EPA United States Environmental Protection Agency

Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	09/11-14/2018	
Media:	Air	
Regulatory Program(s)	Risk Management Program, CAA 112(r) Accident Prevention Provisions 40 CFR 68	
Company Name:	**BASF Corporation**	
Facility Name:	**BASF Corporation**	
Facility Physical Location:	602 Copper Road	
(city, state, zip code)	Freeport, Texas 77541	
Mailing address:	602 Copper Road	
(city, state, zip code)	Freeport, Texas 77541	
County/Parish:	Brazoria	
Facility Contact:	Deb Dalley	EHS Director
	979-415-8103	
FRS Number:	110000463392	
Media Number:	RMP: 1000 0011 1951	
NAICS:	325211; 325199; 325311	
Personnel participating in inspection:		
Lauren Hampton	BASF	EHS Specialist
Susan Boyer	BASF	EHS Specialist
John Shoemaker	BASF	CPN Production Director
Scott Kolb	BASF	EHS Team Leader
Ron Barksdale	BASF	Site Services Director
Beth Holland	BASF	Vice President Operations
Deb Dalley	BASF	EHS Director
Marie Stucky	EPA Region 6 – 6EN-AS	Inspector
EPA Inspector:		
EPA Lead Inspector Signature/Date	Marie Stucky	11/1/2018 Date
Supervisor		
Supervisor Signature/Date	Samuel Tates	11/1/2018 Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

I, EPA Region 6 inspector Marie Stucky, arrived at BASF Corporation (BASF) at 7:35 AM on September 11, 2018, for an announced inspection. I met with Deb Dalley and others listed on Page 1 of this report. I presented my credentials and informed them that this was an EPA inspection to determine compliance with the Clean Air Act (CAA) Section 112(r) and the Chemical Accident Prevention Provisions in 40 C.F.R. Part 68. The scope of the inspection is a partial compliance evaluation (PCE) and included an evaluation of the compliance of the facility with CAA Section 112(r) and the Chemical Accident Prevention Provisions 40 C.F.R. Part 68. On August 30, 2018, BASF received an inspection notice announcement email from me, which outlined the directions of conducting an inspection on September 11-14, 2018. The email also contained a list of documents for BASF to gather for review during the inspection. BASF is not a union facility.

FACILITY DESCRIPTION

BASF is in Freeport, Texas. According to https://www.basf.com/us/en/company/about-us/Locations/featured-sites/Freeport.html:

"The BASF Freeport site was founded in Southeast Texas in 1958 as BASF's first manufacturing site outside Europe. The Freeport site employs more than 850 employees and almost 850 contractors. Currently, the Freeport facility produces 26 different products in 26 plants.

The Freeport site produces raw materials that are used to make products people use every day such as: diapers, fertilizers, food packaging, paints, playing cards, carpets, fishing line, glue sticks, sticky note pads, wood finishes, oven bags and more."

Section II – OBSERVATIONS

40 C.F.R. Part 68 – CHEMICAL ACCIDENT PREVENTION PROVISIONS

Subpart A – General

40 C.F.R. § 68.10 Applicability – I observed that BASF is a stationary source that has an Air Operating Permit and more than a threshold quantity of a regulated substances in a process; therefore, these regulations are applicable. BASF submitted a Risk Management Plan (RMP) that describes the process containing flammable and toxic chemicals held at more than a threshold quantity. The processes are Program 3 because the facility is subject to OSHA's Process Safety Management Standard (29 C.F.R. § 1910.119) and is a chemical manufacturing facility with NAICS Codes of 325211, 325199, and 325311.

40 C.F.R. § 68.12 General requirements – I reviewed the RMP submitted by BASF on January 11, 2018, that lists the flammable and toxic processes, as detailed below.

Table 1: Risk Management Plan Chemical and Process

Process	Program Level	Chemical Name	CAS Number
Acrylic Monomers	Three	Ammonia (anhydrous)	7664-41-7
Dispersions	Three	Acrylonitrile	107-13-1
Caprolactam I&II	Three	Oleum	8014-95-7
Propylene Distribution	Three	Propylene	115-0701
Polyalcohols	Three	Trimethylamine Formaldehyde	75-50-3 50-00-0
Ammonia Distribution	Three	Ammonia (anhydrous)	7664-41-7
Formaldehyde Railcars	Three	Formaldehyde	50-00-0
Ammonia Railcars	Three	Ammonia (anhydrous)	7664-41-7
Oxo-Syngas	Three	Flammable Mixture	00-11-11
Ammonia Plant	Three	Ammonia (anhydrous) Ammonia (conc 20% or greater) Flammable Mixture	7664-41-7 7664-41-7 00-11-11

40 C.F.R. § 68.15 Management – BASF has developed a management system to oversee the implementation of the Risk Management Program elements. This system assigned qualified persons or positions overall responsibility for the development, implementation, and integration of the Risk Management Program elements and documented other persons responsible for implementing individual requirements of the risk management program.

Subpart B – Hazard Assessment

40 C.F.R. § 68.20 Applicability – BASF prepared worst-case release scenario analyses and completed the five-year accident history review. Since BASF has Program 3 toxic and flammable processes, they must comply with the flammable and toxic sections in this subpart.

40 C.F.R. § 68.22 Offsite consequence analysis parameters – I observed that BASF used parameters required in this part to calculate toxic worst-case and alternative release scenarios. BASF used parameters specified by EPA in this rule by using RMP*Comp™, PHAST v 6.7.01, and EPA's RMP Guidance for Ammonia Refrigeration Reference Tables or Equations models to determine the scenarios using appropriate wind speeds, stability classes, ambient temperature and humidity values, height values, and surface roughness values.

40 C.F.R. § 68.25 Worst-case release scenario analysis – During the inspection, I reviewed documentation from BASF regarding the worst-case release scenario analysis. It showed that BASF analyzed and reported worst-case toxic and flammable releases in its RMP. This analysis for toxics was done using PHAST v 6.7.01. The analysis for flammables used the RMP*Comp™ Model.

40 C.F.R. § 68.28 Alternative release scenario analysis – BASF identified and documented an alternative release scenario for the RMP covered flammable substances and an alternate release scenario for all the

toxic substances in their RMP. These analyses used the models RMP*Comp, RMP Guidance for Ammonia Refrigeration Reference Tables or Equations, and PHAST v 6.7.01.

40 C.F.R. § 68.30 Defining offsite impacts – Population – BASF used the most current (2010) Census Bureau population data and the distance to endpoints to calculate the population numbers reported in their RMP. BASF used MARPLOT to define population surrounding the facility.

40 C.F.R. § 68.33 Defining offsite impacts – Environment – U.S. Geological Survey Data was used to determine the environmental receptors and the distance to endpoints.

40 C.F.R. § 68.36 Review and update – I reviewed the documentation that illustrated reviews and updates regarding the offsite consequences are completed at least every five years.

40 C.F.R. § 68.39 Documentation – I was provided documentation of the offsite consequence analyses. Included in the documentation of the worst-case and alternative release scenarios, was a description of the vessel or pipeline, assumptions and parameters used, and the rational for the selection with the assumptions including use of any administrative controls and any passive mitigation that were assumed to limit the quantity that could be released. The documentation also included the estimated quantity released, release rate, duration of release, methodology used, and data used to estimate population and environmental receptors potentially affected.

40 C.F.R. § 68.42 Five-year accident history – BASF reported no accidental releases in their RMP as of January 11, 2018. I reviewed the additional Incident Investigations on site for additional incidents that may have required addition to BASF's five-year accident history.

Subpart D – Program 3 Prevention Program

40 C.F.R. § 68.65 Process safety information – BASF provided written process safety information (PSI). I reviewed a selection of materials across the units. The PSI I reviewed included information pertaining to the hazards of the regulated substances used or produced by the processes, information pertaining to the technology of the processes, and information pertaining to the equipment in the processes. The process safety information contained Safety Data Sheets (SDSs), which included information on 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. The facility documented information pertaining to the technology of the processes with block flow diagrams, process chemistries, maximum intended inventories, safe upper and lower limits, and evaluation of consequences of deviation. Also, the PSI includes materials of construction, Piping and instrument Diagrams (P&IDs), electrical classifications, relief system designs, ventilation system designs, design codes and standards, material and energy balances, and safety systems. In one instance, a P&ID did not show the current in-use Master Stick after a temporary Management of Change (MOC) requiring update to the P&ID was not updated, although the MOC was listed as complete (Appendix 34). **[AOC 1]**

40 C.F.R. § 68.67 Process hazard analysis (PHA) – BASF conducted PHAs for the RMP covered process units. While onsite, I reviewed Dispersions, Caprolactum I, Caprolactum II, and Oxo/Syngas PHAs. The PHAs included the hazards of the process, engineering and administrative controls applicable to the hazards, consequences of failure of engineering and administrative controls, stationary siting, human factors, and evaluation of a range of the possible safety and health effects of failure of controls. Techniques used to conduct the process PHA included Checklists and Hazard and Operability Study

(HAZOPs). The PHAs were conducted by a team including appropriate personnel and the findings and recommendations were addressed and documented.

40 C.F.R. § 68.69 Operating procedures – BASF has developed and implemented written operating procedures that provide instructions or steps for conducting activities associated with each covered process consistent with the safety information. I viewed selected operating procedures to identify steps for each operating phase (initial startup, normal operations, normal shutdown and startup following a turnaround or after emergency shutdown). This included review of operating procedures from Caprolactum II through an intranet webpage. I reviewed the facility's procedures to ensure they addressed operating limits as well as safety and health considerations. Annual certifications were provided for procedures in the RMP covered processes in each unit. Annual certifications were complete over 1 year for two instances. Polyalcohols Formaldehyde Railcars (Appendix 15) and Ammonia Distribution Hydrox (Appendix 13) were conducted greater than 365 days apart. **[AOC 2]**

40 C.F.R. § 68.71 Training – Training by BASF was conducted independently in each unit and are handled by the Learning and Development Coordinators (LDC). The training records for employees included both paper and electronic records. Generally speaking in the units I reviewed, technicians are provided an outline of the trainings that are separated into packages. Trainees receive 2 weeks of on-shift training with the trainer, training on the system, interactions with the technicians running the system, shadowing, and testing with drawing the process. The trainee is provided a panel test for each package. In some instances, original training records were not available, and certification statements were included in the employee file. For Oxo/Syngas, trainees follow a training outline and review packages with written tests. For refresher training, each unit handled completing the trainings uniquely, but some instances were not conducted every three years. Records for Operator #1 showed initial training in 1991 to 1995, but the documentation of refresher training on procedures was September 6, 2017 (Appendix 1). Documentation of Operator #2 PSM Electronic Refresher Trainings occurred in February 2010, March 2013, and August 2016 (Appendix 4), which were more than three years apart. On September 14, 2018, BASF provided a record that Operator #2 completed an additional Electronic Refresher Training on September 13, 2018 (Appendix 38). Also, Operator #2 only received Operating Procedure Refresher Training on August 11, 2017 (Appendix 3). Documentation for Operator #3 showed a Verification of Training Statement dated May 12, 2016 (Appendix 5) with Operating Procedure Refresher Training on different processes between August 2015 and January 2018 (Appendices 6-8), some of which are more than 3 years since the last refresher on some procedures. Operator #4 shows verification statement dated on May 12, 2016 (Appendix 9). Operating Procedure Refresher Trainings were conducted between August 2015 and January 2018 (Appendices 10-12), some of which are more than 3 years since the last refresher on some procedures. Operator #5 records provided a Verification of Training Statement in 2017 with Operating Procedure refresher trainings also in 2017. Operator #5 did not have Electronic PSM Refresher Training completed according to the electronic record (Appendix 20). PSM Operating Procedure Refresher Trainings were only provided for Oximation in 2015 (Appendix 28), RA Salt in 2016 (Appendix 29), and Rearrangement in 2017 (Appendix 27). Previous PSM Operating Procedure Trainings were not provided for these units. **[AOC 3]**

40 C.F.R. § 68.73 Mechanical integrity – I requested and was provided mechanical integrity records from Risk Management Program covered equipment and the written procedure for maintaining the integrity of the process. I spoke with representatives for fixed equipment, rotating equipment, and instrumentation. Records for fixed equipment are managed in SAP Monitor and Ultrapipe which utilize API 510, 570, 579 and 580. Rotating equipment preventative maintenance is based off OEM Recommendations critical equipment list which is set by remaining life. No overdue equipment

inspection items were noted at the time of the inspection. In reviewing records for rotating equipment, the reason for deferring preventative maintenance and rebuilds for rotating equipment was unclear in the documentation record. (Appendix 16). **[AOC 4]**

40 C.F.R. § 68.75 Management of Change – I asked for and was shown MOCs done at the facility and the written procedure for MOC. I reviewed MOC documentation packages for changes occurring in covered processes. In a few instances, it was unclear from the MOC documentation that the training required prior to the start of the changes was completed timely. Records indicate trainings for some employees occurred after the change occurred (Appendix 21 and Appendix 32), although some employees were trained prior to the change. In one instance, an action item was closed prior to it being completed (Appendix 24). **[AOC 5]**

40 C.F.R. § 68.77 Pre-startup review – Pre-startup review was included with the MOC documentation in that I reviewed. The documentation for the startup of the Ammonia Unit at times showed conflicting trainings that may have occurred after startup. According to BASF documentation, the Take Over Certificate was signed on June 21, 2018, although the startup of the unit occurred on April 27, 2018 by KBR. The documentation of the trainings on the PSSR showed updates to ammonia procedures, and that many employees received training after the startup date of July 31, 2018 as listed in the PSSR (Appendix 35), although some had been trained prior to startup. **[AOC 6]**

40 C.F.R. § 68.79 Compliance audits – BASF conducts multiple Risk Management Program compliance audit reports for processes in different units. The compliance audits include a certification, list persons knowledgeable about the process included in the audit, a report of the findings, and provided the documentation of the responses to the findings. The Anone I & Caprolactum I compliance audits were conducted on September 29, 2014 and January 8-11, 2018. According to BASF, this compliance audit was originally scheduled for September 11, 2017, but due to hurricane preparations and disruption to local infrastructure, it was rescheduled to January 2018 (Appendix 14). **[AOC 7]**

40 C.F.R. § 68.81 Incident investigation – Prior to the inspection, I requested the incident investigations for the all incidents which resulted in, or could reasonably have resulted in, a catastrophic release of a regulated substance over the last three years. I reviewed additional incident investigations which included in the report the date of the incident, the date investigation began, a description of the incident, the factors that contributed to the incident, and the recommendations resulting from the investigation.

40 C.F.R. § 68.83 Employee participation – I reviewed the employee participation plan during this inspection and found no issues.

40 C.F.R. § 68.85 Hot work permit – While onsite, I reviewed two hot work permits. The hot work permits included the date authorized for hot work and identified the object on which hot work was performed.

40 C.F.R. § 68.87 Contractors – I observed that contractors are vetted through the Avetta system. Once the review is done, the contract is awarded. The contractors are then onboarded with site security requirements and background checks. If they meet those requirements, they go to the Brazoria County Safety Council and take standardized OSHA 10 Plus, site specific training, and vehicle specific training if needed. The contractors must also obtain TWIC site certification. To obtain a BASF Badge, they must

meet all qualifications in the block/unit specific trainings. The contractors must take specific training on an annual basis. Additionally, I reviewed periodic audits conducted by BASF.

Subpart E – Emergency Response –

40 C.F.R. § 68.90 Applicability – BASF employees are first responders that respond to fires and releases onsite.

40 C.F.R. § 68.95 Emergency response program – I requested and was provided the Emergency Response Plan for BASF. I reviewed this plan onsite and observed there was not a link to first aid documentation in the emergency response plan (Appendix 17). Medical guidelines showing first aid information was provided in a separate document (Appendix 26) **[AOC 8]**. On September 20, 2018, Susan Boyer provided an email showing that a link to the medical guidelines was added to the Emergency Response Plan (Appendix 40). Also, it appears that some inspections of safety equipment do not align with the inspection procedures (Appendix 18). For Fire Suppression 500 Block, inspections occurred more than one year apart on May 11, 2016, August 9, 2017, and 2018 was not found at the time of the inspection (Appendix 19). Monthly SCBA inspections on the 400 block inspections were missed during the June 2018 inspection (Appendix 22). Monthly Fire Hose Box inspections for the 400 Block were missed from May through August 2018 (Appendix 23). **[AOC 9]**

40 C.F.R. § 68.195 Required corrections – The RMPs for this facility were submitted eighteen times between 1999 and 2018, with additional corrections submitted five times. The re-submissions were all within the five-year timeframe. The most recent re-submission was January 11, 2018 with a correction submitted April 16, 2018.

Section III – AREAS OF CONCERN

AOC 1: 40 C.F.R. § 68.65(d)(1)(ii) Process Safety Information

40 C.F.R. § 68.10(b)(2) states that "Information pertaining to the equipment in the process... Information pertaining to the equipment in the process shall include... Piping and instrument diagrams..."

The current P&ID used by the facility provided when requested did not include the update after a temporary MOC, although the MOC was listed as complete (Appendix 34).

AOC 2: 40 C.F.R. § 68.69(c) Operating Procedures

40 C.F.R. § 68.69(c) states that "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."

Annual certifications were complete over 1 year in two instances. Polyalcohols Formaldehyde Railcars (March 7, 2016 to August 21, 2017) and Ammonia Distribution Hydrox (November 8, 2015 to December 13, 2106) were conducted greater than 365 days apart (Appendices 13 and 15)

AOC 3: 40 C.F.R. § 68.71 Training

40 C.F.R. § 68.71(a) states that "**(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. **(2)** In lieu of initial training for those employees already involved in operating a process on June 21, 1999 an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures.

(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.

(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."

Documentation for multiple operators for initial training was missing or lacking, and refresher training was over the 3 years (Appendices 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 20, 27, 28, 29, and 38).

AOC 4: 40 C.F.R. 68.73 Mechanical Integrity –

40 C.F.R. § 68.73(d)(3) states that "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."

In reviewing inspection records for rotating equipment, the reason for deferring rotating equipment (D-58-3 and P-58-D) was unclear in the documentation record as to why the preventative maintenance and rebuilds were deferred. (Appendix 16)

AOC 5: 40 C.F.R. 68.75(b) Management of Change –

40 C.F.R. § 68.75(b) states that "Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to start-up of the process or affected part of the process."

(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.

In a few instances, it was unclear from the MOC documentation that training was required prior to the start of the changes was completed timely. Records indicate trainings for some employees occurred after the change occurred (Appendices 21 and 32), although some employees were trained prior to the change. In one instance, an action item was closed prior to it being completed (Appendix 24).

AOC 6: 40 C.F.R. 68.77 Pre- Startup Safety Review –

40 C.F.R. § 68.73(d)(4) states that "**(b)** The pre-startup safety review shall confirm that prior to the introduction of regulated substances to a process: **(4)** Training of each employee involved in operating a process has been completed.".

The documentation of the trainings on the PSSR showed updates to ammonia procedures, and that many employees received training after the startup date of July 31, 2018 as listed in the PSSR, although some had been trained prior to startup (Appendix 35).

AOC 7: 40 C.F.R. 68.79 (a) Compliance Audits –

40 C.F.R. § 68.67(f) states that "**(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 Anone I & Caprolactum I compliance audits were conducted on September 29, 2014 and January 8-11, 2018. According to BASF, this compliance audit was originally scheduled for September 11, 2017, but due to hurricane preparations and disruption to local infrastructure, it was rescheduled to January 2018 (Appendix 14).

AOC 8: 40 C.F.R. 68.95(a)(2) Emergency Response Plan –

40 C.F.R. § 68.95(a)(2) states that "(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;

I reviewed the plan onsite and observed there was not a link to first aid documentation in the emergency response plan (Appendix 17).

AOC 8: 40 C.F.R. 68.95(a)(2) Emergency Response Plan –

40 C.F.R. § 68.95(a)(2) states that "(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;

Some inspections of safety equipment do not align with the inspection procedures (Appendix 18). For Fire Suppression 500 Block, inspections occurred more than one year apart on May 11, 2016 and August 9, 2017, and the 2018 were not found at the time of the inspection (Appendix 19). Monthly SCBA inspections on the 400 block documents missed the June 2018 inspection (Appendix 22). Monthly Fire Hose Box inspections for the 400 Block missed May through August 2018 (Appendix 23).

Section IV – Followup

On September 28, 2018, Mr. Scott Kolb provided an Action Plan developed to address the Areas of Concern noted by the inspector at the closeout meeting (Appendix 38 – Action Plan).

Section V – LIST OF APPENDICES

Appendix 1 – Capro Operating Procedure Training Checklist for Operator #1 (CBI)
Appendix 2 – Breakdown of RMP Process by Plant(CBI)
Appendix 3 – Syn Gas & 100 System PSM Operating Procedure Training Checklist for Operator #2 (CBI)
Appendix 4 – NA_US_UFRE-F/SG/O/PSMREF Training Records for Operator #2 (CBI)
Appendix 5 – PSM/RMP Verification of Training for Hydroxylamine 2 for Operator #3 (CBI)
Appendix 6 – 3 Year PSM Procedure Refresher Training Burner for Operator #3 (CBI)
Appendix 7 – 3 Year PSM Procedure Refresher Training Kettle for Operator #3 (CBI)
Appendix 8 – 3 Year PSM Procedure Refresher Training Auxiliary for Operator #3 (CBI)
Appendix 9 – PSM/RMP Verification of Training Hydroxylamine 2 for Operator #4 (CBI)
Appendix 10 – 3 Year PSM Procedure Refresher Training Burner for Operator #4 (CBI)
Appendix 11 – 3 Year PSM Procedure Refresher Training Kettle for Operator #4 (CBI)
Appendix 12 – 3 Year PSM Procedure Refresher Training Auxiliary for Operator #4 (CBI)
Appendix 13 – Hydrox Operating Procedure Certification for 2015 & 2016 (CBI)
Appendix 14 – ACC Compliance Audit (CBI)
Appendix 15 – Operating Procedure Certification Polyalcohols Department (CBI)
Appendix 16 – Rotating Equipment Mechanical Integrity Records associated with D-58-3 (CBI)
Appendix 17 – Freeport Site Emergency Plan Contents (CBI)
Appendix 18 – BCF020.016 – Appendix 1 Rev 1 Equipment Inspection and Frequency Table (CBI)
Appendix 19 – Fire Suppression Inspection Certificate for BASF 500 Blk Deluge for 2016 & 2017 (CBI)

Appendix 20 – Training Records Operator #5 (CBI)
Appendix 21 – 0117-AMM-17-2304 (CBI)
Appendix 22 – 400 Block Monthly SCBA Inspection Checksheet (CBI)
Appendix 23 – 400 Block Monthly Fire Hose Box Inspection Checksheet (CBI)
Appendix 24 – 0117-AA-E-17-2790 & PSV Design Summary & PSM/RMP Audit Recommendations(CBI)
Appendix 25 – Management of Change Procedures (CBI)
Appendix 26 – Medical Guidelines – Health – Tools & Services – EHS Portal(CBI)
Appendix 27 – 3 Year PSM Refresher – Rearrangement (CBI)
Appendix 28 – 3 Year PSM Refresher – Auxiliary (CBI)
Appendix 29 – 3 Year PSM Refresher – RA Salt (CBI)
Appendix 30 – Take Over Certificate (CBI)
Appendix 31 – 0117-CAP2-18-1493 (CBI)
Appendix 32 – 0117-AA-E-18-0578 (CBI)
Appendix 33 – 0117-AA-E-18-0320 (CBI)
Appendix 34 – 0117-AA-18-1413 including associated P&IDs(CBI)
Appendix 35 – 0117-AMM-18-1429 (CBI)
Appendix 36 – BCF020.025 Pre-Startup Project Safety Review (CBI)
Appendix 37 – BCF020.031 BASF Freeport Mechanical Integrity Program & Att. 5 Pumps & Rotating/Reciprocal Equipment(CBI)
Appendix 38 – 9/14/18 Email Operator Refresher
Appendix 39 – 9/14/18 Email Updating Rotating Equipment Inspection
Appendix 40 – 9/20/18 Email Updated Site Emergency Plan