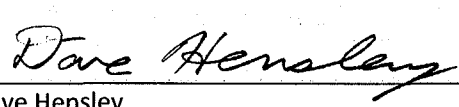
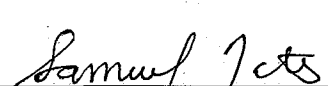




**Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT**

Inspection Date(s):	09/15-17/2015		
Media:	Air		
Regulatory Program(s)	RMP		
Company Name:	E. I. DuPont De Nemours & Co., Inc.		
Facility Name:	DuPont Sabine River Works		
Facility Physical Location:	3055 FM 1006		
(city, state, zip code)	Orange, TX 77630		
Mailing address:	P.O. Box 1089		
(city, state, zip code)	Orange, TX 77631		
County/Parish:	Orange County		
Facility Contact:	Becky S. Pietras	Safety, Health, and Environmental Manager	
	becky.s.pietras@usa.dupont.com		
FRS Number:	110017746368		
Identification/Permit Number:	Risk Management Program EPA Facility Identifier: 1000 0006 3584		
Media Number:	State Air CAA TX0000004836100002		
NAICS:	32511 - Petrochemical Manufacturing		
Personnel participating in inspection:			
Becky S. Pietras	DuPont Sabine River Works	Safety, Health, and Environmental Manager	409-886-9215
Scott A. Elliott	KattenMuchinRosenman LLP	Attorney at law	713-270-3400
Jessica I. Wilson	KattenMuchinRosenman LLP	Attorney at law	512-691-4000
EPA Lead Inspector Signature/Date			10/20/2015
	Dave Hensley		Date
Supervisor Signature/Date			10/22/2015
	Sam Tates		Date

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

Environmental Protection Agency (EPA) Region 6 inspector Dave Hensley (I) arrived at E. I. DuPont De Nemours & Co., Inc. / DuPont Sabine River Works at 09:00 on September 15, 2015, for an announced inspection. I met with Becky S. Pietras (Safety, Health, and Environmental Manager), Scott A. Elliott (Attorney), and Jessica I. Wilson (Attorney). I presented my credentials to Ms. Pietras, Mr. Elliott, and Ms. Wilson. I informed them that the scope of the EPA inspection was to determine compliance with the Clean Air Act Section 112 (r) and the Chemical Accident Prevention Provisions 40 Code of Federal Register (C.F.R.) Part 68. An employee representative was invited to participate in the inspection; however, the facility is non-union and a representative was not available.

FACILITY DESCRIPTION

DuPont Sabine River Works plant is located approximately two miles south of the city of Orange, in a rural setting on FM 1006. The site is located on 1,500 acres evenly divided between manufacturing processes, the employee recreation area, and bio-oxidation ponds. The site is a petrochemical facility that manufactures Ethylene and Ethylene Copolymers, in a twenty four hour / seven days a week operation. DuPont Sabine River Works has 921 full time employees. Support operations include Site Environmental Services (i.e. incinerator and bioponds) and Power. The barge dock, water treatment, and cogeneration operations are encompassed within the Power Unit. Within these operations, the following regulated substances are used and are present on site in quantities greater than the threshold quantity: Vinyl Acetate monomer (VA), Ammonia, Aqueous (>20%), Chlorine, Ethane, Ethylene, Propane, Propylene, Isoprene, Hydrogen, Methane, and Flammable Mixture of: 1,3-Butadiene, Butane, 1-Butene, 2-Butene-cis, 2-Butene-trans, 1-Pentene, Isobutane, and Isobutylene.

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 DuPont Sabine River Works is a stationary source that has Air Operating Permits 1900, 2001, 1899, 1896, 2055, 2331, 1895, and 1901. I reviewed documentation that showed more than a threshold quantity of a regulated substances in four processes; Ethylene Copolymers Unit, Power Unit, Ethylene Unit, and Site Environmental Services; therefore, these regulations are applicable. DuPont submitted a Risk Management Plan (RMP) that describes these four processes containing toxic and flammable chemicals held at more than a threshold quantity. The processes are Program 3 pursuant to 40 C.F.R. 68.10 (d)(1) and due to being the North American Industry Classification System (NAIC) code of 32511 Petrochemical Manufacturing and the facility is subject to OSHA's Process Safety Management Standard (29 CFR 1910.119).

40 C.F.R. § 68.12 General requirements – I reviewed the RMP submitted by DuPont on May 29, 2014, that listed ten toxic and flammable chemicals in four processes.

40 C.F.R. § 68.15 Management – DuPont 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.

Subpart B – Hazard Assessment

40 C.F.R. § 68.20 Applicability - DuPont prepared a worst-case release scenario analysis and completed the five-year accident history. Since DuPont has Program 3 processes, they must comply with all sections in this subpart.

40 C.F.R. § 68.22 – 39 Offsite consequence analysis – I reviewed documentation and discussed the offsite consequence analysis completed by DuPont. DuPont used RMP*Comp and thus used the required assumptions and parameters required by this part. The documentation met the requirement.

40 C.F.R. § 68.42 Five year accident history – DuPont did not list any accidents in the five year accident history of the RMP submittal. I reviewed the National Reporting Center (NRC) and State of Texas Environmental Electronic Reporting System (STEERS) for additional incidents that may have required addition to DuPont's five year accident history. I did not discover any accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.

Subpart D – Program 3 Prevention Program

40 C.F.R. § 68.65 Process safety information – I reviewed process safety information such as a block flow diagram of RMP processes, safety data sheets, and equipment files including material of construction and design basis.

40 C.F.R. § 68.67 Process hazard analysis – I requested and reviewed the Process Hazard Analyses (PHAs) from January 16, 2013, for the Ethylene Unit and July 13, 2013, for the Site Environmental Services.

40 C.F.R. § 68.69 Operating procedures – I reviewed the annual certifications for the operating procedures at DuPont Sabine River Works. Each Risk Management Process maintains an annual certification statement that all procedures are accurate, correct, and signed by a person overseeing that process.

40 C.F.R. § 68.71 Training – I reviewed documentation of initial and three year refresher training. I discussed the training program with DuPont staff. They have mechanisms in place to ensure initial and refresher trainings occur.

40 C.F.R. § 68.73 Mechanical integrity – I reviewed the written procedures to maintain the ongoing integrity of process equipment. I requested and was provided a list of overdue inspections. I was provided a list of fifty two (52) pieces of equipment that were identified as overdue. Approximately 50% of these had been taken out of service. The remaining 50% had approved extensions. I requested a specific example of these extensions and was provided the extension file. This contained an engineering analysis, managerial approval, and documentation of the time frame for the extension. None of these extensions were more than a year old.

40 C.F.R. § 68.75 Management of Change – I asked for and was given a list of the management of changes (MOC) done in RMP units at the facility for the last year (September 01, 2014 - September 01, 2015) and the written procedure for MOC. Both were provided upon arrival at the inspection. I selected

and requested the following MOCs for review: MOC ID# 2015 Ethylene-14, MOC ID# 2014 Ethylene-127, MOC ID# 2015 SES-7, and MOC ID# 2014 SES-14.

40 C.F.R. § 68.77 Pre-startup review – Pre-startup review was included with the MOC documentation when appropriate, which met the requirements.

40 C.F.R. § 68.79 Compliance audits – With my inspection announcement, I attached a request for documentation, which included the last two Risk Management Program compliance audits.

40 C.F.R. § 68.81 Incident investigation – I requested the incident investigations for the following releases:

1. June 12, 2015; G-Unit experienced a rupture disc burst resulting in a release of ethylene gas at the top of the vent stack. As a result, the reactor and HPS dump systems were activated per area emergency procedures (STEERS)
2. February 20, 2015; Pinhole leak in #5 hyper suction cooler on welded section of piping underneath insulation. (STEERS)
3. January 14, 2014; Upset occurred in the unit (STEERS)
4. December 11, 2013; the wax receiver vessel level indication was reading inaccurately. As a result, the vessel was filled beyond its max capacity resulting in the carryover of wax. The overpressure in off gas header caused the wax receiver off gas relief valve to relieve for two (2) minutes. (STEERS)
5. September 16, 2013; Rector bottom Seal failure (STEERS)

DuPont provide incidents reports for each of these incidents. I reviewed these reports and found that they meet the requirements of this part.

40 C.F.R. § 68.83 Employee participation – I reviewed the employee participation plan during this inspection. It meets the regulation.

40 C.F.R. § 68.85 Hot work permit – While onsite, I reviewed several hot work permits that met the requirements of this regulation.

40 C.F.R. § 68.87 Contractors – I observed that contractors and visitors were required to watch a safety video prior to entering the facility.

Subpart E – Emergency Response –

40 C.F.R. § 68.90 Applicability – DuPont employees are the first responders to fires and releases onsite.

40 C.F.R. § 68.95 Emergency response program – I requested and was provided the Emergency Response Plan for the facility. Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures was not in the emergency response plan, but were in a medical procedure. Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance were also in another procedure.

40 C.F.R. § 68.195 Required corrections – The original RMP for this facility was submitted on June 21, 1999. There has been five resubmissions since then, which were all within the five year timeframe. The most recent submittal was May 29, 2014, due to a five year update.

40 C.F.R. § 68.215 Permit content and air permitting authority or designated agency requirements - I requested and reviewed DuPont's Title V air permits. Two of these permits covering Risk Management Program processes, O1882 and O1896, did not have a statement listing this part as an applicable requirement.

Section III – AREAS OF CONCERN

40 C.F.R. § 68.79 (a) - Compliance audits were certified more than three years from each other.

“(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.”

DuPont has a system to continually audit their risk management program. Each unit audits one of the 14 elements of the OSHA Process Safety Management and Risk Management Program every quarter so all elements are audited in three years. To document the certification required by 40 C.F.R. 68.79(a) DuPont creates a certification form that is signed by the Business Unit Leader every third year. I reviewed these certifications for two cycles. The Ethylene Copolymers / CDG compliance audit certifications were signed more than three years from each other. An Ethylene Copolymers / CDG compliance audit certification was signed on June 16, 2009. The next Ethylene Copolymers / CDG compliance audit certification was signed on December 18, 2012. Approximately three years and six months apart. The certification of the compliance audits at DuPont is summarized below:

Table 1: Risk Management Program Compliance Audits Certification Dates

Risk Management Program Unit	Date of Last Certification	Date of Previous Certification
Ethylene Copolymers Unit	12/18/2012	06/16/2009
Power Unit	12/21/2012	09/18/2011
Ethylene Unit	08/11/2015	11/7/2012
Site Environmental Services Unit	06/26/2015	06/26/2012

I requested and DuPont provided these eight certification forms. They can be found in the file associated with this inspection.

40 C.F.R. § 68.175 - Prevention program/Program 3

“(a) For each Program 3 process, the owner or operator shall provide the information indicated in paragraphs (b) through (p) of this section. If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which processes the information applies. ... (h) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.”

In preparation for this inspection, I reviewed DuPont's most recent Risk Management Plan submittal, from May 29, 2014. For each program 3 Risk Management Program unit, the date of the most recent equipment inspections were listed as:

Table 2: Risk Management Program Units Equipment Inspection Dates

Risk Management Program Unit	Equipment Inspected	Date
Ethylene Copolymers Unit	Relief Valve	April 08, 2014
Power Unit	Flame Arrestor	February 19, 2014
Ethylene Unit	EA-201-A Heat Exchanger	April 14, 2014
Site Environmental Services Unit	#2 Organic Tank, Eq#2402	May 20, 2009

The Ethylene Copolymers Unit, Relief Valve, April 08, 2014; the Power Unit, Flame Arrestor, February 19, 2014; the Ethylene Unit, EA-201-A Heat Exchanger, April 14, 2014; and the Site Environmental Services, #2 Organic Tank, Eq#2402, May 20, 2009. I requested to review these equipment inspections during the inspection. I was provided the inspection reports for the Ethylene Copolymers Unit, the Power Unit, and the Ethylene Unit, with the dates listed in the Risk Management Plan. The inspection of the #2 Organic Tank, Eq#2402 in the Site Environmental Services occurred on April 10, 2014. The date provided to the most recent Risk Management Plan submittal and the inspection date provided did not match.

40 C.F.R. § 68.215 (a)(1) – No statement listing this part as an applicable requirement was in two of the facility's 40 C.F.R. part 70 permits.

“(a) These requirements apply to any stationary source subject to this part 68 and parts 70 or 71 of this chapter. The 40 CFR part 70 or part 71 permit for the stationary source shall contain: (1) A statement listing this part as an applicable requirement;”

Table 3: DuPont Sabine River Works Title V Clean Air Act Operating Permits

Risk Management Program Unit	Permit Numbers Associated	Is 40 C.F.R. 68 Included
Ethylene Copolymers Unit	O2055, O2001,	Yes
Power Unit	O1882	No
Ethylene Unit	O1901	Yes
Site Environmental Services Unit	O1896	No

Clean Air Act Title V Operating Permits for facilities in the State of Texas are available at <https://webmail.tceq.state.tx.us/gw/webpub>. I requested DuPont's title V Clean Air Act Operating Permits during the inspection. DuPont provide copies for my review. During this review I discovered that the operating permits for the Power Unit (O1882) and Site Environmental Services Unit (O1846) did not contain statements listing this part as an applicable requirement.

Section IV – FOLLOW UP

On September 17, 2015, I made a request for documentation recorded as request 27 for Production to EPA. The documents requested were; Compliance audit certification forms reviewed on site and Front page of 2009 audit report for PSM elements 2.10, 2.11, and 2.12.

On September 25, 2015, I received an email from Yolanda Rodriguez and Scott Elliott of Katten Law with a cover letter for the documentation provided electronically via a Katten drop box website. Later that

day I received an email from Katten Dropoff with a link to the drop box website. I followed this link and found and downloaded the requested documents. A listing of the documents is below.

Table 4: DuPont Sabine River Works Documents Provided

File Name	Request	Title
DuPont SRW EPA RMP Production 1 Cover Letter		Production 1 Cover Letter
DUP-SRW-EPA-0000001-DUP-SRW-EPA-0000001	Front page of 2009 audit report for PSM elements 2.10, 2.11, and 2.12	PSM 2.10 Auditing 1st PARTY AUDIT REPORT CDG Units 07/13/2009
DUP-SRW-EPA-0000002-DUP-SRW-EPA-0000002	Front page of 2009 audit report for PSM elements 2.10, 2.11, and 2.12	PSM 2.11 1st PARTY AUDIT REPORT CDG UNIT 12/21/2009
DUP-SRW-EPA-0000003-DUP-SRW-EPA-0000003	Front page of 2009 audit report for PSM elements 2.10, 2.11, and 2.12	PSM 2.12 1st PARTY AUDIT REPORT CDG UNIT 10/20/09
DUP-SRW-EPA-0000004-DUP-SRW-EPA-0000004	Compliance audit certification forms reviewed on site	Audit Certification CDG UNIT 12/18/2012
DUP-SRW-EPA-0000005-DUP-SRW-EPA-0000006	Compliance audit certification forms reviewed on site	Audit Certification Ethylene Copolymers/CDG 06/16/2009
DUP-SRW-EPA-0000007-DUP-SRW-EPA-0000007	Compliance audit certification forms reviewed on site	Audit Certification Site Environmental Services 06/26/2012
DUP-SRW-EPA-0000008-DUP-SRW-EPA-0000008	Compliance audit certification forms reviewed on site	Audit Certification Site Environmental Services 06/26/2015
DUP-SRW-EPA-0000009-DUP-SRW-EPA-0000010	Compliance audit certification forms reviewed on site	Audit Certification Power Unit 09/28/2011 & 12/21/2012
DUP-SRW-EPA-0000011-DUP-SRW-EPA-0000011	Compliance audit certification forms reviewed on site	Audit Certification SRW Ethylene Unit 11/07/2012
DUP-SRW-EPA-0000012-DUP-SRW-EPA-0000012	Compliance audit certification forms reviewed on site	Audit Certification SRW Ethylene Unit 08/11/2015