



# For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-10700001-2023** Title V Application Received: **July 8, 2022** Plant Identification Number: **10700001** Permittee: **DuPont Specialty Products USA, LLC** Facility Name: **Washington Works** Business Unit: **Acetal Resin Production (Part 3 of 14)** Mailing Address: **P.O. Box 2800, Washington, WV 26181-2800** 

Physical Location: UTM Coordinates: Directions: Washington, Wood County, West Virginia 442.368 km Easting • 4,346.679 km Northing • Zone 17 Route 68 west from Parkersburg to intersection of Route 892. Continue west on Route 892 with the plant being on the north side about one mile from the intersection of Routes 68 and 892.

## **Facility Description**

The Delrin<sup>®</sup> Business unit is divided into three areas which work together to produce a finished acetal product. The first area is the **Formaldehyde Area** which produces the formaldehyde to be fed to the process. The formaldehyde is used in the **Chemical Area** which conditions the formaldehyde and converts it into raw polymer. The raw polymer is then sent to the **Finishing Area** where it is extruded with additives into finished pellets which are then sold.

#### Formaldehyde Area

The Delrin® formaldehyde plant is designed to produce a formaldehyde/water solution. Heat of reaction is recovered to produce steam used in the Delrin<sup>®</sup> Chemical Area. The plant consists of multiple reactor loops each containing a reactor, blower, vaporizer, and a heat transfer fluid condenser/steam generator. Common equipment to the reactor loops include absorbers, a catalytic converter, a boiler feed water tank, a caustic tank, and a heat transfer fluid heater and storage tank. Support facilities include a cooling tower, methanol storage tanks, and formaldehyde tanks. Methanol is normally received by barge and infrequently by tank truck. It is stored in tanks. Formaldehyde is produced by air oxidation of methanol over catalyst. The methanol gas feed stream is converted to a gas stream containing formaldehyde, unreacted methanol, and reaction byproducts. The hot reactor gas passes through the vaporizer to provide heat to vaporize the liquid methanol feed. The gases then flow through the absorbers, where formaldehyde and water vapor are

removed from the gas stream by scrubbing. Absorber pH is controlled by adding caustic solution. The liquid product stream is adjusted to a specified formaldehyde concentration after leaving the absorbers by mixing with a dilute formaldehyde stream. The aqueous formaldehyde product is stored in the formaldehyde tank farm for feed to the Delrin<sup>®</sup> Chemical Area. The process gas which exits the absorbers is primarily nitrogen and oxygen, with small amounts of formaldehyde, water, methanol, carbon monoxide, and dimethyl ether. Most of the exit gas is mixed with air and returned to the reactor via the blower. The amount of recycle gas is controlled to maintain non-explosive conditions. As the process gas is returned to the reactor, it passes through a vaporizer where fresh methanol is added. As previously noted, heat is supplied by the hot reactor shell. The heat transfer fluid vapor passes to a condenser where it is condensed by boiler feed water generating steam that is used elsewhere in the plant. Process gas that is not recycled to the reactor loops flows through the catalytic converter system for air emissions control.

#### **Chemical Area**

The polymerization of Acetal resin homopolymer starts with the purification of the formaldehyde monomer stream. The general feedstock for the purification stream may be either manufactured on site or trucked into the facility after purchase on the open market. This liquid solution of formaldehyde is then treated in an extraction column where an aliphatic alcohol mixture is used to selectively extract the formaldehyde from the water by forming an alcohol mixture by forming an alcohol hemiformal. This alcohol hemiformal is then dried to remove water and impurities that are found in almost all formaldehyde. After drying the material, the purified hemiformal is then thermally decomposed to generate essentially pure formaldehyde vapor through the use of a pyrolyzer and partial condenser system. A scrubber system is used to absorb the monomer generated during the start up of the polymerization process. The formaldehyde vapor exiting the partial condenser is sent to a polymerization vessel that contains a commercial heptane solvent blend as the carrier solvent for the forming homopolymer particles. This polymerization is cooled to remove the exothermic heat of reaction evolved in the polymerization. The polymerization vessel operates continuously with both formaldehyde and solvent feeds occurring continuously. A solvent and polymer slurry is constantly withdrawn from the polymerization vessel and sent to isolation to separate the polymer. The recovered solvent is recycled for further use in the process. Periodically the polymerization vessel must be shutdown to clear the vessel of polymer build up. This clean out is performed through a condenser based emission control system with a different emission point. The homopolymer and solvent slurry mixture produced in the polymerizer during normal operation is fed to a separation device that isolates the solids and drops them into a conveyor/dryer system. The solids are placed into a set of intermediate storage bins. These bins feed a conveying system that transports the intermediate polymer (raw fluff) to a reactor processing vessel that "caps" the homopolymer chains with a terminating agent to improve the stability of the polymer chains. The capping is done with excess of the required amount of capping agent present. The capping reagent and evolved formaldehyde are recovered for further purification and reuse. The formaldehyde recovered is sent to other parts of the process for concentration and recycled back to the feed tank of the initial process. The capped polymer exits from the capping reactor and is treated to reduce the residual reactants present on the polymer. Upon exiting this final process the finished product is ready for either conversion to another form or the direct sale or transfer to other processors. This is also the point of definition for the final product for the Acetal MACT (40 CFR 63 Subpart YY) standard.

#### **Finishing Area**

The capped fluff is loaded out into boxes for temporary storage or shipment; or into rail cars for temporary storage or shipment. It may also be loaded into sea-land boxes for shipment overseas, or fed to a set of conversion lines in which other materials and modifiers are added to the fluff to produce modified polymers in pellet form. In the finishing area the pelletized polymer is produced by five extrusion lines that are used to alter the form of the product produced in the plant through the use of additives, heat, and pressure. These modified products exhibit improve characteristics that improve their market value. Raw materials for the extrusion system are received in boxes, bags, leverpaks, and by pneumatic transport from other portions of the facility. The materials are fed directly to extruders through metering devices, or used to make blends for a similar incorporation into a final product. Raw materials for the extrusion lines include modifiers, colors, and base plastic materials. Some finished material from the polymerization unit is packed out directly for shipment to other processors or for interim storage. The extrusion feed material is fed to the extrusion feed materials are thoroughly mixed and converted to another product form by extrusion. The product, usually in the form of pellets, is dried, screened, conveyed, and packaged into either shipping or storage containers. The material is then shipped to other users or to customers.

## **Emissions Summary**

Plantwide Emissions Summary [Tons per Year]			
<b>Regulated Pollutants</b>	Potential Emissions	2022 Actual Emissions	
Carbon Monoxide (CO)	67.87	6.31	
Nitrogen Oxides (NO <sub>X</sub> )	48.30	0.00	
Particulate Matter (PM <sub>2.5</sub> )	14.25	3.15	
Particulate Matter (PM <sub>10</sub> )	14.25	3.15	
Total Particulate Matter (TSP)	14.84	3.15	
Sulfur Dioxide (SO <sub>2</sub> )	11.30	0.69	
Volatile Organic Compounds (VOC)	243.88	49.29	
$PM_{10}$ is a component of TSP.			
Hazardous Air Pollutants	Potential Emissions	2022 Actual Emissions	
Formaldehyde	19.67	2.89	
Methanol	5.13	0.80	
Toluene	8.79	1.60	

Hexane1.060.31Benzene0.050.01BiPhenyl/Diphenyl Ether0.160.07Total HAPs34.865.68

Some of the above HAPs may be counted as PM or VOCs.

## **Title V Program Applicability Basis**

This facility has the potential to emit 243.88 tons of VOC per year, 19.67 tons of Formaldehyde per year and 34.86 tons of Total HAPs per year. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year of an individual HAP, and over 25 tons per year aggregate HAPs, DuPont Specialty Products USA, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

## Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

Acetal Resin Production (Part 3 of 14) has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Particulate matter and opacity limits for indirect heat exchangers.
	45CSR6	Open burning prohibited.
	45CSR7	Particulate matter and opacity limits for
		manufacturing sources.
	45CSR10	Sulfur dioxide limits.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Preconstruction permits for minor sources.
	45CSR16	Emission Standards for New Stationary
		Sources Pursuant to 40 C.F.R. Part 60.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
		information such as annual emission
		inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air
		Pollutants Pursuant to 40 C.F.R. Part 63.
	40 C.F.R. Part 60, Subpart Dc	Standards of Performance for Small
		Industrial-Commercial-Institutional Steam
		Generating Units.
	40 C.F.R. Part 60, Subpart Kb	Standards of Performance for Volatile
		Liquid Storage Vessels.
	40 C.F.R. Part 60, Subpart VV	Standards of Performance for SOCMI.
	40 C.F.R. Part 60, Subpart III	Standards of Performance for VOC
		Emissions from SOCMI Air Oxidation Unit Processes.
	40 C.F.R. Part 60, Subpart NNN	Standards of Performance for VOC
		Emissions from SOCMI Distillation
		Operations.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart F, G, H	Hazardous Organic NESHAP (HON)
	40 C.F.R. Part 63, Subpart YY	Generic MACT
	40 C.F.R. Part 63, Subpart SS	NESHAP for closed vent systems, control
		devices, recovery devices, and routing to a
	40 C E B Dort 62 Submart III	fuel gas system or process.
	40 C.F.R. Part 63, Subpart UU	NESHAP for equipment leaks – control level 2 standards.
	40 C.F.R. Part 63, Subpart EEE	Hazardous Waste Combustors MACT.
	40 C.F.R. Part 63, Subpart EEE	Organic Liquid Distribution (OLD) MACT.
	40 C.F.R. Part 63, Subpart DDDDD	Boilers and Process Heaters MACT.
	40 C.F.R. Part 68	Chemical Accident Prevention Provisions
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	, , <u>.</u>	r o

State Only:	45CSR4	No objectionable odors.
	45CSR§§21-37 and 40	Control of VOC Emissions
	45CSR27	Best Available Technology (BAT) for TAPs

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-1596F	August 27, 2018	
R13-1849P	October 15, 2021	
R13-2381N	October 7, 2022	
R13-2617P	January 23, 2023	
Federal Consent Decree Civil Action No. 6:13-cv- 27030	October 28, 2013	

# Active Permits/Consent Orders

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

# **Determinations and Justifications**

This Title V renewal includes changes submitted as Title V minor modifications R30-10700001-2018 (MM10, MM11, and MM12) and changes approved under R13-2381N, R13-2617O, and R13-2617P.

Changes made to the Title V Permit since the last revision are summarized below:

- 1. Emission Unit DOJ was removed from Section 1.1 Emission Units table.
- 2. The emission point ID and control device for the D5 Sparger Cube Feed Conveyor (DVX-S) were changed from DTZ-E and DTZ-C to DVX-E and DVX-C in the Section 1.1 Emission Units table. Additionally, emission point DVX-E was added to the list of emission points subject to 45CSR7 in conditions 6.1.3, 6.1.7, and 6.1.8; and monitoring requirements in conditions 6.2.1 and 6.2.2.
- 3. Emission units HSA-S, HSB-S, HSD-S, HSE-S, HSF-S, HSI-S, HSP-S, HSQ-S, HSS-S, and HSV-S were added to the Section 1.1 Emission Units table to include the new extruder line. Additionally, emission points HSE-E, HSF-E, HSI-E, HSP-E, HSQ-E, and HSV-E were added to the list of emission points subject to 45CSR7 in conditions 6.1.3, 6.1.7, and 6.1.8; and monitoring requirements in conditions 6.2.1 and 6.2.2.

- 4. Removed the emergency and affirmative defense provisions in Sections 2.17, 3.5.7 and 3.5.8.a.1. of the Title V permit boilerplate in accordance with the deletion of section 5.7 from 45CSR30.
- 5. Section 3.1.16 was added to include a requirement that the permittee implement the leak detection and repair (LDAR) manual approved by the US EPA on June 22, 2022 in accordance with their Federal Consent Decree (Civil Action No 6:13-cv-27030).
- 6. The language in condition 3.3.2 was changed due to the updated language from underlying condition 4.3.1 in R13-2617.
- 7. The US EPA address was changed in Section 3.5.3.
- 8. Section 3.5.4 was changed. The requirement to submit a certified emission statement was removed. The section was changed requiring the permittee to pay fees on an annual basis in accordance with 45 CSR §30-8.
- 9. In Section 3.5.8.a.2, 'telefax' was replaced with 'email'.
- 10. In Sections 5.1.8.1.a.iii, 5.1.8.1.a.iii.A., 5.2.6.4, 5.2.6.4.a, 5.4.11.1, 5.4.11.1.a, and 5.5.2.1 emission point 'DOJ' was removed.
- 11. Appendix A.1 was added to Section 3.4.4 in accordance with Appendix A of R13-2617, Condition 4.4.2.
- 12. Changed Section 5.1.7.6.f to include the phrase ". . .the owner or operator shall reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the..." in accordance with 40 C.F.R.§63.1106(c)(6).
- 13. In Condition 6.1.1 the number of extruder lines was changed from five to six to reflect the addition of a new extruder line permitted under R13-2381N.
- 14. APPENDIX A.1 (Attachment A of R13-2617) was updated with Emission Point DTZE for D1 Fluff Bin (HFJ) and D5 Sorter System (DSS5). DTZE was changed to DVXE for the D5 Sparger Cube Feed Conveyor (DVX). Rows for Emission Points HSEE, HSF-E, HSI-E, HSP-E, HSQ-E, and HSV-E were added to the table. A row for DQCE for the D6 Surge Hopper/Sorter (DSS6) was added.
- 15. APPENDIX A.1 (Attachment A of R13-2617) was updated to more accurately describe Emission Point IDs, Source IDs, Source Descriptions, and Control Device IDs.
- 16. Source ID DBNS was deleted from the Table in APPENDIX B.1 (Appendix A of R13-1596).
- 17. APPENDIX D.1 (APPENDIX A of R13-2381) was updated with the addition of Emission Points HSF-E, HSI-E, and HSP-E. Control Device IDs were updated with descriptions of each control device including 'bag filter' or 'fabric filter'.
- 18. APPENDIX D.2 (APPENDIX B of R13-2381) was updated with the addition of Emission Points HSE-E, HSF-E, HSI-E, HSP-E, HSQ-E, and HSV-E with corresponding emission limits.

## **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

 a. 40 C.F.R. 60, Subpart K - "Standards of Performance for Storage Vessels For Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978." There are no petroleum liquid storage tanks in the Acetal Resin Production Area.

- b. 40 C.F.R. 60, Subpart Ka "Standards of Performance for Storage Vessels For Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984." There are no petroleum liquid storage tanks in the Acetal Resin Production Area.
- c. 40 C.F.R. 60, Subpart DDD "Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry." The Acetal Resin Production Area does not manufacture polypropylene, polyethylene, polystyrene, or poly(ethylene terephthalate) for which this rule applies.
- d. 40 C.F.R. 61, Subpart V "National Emission Standards for Equipment Leaks (Fugitive Emissions Sources)." Applies to sources in VHAP service as defined in 40 C.F.R. §61.241. VHAP service involves chemicals that are not used in a manner that qualifies them under the rule in the Acetal Resin Production Area.
- e. 40 C.F.R. 63, Subpart DD "National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations." The Acetal Resin Production Area does not receive off-site materials as specified in paragraph 40 C.F.R. §63.680(b) and the operations are not one of the waste management operations or recovery operations as specified in 40 C.F.R. §863.680(a)(2)(i) through (a)(2)(vi).
- f. 40 C.F.R. 63, Subpart JJJ "National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins." The Acetal Resin Production Area does not produce the materials listed in 40 C.F.R.§63.1310.
- g. 40 C.F.R. 63, Subpart PPPP "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products." The Acetal Resin Production Area does not produce an intermediate or final product that meets the definition of a "surface coated" plastic part.
- h. 40 C.F.R. 63, Subpart WWWW "National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production." The Acetal Resin Production Area does not engage in reinforced plastics composites production as defined in 40 C.F.R. §63.5785 and does not manufacture composite material as defined in 40 C.F.R. §63.5935.
- i. 40 C.F.R. 63, Subpart GGGGG "National Emission Standards for Hazardous Air Pollutants: Site Remediation." The Acetal Resin Production Area does not conduct site remediation as defined by 40 C.F.R. §63.7957 that meets all three of the conditions specified in 40 C.F.R. §§63.7881(a)(1) through (a)(3).
- j. 40 C.F.R. 63, Subpart HHHHH "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing." The Acetal Resin Production Area does not produce, blend, or manufacture coatings as part of the manufacturing process.
- k. 40 C.F.R. 63, Subpart NNNNN "National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production." The Acetal Resin Production Area is not an HCl production facility as defined by 40 C.F.R. §63.9075.
- 40 C.F.R. 82, Subpart B "Protection of Stratospheric Ozone." Requires recycling of Chlorofluorocarbons (CFCs) from motor vehicles and that technicians servicing equipment need to be licensed. The Acetal Resin Production Area does not conduct motor vehicle maintenance involving CFCs on site.
- m. 40 C.F.R. 82, Subpart C "Protection of Stratospheric Ozone." Bans non-essential products containing Class I substances and bans non-essential products containing or manufactured with Class II substances. The Acetal Resin Production Area does not use, manufacture, nor distribute these materials.

- n. 45CSR17 "To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter." Per 45CSR§17-6.1, the Acetal Resin Production Area is not subject to 45CSR17 because it is subject to the fugitive particulate matter emission requirements of 45CSR7.
- o. 40 C.F.R. 63, Subpart EEEE "National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)." Storage tanks DIN, DIR, and DIS are existing tanks with a design capacity greater than or equal to 18.9 cubic meters (5,000 gallons) and less than 189.3 cubic meters (50,000 gallons) storing an organic liquid with an annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid less than 27.6 kilopascals (4.0 psia). Since the annual average true vapor pressure of the total Table 1 organic HAP is less than 4.0 psia, these tanks are not required to be controlled under 40 C.F.R. 63, Subpart EEEE and are only subject to the notification, recordkeeping, and reporting requirements of 40 C.F.R. §§63.2343(b)(1) through (3). The unloading systems for these tanks, DJZ, DJY, and DJX are used for unloading the storage tanks when maintenance or inspection is required and are not an affected source under 40 C.F.R. 63, Subpart EEEE as specified in 40 C.F.R. §63.2338(c)(3). Since the tanks do not require control and the unloading systems are not affected sources, 40 C.F.R. §63.2350(c) does not require DuPont to develop a written startup, shutdown, and malfunction (SSM) plan for the tanks or unloading systems. Also, since the equipment leak detection requirements of 40 C.F.R. §63.2346(c) only apply if the affected source has at least one storage tank or transfer rack that meets the applicability criteria for control in Table 2 of 40 C.F.R. 63, Subpart EEEE, and none of the tanks or transfer racks are required to be controlled, DuPont is not subject to the leak detection and repair requirements of 40 C.F.R. 63, Subpart EEEE.
- p. 40 C.F.R. Part 64 Compliance Assurance Monitoring (CAM)
  Part 3 of 14 is not subject for the following reasons:
  40CFR§64.2(a)(3) This Group did not add a pollutant-specific emissions unit that has potential, precontrol device emissions equal to or greater than 100 percent of the amount, in tons per year, of any pollutant that would require the emission unit to be classified as a major source.

## **Request for Variances or Alternatives**

None

## **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

## **Comment Period**

Beginning Date:	April 21, 2023
Ending Date:	May 22, 2023

## **Point of Contact**

All written comments should be addressed to the following individual and office:

Jonathan Carney West Virginia Department of Environmental Protection Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304 Phone: 304/926-0499 ext. 41247 Jonathan.W.Carney@wv.gov

## **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

## **Response to Comments (Statement of Basis)**

### Comments from DuPont Specialty Products USA, LLC(received via email on May 18, 2023)

**Comment** 1 – DuPont commented that 40 CFR 60, Subpart VVa was made applicable only to a specified number of components in the polymerization portion of the plant (R13-1849) where 40 CFR 63, Subpart UU had originally been applicable, but where it was later determined to be non-applicable because OHAP concentration was less than 5%. DuPont further commented that Subpart VVa does not apply to the formaldehyde plant (R13-1596). For applicability of Subpart VVa to section 5 of the permit, DuPont proposed the following terms and conditions be added to section 5.1.7.3:

"The permittee shall apply the standards of 40 CFR 60, Subpart VVa to streams BX and 71. If streams BX and 71 become subject to a federal MACT LDAR standard, then the permittee shall implement the federal MACT standard in lieu of Subpart VVa"

**Response** – DEP agrees with the suggested addition to section 5.1.7.3 and has included it in the Title V permit on the basis of 45CSR§30-12.7.

**Comment 2** – DuPont requested typographical corrections in item 2 of the Determinations and Justifications section of the Fact Sheet. The corrections requested included DTZVX-E being changed to DTZ-E and DTZVX-C being changed to DTZ-C.

**Response** – Corrections granted.

**Comment 3** – DuPont requested that the descriptions in the table of Appendix C.1 remain as found in the previous permit and in the NSR permit (R13-1849).

**Response** – Changes made to Appendix C.1 in the draft permit have been changed back to match the Appendix C.1 of the previous permit and Appendix A of the current NSR permit.

**Comment 4** – Section 5.2.16.1.(a) incorrectly refers to itself rather than section 5.2.16.1.(b).

**Response** – The reference to Section 5.2.16.1.(a) in Section 5.2.16.1.(a) was changed to 5.2.16.1.(b).

**Comment 5** – In section 5.2.16.4.b, the text in the exceptions inadvertently omitted the "b" in the referenced conditions.

**Response** – In section 5.2.16.4.b, the referenced conditions in the exceptions text were changed as follows. Condition 5.2.16.4.i was changed to 5.2.16.4.b.i. Condition 5.2.16.4.iii was changed to 5.2.16.4.b.ii.

Comment 6 – In section 5.4.2.3, the reference to "Appendix A" should be corrected to "Appendix C.1".

**Response** – In section 5.4.2.3, the reference to Appendix A was changed to Appendix C.1.