge Fluorine’s Emergency Management Plan, PRC-ERP-001, 04/19/22. Honeywell BR indicated in the plan that the facility will respond to any incident that is within their fence line. If an incident goes beyond the fence line, the facility seeks additional help from ExxonMobil and other adjacent facilities that have the resources to respond in the event of a release, including the Baton Rouge Area Mutual Aid Systems. I requested the following records for inspection and maintenance of emergency response equipment: mitigation towers (1-12) past years’ worth of quarterly testing; fire

pump N40PU—Electric 2,500 gallon per minute (gpm) annual flow tests for the past five years; past five years' pressure tests for the personal protection Level A suits; and, past five years' annual fire hose inspections. Mitigation tower inspections are performed on a quarterly basis. I received all the 2021 inspections. I also requested the first and second quarter inspection records for 2022 but did not receive those documents while on site. *See Table 5.*

Table 5

Mitigation Towers (1-12)	Inspection and testing date
1 st quarter of 2021	3/18/2021
2 nd quarter of 2021	6/23/2021
3 rd quarter of 2021	9/20/2021
4 th quarter of 2021	12/16/2021

Honeywell BR's frequencies of inspection and testing of the emergency response equipment is not consistent with the frequencies specified in the Emergency Management Plan for Fire Pump N40PU. *See Table 6.*

Table 6

Fire Pump N40PU- Electric 2,500 gpm	Inspection and testing date	Notes
2022	No data provided	No documentation provided
2021	3/2/2021	Performed 19 months after the 2019 inspection.
2020	No data provided	Not performed
2019	8/30/2019	
2018	8/21/2018	
2017	9/12/2017	

Level A worker protection suits are supposed to be inspected annually; however, I did not receive the 2021 pressure test records for the Level A suits that should have been performed in December 2021. *See Table 7. [AOC 16 – § 68.95(a)(2)]*

Table 7

Inspection Year for Level A Suits	Inspection and testing date	Notes
2021	No date furnished	No available documentation of 2021 inspection that should have been performed in December 2021
2020	12/14/2020	
2019	12/17/2019	One month late
2018	11/07/2018	30 total suits. *44477 failed again (should have been taken off of the list in 2017 when it failed the first time and not with the other suits to be used)
2017	11/13/2017	22 total suits. 597953 & 44477 failed

Honeywell BR provided training records for employees involved as responders for the emergency response program. However, Honeywell failed to consistently implement required training for all participating employee responders in the relevant emergency procedures. *See Table 8. [AOC 17 – § 68.95(a)(3)]* Additionally, no documentation was provided to show that the Honeywell Fluorine Products Baton Rouge Louisiana Operations Emergency Management Plan, or other necessary information for developing and implementing the community emergency response plan, was provided to the LEPC. [AOC 18 – § 68.95(c)]

Table 8

Employee	Deviations from §68.95(a)(3) Training Requirements
RM	Fire - missing 2021 refresher training record
	Hazardous materials (HAZMAT) - no records for the past two years
	Rescue – no records for the past two years
	Medical - employee’s name is not on the current list at the Louisiana Department of Health Bureau of Emergency Medical Services; not all of the employee’s records have been transferred yet
TB	Fire - Industrial Fire Brigade Refresher Training from Louisiana State University and Agricultural and Mechanical College – 8 Hour refresher training completed on February 13, 2020, and May 6, 2021 (3 months late)
	Honeywell Fire Refresher Training - Sign-Off Sheet dated July 19, 2022, is two months past the previous 2021 training date
	HAZMAT - no records for training in 2021 or 2022
	Rescue - Rescue Certificate of Completion (RCOC), Compliance Rescue Refresher training, Confined Space & Rope Rescue training on January 14, 2021 & May 19, 2022 (four months late for an annual training)
CC	Fire - Industrial Fire Brigade Refresher Training from Louisiana State University and Agricultural and Mechanical College – 8 Hour refresher training on February 6, 2020 & May 13, 2021 (3 months late for an annual training)
	HAZMAT - no records provided for 2021
	Rescue - no records provided
	Medical - employee not listed with the Louisiana Department of Health Bureau of Emergency Medical Services
TG	Fire - Louisiana State University and Agricultural and Mechanical College Industrial Fire Brigade Refresher - 8 hours training on February 6, 2020 & May 13, 2021 (three months late for an annual training); no records for 2022 refresher training that was due in May 2022.
	HAZMAT - no records for the past two years
	Rescue - Rescue Certificate of Completion (RCOC), Compliance Rescue Refresher Confined Space & Rope Rescue training on December 15, 2020 & May 17, 2022; no records for refresher training in 2021; 17 months lapse between the 2020 training and the 2022 training.
EB	Fire - Louisiana State University and Agricultural and Mechanical College Industrial Fire Brigade Refresher - 8 hours training on January 21, 2020 & May 4, 2021 (4 months late for an annual training); no records provided for the 2022 refresher training that should have been completed in May 2022.
	HAZMAT - HAZMAT Baton Rouge Plant 8 Hour Training September 29, 2020 & November 11, 2021 (two months late for an annual training)

Employee	Deviations from §68.95(a)(3) Training Requirements
MR	Fire - Industrial Fire Brigade Refresher Training from Louisiana State University and Agricultural and Mechanical College – 8 Hour training on February 13, 2020 & May 13, 2021 (3 months late for an annual training); no records for the 2022 refresher training that should have been completed in May 2022.
	HAZMAT - Baton Rouge Plant - 8 Hour training September 29, 2020 & November 9, 2021 (two months late for an annual training)
	Rescue - Rescue Certificate of Completion (RCOC) Refresher Training, Confined Space & Structural Rope Rescue, 10 hours training on December 15, 2020 & May 19, 2022. (6 months late for an annual training).

40 C.F.R. § 68.96 Emergency Response Exercises – Honeywell BR plans to begin conducting tabletop drills and exercises in coordination with local emergency planning and response organizations before the deadline specified in the rule.

Subpart G – Risk Management Plan

40 C.F.R. § 68.190 Updates – Honeywell BR’s RMP registration renewal was re-submitted on June 30, 2022 (Voluntary update), pursuant to 40 C.F.R. § 68.190 (b)(1).

40 C.F.R. § 68.195 Required corrections – Honeywell BR’s next RMP registration re-submission is due by June 30, 2027, 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. Honeywell’s hazard assessment update will require a correction.

Section III – AREAS OF CONCERN

Closing Meeting- On the last day of the inspection (August 25, 2022), I conducted a closing conference, during which I presented the following areas of concern identified during the inspection.

AOC 1 – 40 C.F.R § 68.30 (a) Defining off-site impacts – population

“(a) The owner or operator shall estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in § 68.22(a).”

Honeywell BR did not include in the OCA worst case scenarios for each chemical an estimate of the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in § 68.22(a). The MARPLOT maps provided for all the worst-case scenarios were all identical.

AOC 2 – 40 C.F.R § 68.39 (a) 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.”

For the worst-case scenario, a description of the specific vessel or pipeline and substance selected was not provided. The documentation only stated that worst case includes two identical storage tanks.

AOC 3 – 40 C.F.R § 68.39 (b) Documentation

“(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.”

For the worst-case and alternative release scenarios, the rationale for selection was not documented.

AOC 4 – 40 C.F.R § 68.67 (c)(5) Process Hazard Analysis

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

During the facility tour, the control room was located on the 2nd floor of a structure adjacent to the process units. The PHA schedule states: “A review of plant changes since the previous Facility Siting Study (also known as a Quantitative Risk Assessment or QRA) shall be conducted by the local leadership team to assess the need to revise the Facility Siting Study. The local review shall be approved by a qualified PMT PSM representative. When deemed necessary, the Facility Siting Study shall be revised by a qualified party.”

AOC 5 – 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.”

The 2016 1234ze and CTFE PHAs had action items that were still open or not completely promptly. (347817, 347818, 347819, 347784, 347785, 347786, 347787 and 347788).

AOC 6 – 40 C.F.R § 68.69 (c) Operating Procedures

“(c) 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.”

Honeywell BR failed to provide the 2021 annual certification for MPD Operations.

AOC 7 – 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.”

The facility failed to initially train each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, in an overview of the process and in the operating procedures. The initial training records for Perry Blanchard (1234ze) could not be found.

AOC 8 – 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.”

The facility failed to provide refresher training at least every three years, or more often, if necessary, to several employees involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. One operator in the 1234ze Unit completed refresher training on December 15, 2017, and then again on July 20, 2021, 7 months late. One operator completed refresher training on October 24, 2014, and then again on December 9, 2017, 1.5 months late. Additionally, the facility failed to consult with employees involved in operating the 1234ze and G-1113 processes to determine the appropriate frequency of training. This was a finding of the 2020 Compliance Audit.

AOC 9 – 40 C.F.R § 68.73 (d)(3) Mechanical Integrity

“(d) Inspection and testing. (3) The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.”

The frequencies of inspections and tests of process equipment have not been consistent with the facility's recommendation and good engineering practices for the AHF loading/unloading hoses. The facility's procedure states that they hoses shall be replaced annually (i.e every 365 days). The hose on the AHF railcar load station on track 4/6 hose was replaced February 3, 2022, and December 21, 2020. The hose on the AHF railcar load station on track 5/6 hose was replaced April 13, 2021, and February 16, 2020. I was not provided a 2022 replacement record for the hose on track 5/6. This was also a finding in of the 2020 compliance audit.

AOC 10 – 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.”

Relief valves do not release to safe locations. This was seen visually during the facility tour above vessel E- 05RB on the 2nd platform. The facility is undergoing a study to mitigate this issue based on a finding in previous audit report.

AOC 11 – 40 C.F.R § 68.75 (d) Management of Change

“(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.”

One MOC reviewed, permanent MOC #2242 in the CTFE unit was initiated for RV 795 and 796 each to have block valves to be changed to a modern design. This was redlined during the MOC, but the P&ID #44155 was not updated.

AOC 12 – 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.”

The 1234ze and CTFE units were not audited during the 2020 audit, and OMNI unit was not audited in the 2017 CA. The 2020 virtual audit that was certified on May 11, 2020, by Dan Lazorcak was conducted on OMNI, 1233zd, and Tank Farm. The 2017 audit was certified on May 12, 2017, by Tony Aguilera. This audit was conducted on 1233zd, OMNI, Tank Farm. – This audit was conducted on CTFE, 1233zd, and 1234ze. The 2014 audit was conducted on OMNI, Tank Farm, and Thermal Oxidation.

AOC 13 – 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.”

The findings in the following tables were repeat findings or not completed from the 2020 and 2017 audits.

2020 Compliance Audit Findings - Repeat/Not Completed
279724 Finding 2020 – At the time of the audit the site could not locate a document that meets the requirements of 40 CFR § 68.93(c). – Consider updating the site practices and procedures to ensure when coordinating annually on emergency response with third parties to document coordination with local authorities per 40 CFR § 68.93(c). This was noted as completed; however, it is an AOC in the ER section.
279680 Finding 2020 – Operators complete initial and refresher qualification on PSM process areas. Examples: G-113 BE Knowledge Verification, 1234ze Operator Knowledge Verification, etc. Although employees appear to be current on their training, there are some instances where requalification exceeded 3 years. In one example, the operator completed triennial requalification for G-113 Back End Knowledge Verification on October 29, 2015, and January 3, 2019, which exceeds 3 years. – Consider a method to ensure that operator requalification does not exceed 3 years. One employee had late refresher training for the 1234ze Unit on December 15, 2017 & July 20, 2021.
279669 Finding 2020 – The site meets the required frequency for PSM refresher training. However, records that document the consultation with the operators on the frequency of refresher training do not exist. During interviews operators indicated that they are not consulted on the frequency of refresher training. – Consider developing a method to consult operators on the desired frequency of refresher training. Examples written surveys and/or questions added at the end of a training session quiz, etc. such records should be available for each refresher training cycle.
279807 Finding 2020- Operator procedures not being certified. Consider locating the annual certifications for all SOPs. Alternatively consider creating a process to ensure that all SOPs are certified on an annual basis with a signature. Site may consider using a compliance calendar and/or document workflows.
Fire hoses being replaced annually - There are two findings regarding hoses that do not indicate corrective action completion.
279494 Finding 2020- Of the 17 records sampled, 6 of 17 were legible and had the requisite information, including applicable demand scenarios and calculations for each, along with the reactive force calculations; 2 of 17 appeared to be missing reactive force calculations, and several appear to have design calculations, but the records could not be opened as they were stored in a software not familiar/available to the site. – Consider ensuring that design calculations are complete (all applicable demands scenarios, calculations for each scenario and reactive force calculations), in a survivable file format (e.g., PDF) and that the PSI Map for the site includes the correct file locations for the relief device calculations. Honeywell BR closed this finding on November 5, 2020. The record stated that a long-term action item was created - action item 460412. I was shown a corporate project tracking system, and I requested that the action item be opened for review, but it did not exist. The Honeywell BR Technical Manager stated that the project started on June 3, 2020, but there is no record of the action item to track the project to completion. This action item project encompasses all Honeywell sites. The project’s due date is December 31, 2023. In addition, this is a repeat finding from the 2017 audit. From the available information, it appears some audit findings have been open since 2011 or have been repeated and marked closed. The new corporate due date is December 31, 2023.

2017 Compliance Audit
2017 Recommendation 8 – Consider ensuring the completion of the project to update the design calculations for all the relief devices at the site and ensure appropriate field installation, addressing/replacing any instances of plastic discharge piping. I requested a demonstration of the process by which Recommendation 8 was closed in 2017. The record stated the project started in May 2015 and should have been completed in 2017. A spreadsheet titled “The Master List” of relief valves and rupture disks was created to address this finding. The spreadsheet provides important information on the relief valves and rupture disks but does not address the recommendations. For the last part of the recommendation, “addressing/replacing any instances of plastic discharge piping”, there are no records to show that this part of the finding was addressed. There were 138 references regarding the type of discharge piping.
2017 Recommendation 7 (A critical priority) – Consider accelerating the completion 1.) Outstanding relief device calculations, 2) Acceptable discharge location assessment (ADLA) for relief Installation of identified changes from ADLA work. [These were also findings of the 2011 PSM audit and 2014 PSM audit.] • This finding notes that this is an ongoing issue that has not been corrected/completed since 2011. • The facility stated that this finding was addressed by the same spreadsheet we discussed in Recommendation 8. Recommendations for ADLA have not been completed, as they are still in progress. The facility is also still working on the relief valve recommendations.
2017 Recommendation 9- Consider scanning the project relief device calculations that are stored in paper manuals to PDFs as with the other ongoing work being conducted by 3rd party resources to ensure such PSI is maintained/sustained. Had this deficiency been completed correctly, then part of the 2020 audit finding to put calculations in a “survivable file format” would have been void.
2017 Recommendation 20 – Consider accelerating the completion 1.) Outstanding relief device calculations, 2) ADLA work for relief devices and 3) Installation of identified changes from ADLA work. [These were findings in the 2011 PSM audit and 2014 PSM audit] • This is an ongoing finding that has not been completed/corrected since 2011.
2017 Recommendation 65 – Consider ensuring the completion of the project to update the design calculations for all the relief devices at the site and ensure appropriate field installation, addressing/replacing any instances of plastic discharge piping. Relief device calculations and ADLA recommendations need to be addressed. These findings have been open since the 2011 compliance audit. Some corrective action was completed in previous years; however, no one knows where the information is located, so the project was restarted in 2020. Honeywell’s corporate is tracking the project now, and it is due to be completed December 31, 2023, to complete all relief valve and ADLA recommendations. As of the date of this inspection, Honeywell BR stated that they have completed the corrective actions for the recommendation in the OMNI Unit, and the corrective actions will be completed in the CTFE Unit during a September 2022 outage. The recommendations still need to be addressed in the 1234ze and 1233zd Units.
Repeat 279498 Finding 2020 – At the time of this audit the site could not demonstrate that it has completed as part of its facility siting study the site contours for location of “tents” as prescribed in API RP 756 issued in Sept. 2014; the site uses tents during certain construction activities per interview. Consider updating the site facility siting study and define the site contours for location of “tents” as prescribed in API RP 756. • 2017 Recommendation 24 Consider developing and deploying guidance on the use of tents in/near covered process areas per API 756.

2017 Compliance Audit
Repeat 279495 Findings 2020- Per interview, the site has not fully implemented alarm rationalization for full compliance with PMT. Consider completing alarm rationalization and bring the site into full compliance with PMT engineering Alarm Management standard PCCDC100HS. 2017 Recommendation 25 Consider completing alarm rationalization/alarm management per PMT Engineering procedure on Alarm Management.
Repeat 279775 Finding 2020 - The previous PSM audit had recommendation #70 to complete a PM/resistance testing of all grounding location throughout the plant. There is no evidence this has been completed. – Consider implementing the previous recommendation to complete a full PM/resistance testing of all grounding locations. 2017 Recommendation 70 Consider completing a fully certifiable PM/Resistance testing of all grounding locations throughout the plant to establish a baseline of performance for the record.
Repeat 279808 Finding 2020 – There is no procedure or inspection form for inspecting trenches and sumps. - Develop a procedure that outlines what to look for and what is acceptable and a form to document the findings. 2017 Recommendation 68 Consider creating a formal procedure for ITPM of drainage trenches and process sewers, including naming inspection intervals.
Closed on 12/9/2021 and no additional action items have been created. The facility is still trying to get capital funding. 309061 Finding 2020 on-site – Structural steel has improved since previous audit and there are several areas in Omni targeted for review. Due to advanced condition in several areas this work must not be deferred. Capital project currently being scoped by Honeywell project manager December 30, 2021.
Repeat 279768 Finding from 2020 PHA Finding- There is a lack of proper evidence that all of the safety instrumentation systems (SIS) inspections are being fully completed and on time required by the safety relief system (SRS). See basis for finding for specific examples. The site self-identified this gap and has taken steps to close it. – Continue to implement a robust SIS process that maintains accessible proof. 2017 Recommendation 63 - Consider further developing the recent initiated ITPM programs for emergency shutdown systems and packaged systems.
Repeat 279768 Finding from 2020 PHA. 279824 Finding – The site’s written Emergency Management Plan (PRC-ERP-001, rev. 8) does not include procedures to be followed by employees who remain to operate critical plant operations before they evacuate as required by 1910.38(c)(3) and 1910.120(q)(1). [This is a repeat finding from the 2017 compliance audit] – Consider adding language to the Accountability Procedure (PRC-ERP-105) for guidance as to how employees who remain behind to stabilize or shutdown their units are to evacuate and be accounted. Also consider adding a reference in the Emergency Management Plan to reference the Accountability Procedure for guidance on evacuation/accountability and also reference the respective unit SOPs to follow the emergency shutdown procedure. 2017 Recommendation 87 – Consider adding language in the emergency response plan that references the more detailed guidance provided in the operating procedures for operators that are required to shut down stabilize plant equipment or operations before they evacuate.

AOC 14 – 40 C.F.R § 68.85 (b) Hot work permits

“(b) 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. The permit shall be kept on file until completion of the hot work operations.”

Hot work permits #4825 and #4813 failed to document that the fire prevention and protection requirements in 29 CFR 1910.252(a) had been implemented prior to beginning the hot work operations and did not indicate the date(s) authorized for hot work or identify the specific equipment on which hot work was performed.

AOC 15 – 40 C.F.R § 68.93 (a)(b)(c) Emergency response coordination activities

“(a) Coordination shall occur at least annually, and more frequently, if necessary, to address changes: At the stationary source; in the stationary source's emergency response and/or emergency action plan; and/or in the community emergency response plan.”

“(b) Coordination shall include providing to the local emergency planning and response organizations: The stationary source's emergency response plan if one exists; emergency action plan; updated emergency contact information; and other information necessary for developing and implementing the local emergency response plan. For responding stationary sources, coordination shall also include consulting with local emergency response officials to establish appropriate schedules and plans for field and tabletop exercises required under § 68.96(b). The owner or operator shall request an opportunity to meet with the local emergency planning committee (or equivalent) and/or local fire department as appropriate to review and discuss those materials.”

“(c) The owner or operator shall document coordination with local authorities, including: The names of individuals involved and their contact information (phone number, email address, and organizational affiliations); dates of coordination activities; and nature of coordination activities.”

The facility could not provide documentation of its coordination activities in 2021. This was also a 2020 compliance audit finding that stated, “At the time of this audit the site could not locate a document that meets 40 CFR 68.93(c)...” and “Consider updating the site practices and procedures to ensure when coordinating annually on emergency response with third parties to document coordination with local authorities per 40 CFR 68.93”. Honeywell BR has not performed the annual emergency response coordination activities with the LEPC and local response organizations.

AOC 16 – 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”.

Mitigation tower inspections are performed on a quarterly basis. I requested the past year worth of inspections but received all the 2021 inspections. I did ask for the 1st and 2nd quarter for 2022 but did not receive those documents while on site. *See Table 5, page x of this report.* Honeywell did not meet the frequency of the inspection and testing of the emergency response equipment that is laid out within the Emergency Management Plan for Fire Pump- Pump N40PU. *See Table 6, page x of this report.* Level A suits are inspected annually, however, I did not receive the 2021 pressure test for the Level A suits that should have been performed in 12/2021. *See Table 7, page 12 of this report.*

AOC 17 – 40 C.F.R § 68.95 (a)(3) 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: (3) Training for all employees in relevant procedures.”

Honeywell BR provided training records for employees involved in the emergency response program. Honeywell failed to implement the emergency response program for the purpose of protecting public health and the environment; specifically, training for all employees in relevant procedures. *See Table 8, page x of this report.*

AOC 18 – 40 C.F.R § 68.95 (c) Emergency response program

“(c) The emergency response plan developed under paragraph (a)(1) of this section shall be coordinated with the community emergency response plan developed under 42 U.S.C. 11003. Upon request of the LEPC or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.”

No documentation was provided to show that the Honeywell Fluorine Products Baton Rouge Louisiana Operations Emergency Management Plan, Baton Rouge Fluorine’s Emergency Management Plan, or other necessary information for developing and implementing the community emergency response plan was provided to the LEPC.

Section IV – FOLLOW UP

The following information was received by EPA on September 2, 2022, after exiting the Facility on August 25, 2022: Confidential Business Information related to this inspection.

Section V – LIST OF APPENDICES

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