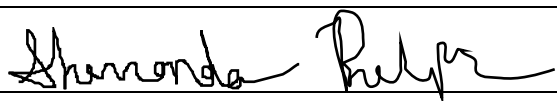




**Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT**

Inspection Date(s):	10/24-27/2017		
Media:	Air		
Regulatory Program(s)	RMP		
Company Name:	Chevron Phillips Chemical Company LP		
Facility Name:	Chevron Phillips Chemical Company LP– Sweeny		
Facility Physical Location:	21441 Loop 419		
(city, state, zip code)	Sweeny, Texas 77480		
Mailing address:	P.O. Box 1000		
(city, state, zip code)	Sweeny, Texas 77480		
County/Parish:	Brazoria		
Facility Contact:	Emily Tucker	PSM Supervisor	
	kruppek@cpchem.com		
FRS Number:	1000 0020 1863		
Identification/Permit Number:			
Media Number:			
NAICS:	32511		
SIC:			
Personnel participating in inspection:			
Gary Parsley	CP Chemical Company LP	Tech Manager	(979)491-5529
Brandon Hernandez	CP Chemical Company LP	PSM Engineer	(979)491-5536
Melody Mauch	CP Chemical Company LP	Training Coordinator	(979)491-5526
Karl Alderks	CP Chemical Company LP	PSM Engineer	(979) 491-5653
Sherronda Phelps	US EPA	Sr. Environmental Engineer	(281) 983-2122
EPA Lead Inspector Signature/Date			12/28/2017
	Sherronda Phelps		Date
Supervisor Signature/Date	 for Sam Tates		12/28/2017
	Samuel Tates		Date

Section I – INTRODUCTION**PURPOSE OF THE INSPECTION**

On October 24, 2017 I (Sherronda Phelps) arrived at the Chevron Phillips Chemical Company LP-Sweeny (CP Chemical- Sweeny) facility for an announced Clean Air Act inspection. A notification of my arrival was sent via email on October 13, 2017. I met with Emily Tucker, PSM Supervisor. I presented my credentials to Mrs. Tucker and informed her and other personnel that this was an EPA inspection to determine compliance with the Clean Air Act Section 112(r)(1) and 112(r)(7). The scope of the inspection was a partial compliance evaluation (PCE) and included evaluation of the compliance of the facility with 40 CFR Subpart 68 – Chemical Accident Prevention Provisions. An employee representative was invited to participate in the inspection. The site has union representation for the many crafts on site.

FACILITY DESCRIPTION

Chevron Phillips Chemical Company LP-Sweeny consists of 6 “covered processes”. The facility employs about 630 employees. The following units were inspected: Unit 22/24/33 Ethylene Units, NGL Units 10ABCD/21, and Polyethylene Unit 40/41/42. The Sweeny complex is located at the intersection of Highway 35 and Farm Road 524. The plant produces simple olefins, including ethylene and propylene, polyolefins, some C6 products, butadiene, and Natural Gas Liquids (NGL). The RMP regulated flammable materials include Normal Butane, 1,3 butadiene, butane, 1-butene, 2-butene, 2-butene-trans, ethane, ethylene, hydrogen, isobutene, isopentane, isoprene, methane, pentane, 1-pentene, propane, propadiene and propylene. The plant is also a Title V facility.

Section II - OBSERVATIONS**40 CFR Part 68 – Chemical Accident Prevention Provisions**
Subpart A-General**68.12 General Requirements**

CP Chemical-Sweeny submitted a single Risk Management Plan with covered processes that are subject to Program 3 requirements. There was a voluntary resubmission completed January 5, 2017. The facility made the resubmission/update as a predictive filing to add in the new process Polyethylene Unit. This unit started up in September of 2017. As a facility with Program 3 processes, CP Chemical-Sweeny must develop and implement a management system, conduct a hazard assessment, implement the prevention requirements of 68.65 through 68.87, develop and implement an emergency response program, and submit the data elements from 68.175 in their RMP.

68.15 Management System

I reviewed the documentation provided and it meets the requirements as stated by the regulation.

Subpart B – Hazard Assessment**68.20 Applicability**

CP Chemical – Sweeny operates a program level 3 process which is subject to this part and thus is required to prepare a worst case release scenario analysis and complete the five-year accident history. I reviewed the documentation provided to make this determination and identified no area of concern with information pertaining to sections 68.22 – 68.33 or any Offsite Consequence Analysis (OCA) data. The facility used the EPA Model RMP Comp.

68.36 Review and Update

CP Chemical –Sweeny indicated that they review their OCA at least once every five years.

68.39 Documentation

CP Chemical – Sweeny maintains documentation describing the vessel selected for review as worst case scenario and the assumptions and parameters used. A description of the scenarios identified, assumptions and parameters used, and the rationale for the selection of specific scenarios have been documented as well.

68.42 Five Year Accident History

CP Chemical –Sweeny is reporting in their RMP accident history all incidents that may cause or caused injury; however, there were none to be reported in the last five years.

Subpart D – Program 3 Prevention Program**68.65 Process Safety Information**

CP Chemical – Sweeny provided documentation of process safety information (PSI) including information pertaining to the hazards of substances in the processes, pertaining to the technology of the process, and pertaining to the equipment in the process. The CP Chemical - Sweeny facility also provided the Maximum Intended Inventory for the RMP covered process for the units of interest.

68.67 Process Hazard Analysis

EPA selected the Process Hazard Analysis (PHA) for the units of focus: **NGL – Unit 22, Ethylene – Unit 22/24, and Ethylene – Unit 33**. All appeared to be current in regards to the required revalidation dates. The Hazard and Operability (HAZOP)/Layers of Protection (LOPA) methodology was used to conduct the review. Upon further review, it would appear that CP Chemical- Sweeny is addressing all action items

made and tracking them to completion. CP Chemical-Sweeny uploads all recommendations/action items into the PHA Pro system where they are assigned and tracked to completion. The facility PHA's can also be accessed via the facility's intranet network.

68.69 Operating Procedures

EPA reviewed several operating procedures while on site. During this review, I reviewed procedures on emergency response to certain regulated substances and the database that holds the Safety Data Sheets referenced when this occurs. There were several substances that showed their data had expired in the database. I spoke with Isaac Atkins, Industrial Hygienist who handles the update of this database, and he explained that the update comes down from the corporate repository. He noted the last update sent was in February of 2017, but it is still a work in progress. He shared that he expects to complete this task by end of 2017. CP Chemical-Sweeny also provided all certifications of operating procedures for the last five years as requested.

68.71 Training

I reviewed training documentation for selected operators from the units of focus for the inspection. Operator qualification includes the following phases: Process Overview Training, Process & Job Specific Training and Operator Initial Qualification. Operator training is a combination of classroom, computer based and on-the-job training. From the information reviewed it would appear that refresher training occurs, but not always in the three year time frame as required by 68.71(b). Please see the documentation provided in facility's Confidential Business Information submittal.

68.73 Mechanical Integrity

I met with Gilberto Alicea, PSM Engineer, who aided with my requests of mechanical integrity information. The CP Chemical-Sweeny site has established and implemented a procedure to maintain the on-going integrity of process equipment. I requested a list of past due/overdue inspections within the last five years. I was provided with a chart that detailed the historical trend of past due inspection, testing and preventative Maintenance activities. The chart shows an increase in past due activities in May of 2016. CP Chemical-Sweeny has provided documentation which explains this spike in activity. Please see the CBI Appendix for details. I also requested last and next inspection dates for vessels and exchangers for the Units of Focus. This information will be evaluated at a later date to ensure that the frequency of inspections are consistent with applicable manufacturer's recommendations and good engineering practices. See Follow Up.

I also reviewed the training records of several trained employees to inspect and maintain Mechanical Integrity equipment. All records provided were current and up to date.

68.75 Management of Change (MOC)

The CP Chemical-Sweeny site has established and implemented a procedure to manage changes to process chemicals, technology, equipment, and procedures. The procedure addresses the technical basis for the change, the impact on safety and health, modifications or operating procedures, and authorization requirements for the proposed change. I sampled several items from their database of MOC's to follow up on the implementation of the procedure. There were no areas of concern noted while on-site.

68.79 Compliance Audits

I requested the two most recent compliance audits conducted from the facility. The most recent completed in 2015 and prior to that in the year 2012. After reviewing such documentation it appears that the facility is reviewing all the elements of the RMP finding recommendations and assigning these details through staff. I reviewed several findings made and the associated actions items for completeness and proper close out. All action items created from the recommendations of these audits are assigned and tracked to completion via the Knowledge Management System (KMS) and Dakota Tracer. I did observe a number of extensions requested for findings, all of which were justified per the policy in place at the time. It was noted that the policy has been reworked so that an extension request is approved by the plant manager as well to deter the numerous requests of extensions.

68.81 Incident Investigation

CP Chemical-Sweeny investigates all incidents promptly and assigns personnel to the recommendations and findings. The facility makes use of Safety Standard A.2, Procedure for Reporting and Investigation of Incidents, for initiation investigations and tracking them to closure. Completed investigation reports are stored in the KMS database. The incidents as required in the PHA are also used to identify any mitigating factors that might have been overlooked or that still leave an opportunity for improvement.

Chevron Phillips Sweeny reported a fire at Unit 22-Ethylene unit on August 27, 2017. This event occurred during Hurricane Harvey where an unprecedented amount of rainfall aided in the decision to shut down Units 22, 33, and 24. It was an orderly shutdown; however, a hydrocarbon alarm sounded near the compressor suction drums and soon thereafter a fire was ignited. An isolated fire started near the Crack Gas Compressor and moved to the Ethylene unit. Once the fire was extinguished and cleanup efforts completed, the facility determined that there was a loss of tubing which released 880 gallons of lube oil and there were at least 5 million dollars damage. No injuries occurred and the tubing had been sent out for analysis. I requested a final report of findings from the recent event, but it is still in progress. Once information has been submitted a further review and evaluation of the incident can be determined.

68.83 Employee Participation

The CP Chemical-Sweeny has developed a written plan of action regarding the implementation of employee participation. I was provided a copy and upon review, it met all conditions as required.

68.85 Hot Work Permit

I reviewed the last two quarters of hot work permits approved in the units of interest. It appears that all necessary information was listed given the particular work performed. However, all the necessary signatures needed to complete the permit were missing. Specifically, some permits were missing the contractor and contractor supervisor signatures. Moving forward the facility should make certain that all signatures are complete as required by the permitting process. I was advised that all permits are kept on site for three years upon completion of the work.

68.87 Contractors

CP Chemical-Sweeny has a policy which defines the requirements for the management of contractor selection and evaluation. I was provided with information which supports the process and how audits are conducted on the contractor's safety performance. All contractors are required to badge in and out, as well as, sign in and out at the board room as a means to control the entrance, exit, and presence of the contractor and its employees in the covered processes.

Subpart E – Emergency Response

68.90 Applicability

The CP Chemical-Sweeny is a stationary source with program 3 processes subject to this part and is thus required to comply with the requirements of 68.95. CP Chemical-Sweeny has an Emergency Response Team that will respond to incidents on site.

68.95 Emergency Response Program

The CP Chemical-Sweeny maintains a written Emergency Response Program called the Integrated Contingency Plan or the "One Plan". I was provided with the facility Contingency Plan. This emergency plan includes procedures for informing the public and local emergency response agencies about accidental releases. I randomly selected members of the Emergency Response Team to review their training records. Sweeny also provided me with inspection records of the emergency equipment. It appears the facility is timely in meeting the inspection requirements of emergency equipment and systems.

Subpart G – Risk Management Plan

68.150 Submission

The Chevron Phillips Chemical Company LP – Sweeny has submitted a single RMP which includes the information required in 40 CFR 68.150.

Section III – AREAS OF CONCERN

On October 24, 2017, I conducted an exit briefing with all involved personnel during the inspection and others who were invited. I reviewed all elements covered and the areas of concern noted during the on-site inspection they are as follows:

- 1) 40 CFR 68.71(b) Refresher training was not always completed at least every three years for unit operators.
- 2) 40 CFR 68.69(a)(3) Safety Data Sheets database is not current on the regulated substances being handled and the measures to be taken in responding to human exposure and other incident types.
- 3) 40 CFR 78.73(d)(3): Inspections and testing were not always completed according to the frequency of inspections and tests of process equipment per the applicable manufacturers' recommendations and good engineering practices.

Section IV – FOLLOW UP

CP Chemical-Sweeny provided follow up information from requests made during the RMP inspection conducted October 24-27, 2017. This information will be reviewed and evaluated.

Section V – LIST OF APPENDICES

Appendix 1 – Opening conference/Exit briefing sign-in sheet
CBI Appendix (Not listed in final report for posting)