

Fact Sheet



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

Permit Number: **R30-05300054-2011**
Application Received: **March 26, 2010**
Plant Identification Number: **05300054**
Permittee: **M & G Polymers USA, LLC**
Facility Name: **Apple Grove**
Mailing Address: **State Route 2, Apple Grove, WV 25502**

Physical Location: Apple Grove, Mason County, West Virginia
UTM Coordinates: 397.86 km Easting • 4,279.97 km Northing • Zone 17
Directions: WV Route 2, approximately thirteen miles south of Point Pleasant and
thirty miles north of Huntington, WV.

Facility Description

M & G Polymers manufactures polyester resin and handles the final product in bagging/packaging, storage, and loading facilities. Infrastructure and support facilities are also located at the site and include boilers, wastewater treatment, warehouses, maintenance shops, and laboratories.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2009 Actual Emissions
Carbon Monoxide (CO)	33.85	26
Nitrogen Oxides (NO _x)	57.28	40.6
Particulate Matter (PM _{2.5})	4.15	2.01
Particulate Matter (PM ₁₀)	8.18	5.76
Total Particulate Matter (TSP)	8.18	5.9
Sulfur Dioxide (SO ₂)	21.39	0.6
Volatile Organic Compounds (VOC)	53.22	39.4

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2009 Actual Emissions
Ethylene Glycol	16.19	14.3
Acetaldehyde	6.30	3.5
1,4-Dioxane	1.37	0.8
HCl	2.72	0.8
Arsenic Compounds	0.0001	0.00008
Beryllium Compounds	0.00001	0.00001
Cadmium Compounds	0.001	0.0005
Chromium Compounds	0.001	0.0006
Cobalt Compounds	0.0001	0.00004
Lead Compounds	0.0004	0.0002
Manganese Compounds	0.0003	0.0002
Mercury Compounds	0.0002	0.0001
Nickel Compounds	0.002	0.0009
Selenium Compounds	0.00002	0.00001

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

Title V Program Applicability Basis

This facility has the potential to emit 16.19 tons per year of Ethylene Glycol. Due to this facility's potential to emit over 10 tons per year of a single HAP, M & G Polymers, 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.

This facility 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.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR16	Standards of Performance for New Stationary Sources pursuant to 40 C.F.R. Part 60.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air Pollutants.
	40 C.F.R. 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
	40 C.F.R. 60, Subpart Kb	Volatile Organic Liquid Storage Tanks Constructed, Reconstructed, or Modified after July 23, 1984.
	40 C.F.R. 63, Subpart JJJ	Polymers and Resins IV MACT.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	40 C.F.R. 63, Subpart FFFF	Miscellaneous Organic Chemical Manufacturing (MON) MACT.
	40 C.F.R. 63, Subpart DDDDD	Boilers and Process Heaters MACT
State Only:	45CSR4	No objectionable odors.
	45CSR42	Greenhouse Gas Reporting

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

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-1650O	February 15, 2011	NA

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 B," which may be downloaded from DAQ's website.

Determinations and Justifications

Title V Minor Modifications/R13 Class II Administrative Amendments

During the review of this Title V renewal, M & G Polymers submitted four Title V minor modification permit applications; along with three Class II administrative updates and one Class I administrative update to their 45CSR13 permit. The changes approved under the 45CSR13 permits (R13-1650L, R13-1650M, R13-1650N, and R13-1650O) and requested in Title V minor modification applications MM04, MM05, MM06, and MM07 were included in this Title V renewal permit and not in separate Title V minor modification permits. The following is a summary of each 45CSR13 permit and each Title V minor modification:

- 1) **R30-05300054-2005 (MM04) and (MM05) and R13-1650L.** R13-1650L, approved on May 25, 2010, is a Class II administrative update which consisted of two process changes. The first change was to allow the processing of polyethylene terephthalate (PET) post consumer recycle flake material in the existing CP-3 production unit equipment. The second change was to allow the recycling and reprocessing of PET fines, scraps, or pellets (either generated at the plant or returned to the plant) in the existing CP-3 and CP-4 production unit equipment. The changes resulted in an emission rate increase of 0.29 lb/hr and 1.3 tpy of particulate matter.

The changes approved under R13-1650L resulted in the following changes to the Title V permit:

- a) Addition of Silos C3S-F-1101 (emission point 3P-1101), C3S-F-1601 (emission point 3P-1601), L21-F-1020 (emission point 3EC-15), L22-F-2040 (emission point 3P-1510), and C3S-F-5010 (emission point 3P-5010) to the Emission Units Table in Section 1.1.
- b) Addition of emission limits for emission points 3P-1101 (emission source C3S-F-1101), 3P-1601 (emission source C3S-F-1601), 3EC-15 (emission source L21-F-1020), 3P-1510 (emission source L22-F-2040), and 3P-5010 (emission source C3S-F-5010) to Table 4.1.11.a (R13-1650, Appendix – Table A).
- c) The particulate matter emission limits in Table 4.1.11.a (R13-1650, Appendix – Table A) for emission point 3P-3130 were increased from 0.09 lb/hr and 0.01 tons/yr to 0.13 lb/hr and 0.19 tons/yr.
- d) The particulate matter emission limits in Table 4.1.11.b (R13-1650, Appendix – Table B) for emission point 4P-3130 were increased from 0.06 lbs/hr and 0.01 tons/yr to 0.11 lbs/hr and 0.23 tons/yr.
- e) Added 3P-1101, 3P-1601, 3EC-15, 3P-1510, and 3P-5010 to the list of applicable sources subject to 45CSR§§7-3.1, 3.7 and 4.1 specified in Conditions 4.1.10, 4.1.11 and 4.1.15.

Compliance with the hourly and annual particulate matter emission limits from Condition 4.1.11 for the new emission points 3P-1101, 3P-1601, 3EC-15, 3P-1510, and 3P-5010 shall be demonstrated by monitoring the pressure differential across each of the baghouses and maintaining these readings on a monthly basis as specified in Conditions 4.2.3 and 4.4.5. Monthly pressure drop monitoring can be used to determine if the baghouses are operating properly. Improper operation of the baghouses can lead to excessive particulate emissions and opacity. In addition to monitoring the pressure differential, the permittee is also required to monitor the daily average hourly and total annual production rates (as specified in Condition 4.2.1) and to maintain monthly records of these values (as specified in Condition 4.4.3). The daily average hourly and total annual production rates can then be used to determine hourly and annual emissions. Also, the Director has the option of requiring emission testing as specified in 4.3.7 and 4.3.8; and the permittee is required by Conditions 4.4.1 and 4.4.2 to maintain malfunction and maintenance records for each baghouse. The monitoring requirements for the new silos are the same as was required in the initial Title V permit for similar types of emission sources (including existing emission points 3P-3130 and 4P-3130) which used a baghouse to control particulate matter emissions. The increased emissions for emission points 3P-3130 and 4P-3130 did not require the need for additional monitoring, testing, and recordkeeping requirements; therefore the existing requirements remained the same.

New emission points 3P-1101, 3P-1601, 3EC-15, 3P-1510, and 3P-5010; and existing emission points 3P-3130 and 4P-3130 are subject to the twenty percent opacity limit of 45CSR§7-3.1. The silos (emission points 3P-1101, 3P-1601, 3EC-15, 3P-1510, and 3P-5010) are only subject to the visible emission requirements of 45CSR§7-3.1 when material is being transferred into or out of these silos. If material is not being transferred and material is being stored, then these silos (emission points 3P-1101, 3P-1601, 3EC-15, 3P-1510, and 3P-5010) are subject to the requirements of 45CSR§7-3.7, which states that there shall be no visible emissions. To demonstrate compliance with the opacity limits of 45CSR§§7-3.1 and 3.7 for the new silos (emission points 3P-1101, 3P-1601, 3EC-15, 3P-1510, and 3P-5010), the permittee shall comply with the monitoring, testing, and recordkeeping requirements of Conditions 4.2.3, 4.3.7, 4.3.8, 4.4.1, 4.4.2, and 4.4.5 as explained above. The increase in emissions did not affect the monitoring, testing, and recordkeeping requirements already required for emission points 3P-3130 and 4P-3130.

New emission points 3P-1101, 3P-1601, 3EC-15, 3P-1510, and 3P-5010; and existing emission points 3P-3130 and 4P-3130 are subject to the requirements of 45CSR§7-4.1. Emission limits are calculated from Table 45-7A based on the maximum hourly process weight rate for the appropriate source category. Based on the maximum hourly process weight rate for these emission sources, the hourly particulate emission limits provided in Condition 4.1.11 are more stringent and shall demonstrate compliance with the 45CSR§7-4.1 hourly particulate matter emission limits for new emission points 3P-1101, 3P-1601, 3EC-15, 3P-1510, and 3P-5010; and existing emission points 3P-3130 and 4P-3130.

- 2) **R30-05300054-2005 (MM06) and R13-1650M.** Class II administrative update R13-1650M was approved on June 30, 2010. M&G Polymers USA, LLC submitted this Class II Administrative Update to replace the existing Therminol 66 heat transfer fluid in the CP-4 Unit with Dowtherm® RP. The heated Dowtherm® RP will be circulated throughout the CP-4 process equipment using the CP-4 Hot Oil Heater (C4T-B-1600). The heated Dowtherm® RP will degrade to lighter compounds over the course of a year, so every two months these lights will be removed from the system over a two day period by nitrogen stripping and venting the lights from the system to the existing Dowtherm® Lights 6,000 gallon tank (C4T-F-2670) that was previously used in the CP-2 Unit. The lights will be collected in this tank and recycled off-site. VOC emissions from the Dowtherm® Lights Tank will be routed to the CP-4 Hot Oil Heater (C4T-B-1600) and burned for energy recovery. The changes associated with R13-1650M resulted in an increase in emissions of 0.001 tons per year of VOC and 0.001 tons per year of HAPs.

The changes made to the Title V permit as a result of the issuance of R13-1650M are as follows:

- a) Added the Dowtherm® Lights Tank (C4T-F-2670) to the Emission Units Table in Section 1.1 for Emission Point 4P-1600.
- b) Added emission limits for the Dowtherm® Lights Tank (C4T-F-2670) to Table 4.1.11.b (R13-1650, Appendix – Table B) for emission point 4P-1600. The emission limits added were: 0.01 lb/hr and 0.01 TPY of total VOC; 0.01 lb/hr and 0.01 TPY of total HAPs; and 0.01 lb/hr and 0.01 TPY of Benzene. Also added footnotes * and ** to the table.

In addition to the changes listed above, the following miscellaneous updates were included in R13-1650M:

- c) Revised the Emission Unit ID in the Emissions Unit Table, Section 1.1 for the CP3 Slurry Mix Tank from F-3010 to C3H-F-3010; and for the CP3 Slurry Feed Tank from F-4010 to C3H-F-4010.
 - d) Added Emission Point 8E-12 (emission source L13-M-3020) to the Emission Units Table in Section 1.1. This emission point was inadvertently left out of R13-1650J, but this error was discovered and it was added back into R13-1650M.
 - e) Revised the emission limit for Emission Point 4P-0340 from 0.04 lb/hr of VOC to 0.03 lb/hr of particulate matter in Table 4.1.11.b (R13-1650, Appendix – Table B). An error occurred when the combined emission limits for several emission points in R13-1650I were separated in R13-1650J. When a separate emission point for 4P-0340 was established in R13-1650J, the limit was incorrectly listed as 0.04 lb/hr of VOC when it should have been 0.03 lb/hr of particulate matter.
 - f) Corrected the Emission Point ID for the CSS-7 Fines Elutriator (L14-U-4030) in Table 4.1.11.c (R13-1650, Appendix – Table C) from 7P-0430 to 7P-4030.
 - g) Added the T-66 Tank to the list of emission units for Emission Point 2P-9001 in Table 4.1.11.d (R13-1650, Appendix – Table D).
 - h) Corrected the Emission Point ID for the CSS-9 Fines Elutriator (L15-U-6110) in Table 4.1.11.e (R13-1650, Appendix – Table E) from P-1060 to 9P-6110.
- 3) **R30-05300054-2005 (MM07) and R13-1650N.** R13-1650N, approved on October 20, 2010, is a Class II administrative update to replace the 4.19 MMBtu/hr temporary water boiler UGS-B-2010 (emission point U-B-2010) at the WWTP with a 14.21 MMBtu/hr unit. The change resulted in an emissions increase of 0.17 tons per year of particulate matter, 1.92 tons per year of CO, 2.28 tons per year of NO_x, 0.01 tons per year of SO₂, and 0.13 tons per year of VOC.

The changes made to the Title V permit as a result of R13-1650N are as follows:

- a) Revised the design capacity and installation date for the WWTP Portable Boiler (emission source UGS-B-2010, emission point U-B-2010) to reflect the new boiler.
- b) The emission limits for U-B-2010 in Table 4.1.11.j (R13-1650, Appendix – Table J) were increased due to the addition of the new larger boiler.
- c) New source case-by-case 112 (g) Boiler MACT references were added to the citations at the end of requirements 4.1.9, 4.2.2, and 4.4.4 (R13-1650, 4.1.9, 4.2.2, and 4.4.5). The new citation is as follows: “45CSR§13-15.1.c and 45CSR§34-3.2 for UGS-B-2010.”
- d) Emission point U-B-2010 was added to the list of emission points subject to the requirements of 45CSR§§2-3.1, 3.2, 4.1.b, 8.1.b, and 9.2 specified in Conditions 4.1.11, 4.1.12, 4.1.13, 4.1.14, and 4.3.5.
- e) Added UGS-B-2010 to the list of emission points subject to the requirements of 45CSR§§2-8.3.c and 8.3.d, 45CSR§2A-7.1.a, and 40 C.F.R. §60.48(g)(2) in Condition 4.4.12.

To demonstrate compliance with the hourly and annual emission limits specified in 4.1.11, the permittee is limited by 4.1.9.b to only combusting natural gas; is required by 4.2.2 to monitor the hourly and annual fuel consumption rates; and is required by 4.4.4 to maintain monthly records of the hourly and annual fuel consumption rates. The hourly and annual fuel consumption rates can be used to calculate hourly and annual emission rates.

Since the maximum design heat input of the new boiler (UGS-B-2010) is greater than 10 MMBTU/hr, 45CSR§2-11.1 no longer exempts it from 45CSR§§2-4, 5, 6, 8, and 9. However, since the boiler combusts only natural gas, 45CSR§2-8.4.b and 45CSR§2A-3.1.a still exempt it from the testing requirements of 45CSR§2-8.1.a and 45CSR§2A-5; and the monitoring requirements of 45CSR§2-8.2 and 45CSR§2A-6;

45CSR§2-3.1 requires the opacity from the new boiler to be maintained at or below ten percent. Since the boiler only combusts natural gas, it is exempt from the visible emission testing requirements of 45CSR§2A-5.1 (COMS or Method 9) and the visible emission monitoring plan requirements of 45CSR§2A-6. No additional monitoring was added through 45CSR§30-5.1.c since this boiler is limited by Condition 4.1.9.b to only combusting natural gas and visible emissions are not anticipated for a boiler this size which combusts only natural gas.

In addition to being subject to the ten percent opacity limits under 45CSR§2-3.1, the new boiler is also subject to the particulate emission limits of 45CSR§2-4. 45CSR§2-4.1.b states that hourly particulate matter emission limits from type 'b' fuel burning units shall be calculated by multiplying 0.09 by the total design heat input. Compliance with the 45CSR§2-4.1.b hourly particulate matter emission limit of 1.278 lb/hr (0.09 x 14.2 MMBTU/hr) will be demonstrated through compliance with the more stringent 4.1.11 hourly particulate emission limits.

Although 45CSR§2-8.4.b and 45CSR§2A-3.1.a exempts the boiler from the testing requirements of 45CSR§2-8.1.a and 45CSR§2A-5; the permittee is still required to conduct testing upon the request of the Director in accordance with 45CSR§§2-8.1.b. and 8.1.c (Conditions 4.3.5 and 4.3.6).

In addition to being required by 4.2.2 to monitor the hourly and annual fuel consumption rates and by 4.4.4 to maintain monthly records of these values, 45CSR2 and 45CSR2A requires the permittee to maintain records of the operating schedule and the quantity of fuel consumed in the new boiler (UGS-B-2010) on a monthly basis. The requirement to maintain these records for the new boiler (UGS-B-2010) is provided in 4.4.12. Condition 4.4.4 already required that monthly records be maintained, but it did not specify that records of the operating schedule should also be maintained. Therefore, these requirements for Boiler UGS-B-2010 were added to Condition 4.4.12 which is an existing requirement that provides similar recordkeeping requirements for the Hot Oil Heaters C3T-B-1600 and C4T-B-1600.

The new boiler (UGS-B-2010) is also subject to the requirements of 40 C.F.R. 60, Subpart Dc. Since the boiler only consumes natural gas, the only applicable requirement under 40 C.F.R. 60, Subpart Dc was a recordkeeping requirement from 40 C.F.R. §60.48c(g)(2) to maintain records of the amount of fuel combusted during each calendar month. Because both 40 C.F.R. §60.48c(g)(2) and 45CSR§2A-7.1.a require that records be maintained on a monthly basis, these recordkeeping requirements were streamlined in Condition 4.4.12.

The new boiler (UGS-B-2010) is subject to the sulfur dioxide emission limits of 45CSR§10-3.3.f. 45CSR§10-3.3.f states that sulfur dioxide emission limits from type 'b' fuel burning units shall be calculated by multiplying 3.2 by the total design heat input. Compliance with the 45CSR§10-3.3.f hourly sulfur dioxide emission limit of 45.44 lb/hr (3.2 x 14.2 MMBTU/hr) will be demonstrated through compliance with the more stringent 4.1.11 hourly sulfur dioxide emission limits.

45CSR§10-10.3 and 45CSR§10A-3.1.b exempts fuel burning units which combust natural gas, wood, or distillate oil, alone or in combination from the testing, monitoring, recordkeeping, and reporting requirements of 45CSR§10-8 and all requirements of 45CSR10A.

Because the new boiler (UGS-B-2010) is located at a major source of HAPs for which EPA has not yet promulgated 40 C.F.R. 63, Subpart DDDDD (Boiler MACT), it is subject to 112(g) new source case-by-case MACT. R13-1650N referenced 45CSR§34-3.2 and 45CSR§13-15.1.c for the natural gas fuel limitation and fuel consumption limits. These new source case-by-case MACT limits were reviewed by the DAQ Air Toxics Coordinator as part of the permitting process for R13-1650N.

- 4) **R13-16500.** R13-16500 is a Class I administrative update, approved on February 15, 2011, which resulted in emission limit decreases for emission points 4P-1296, 4P-4220, 4P-4180, and 4P-4160. The emission limit decreases were the result of M & G no longer manufacturing their Multisorb product in the CP-4 Unit's extruder system.

The changes to the particulate matter emission limits for 4P-4220, 4P-4180, and 4P-4160 are as follows:

Emission Point	R13-1650N Limit		R13-16500 Limit		Emission Rate Change	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
4P-4220	0.03	0.10	0.006	0.03	- 0.024	- 0.07
4P-4180	0.03	0.12	0.006	0.03	- 0.024	- 0.09
4P-4160	0.01	0.24	0.006	0.03	- 0.004	- 0.21
Total Changes					- 0.052	- 0.37

In addition to the hourly and annual particulate matter emission limits specified in 4.1.11.b, emission points 4P-4220, 4P-4180, and 4P-4160 are subject to the twenty percent opacity limit of 45CSR§7-3.1 (Condition 4.1.10) and the hourly particulate matter emission limits specified in 45CSR§7-4.1. The 45CSR§7-4.1 hourly particulate matter emission limits are calculated from Table 45-7A based on the maximum process weight rate. The 45CSR§7-4.1 hourly particulate matter emission limits based on the new maximum process weight rates of 6,000 lb/hr of PET through each CP4 Feed Hopper System remains less stringent than the hourly particulate matter emission limits specified in 4.1.11.b. Compliance with the hourly and annual particulate matter emission limits, the 45CSR§7-3.1 opacity limits, and the 45CSR§7-4.1 hourly particulate matter emissions limits will continue to be demonstrated by monitoring the pressure differential across each of the baghouses and maintaining these readings on a monthly basis as specified in Conditions 4.2.3 and 4.4.5.

In addition to decreases to particulate matter emission rates described above for emission points 4P-4220, 4P-4180, and 4P-4160, the elimination of the Multisorb product in the CP-4 Unit's extruder system also resulted in an emissions decrease for emission point 4P-1296. The raw materials which were used to make Multisorb generated sulfur dioxide and hydrogen chloride emissions. Since Multisorb will no longer be extruded in the CP4 Extruder (C4Q-A-1296), sulfur dioxide and hydrogen chloride emissions from emission point 4P-1296 were eliminated. Since the only emission limits listed in 4.1.11.b for emission point 4P-1296 were sulfur dioxide and hydrogen chloride, this emission point was removed from the table.

The changes to emission point 4P-1296 are as follows:

Emission Point	Pollutant	R13-1650N Limit		Emissions After Elimination of Multisorb		Emission Rate Change	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
4P-1296	SO ₂	1.07	9.34	0	0	- 1.07	- 9.34
	HCl	0.62	2.72	0	0	- 0.62	- 2.72

In addition to the changes requested by M & G in their application, the following changes were also included in R13-1650O:

- a) In the Section 1.1 Emission Units Table, the design capacity for the CP-4 extruder (C4Q-A-1296) was increased from 2,340 lb/hr to 4,760 lb/hr. Since there are no emissions from 4P-1296 now that Multisorb is no longer manufactured, this increase had no effect on emission limits.
- b) The references in Condition 4.2.3 were changed from “4.1.9 and 4.1.10” to “4.1.10 and 4.1.11.” This was a typographical error which first occurred in R13-1650I and was carried forward in subsequent permits.
- c) Emission point “9ESC4” in 4.1.11.e was changed to “8ESC4.” This was a typographical error which occurred when emission limits for this emission point were added under R13-1650J.

Other Changes

- 1) On February 21, 2011, EPA signed the final rule for the Boiler MACT, therefore the 40 C.F.R. 63, Subpart DDDDD placeholder language in Condition 3.1.10 was updated accordingly as Conditions 3.1.10.a, 3.1.10.b, and 3.1.10.c.
- 2) **Added Greenhouse Gas Reporting Requirements.** M & G Polymers is subject to the new greenhouse gas reporting requirements of 45CSR42 because emissions of carbon dioxide are greater than 10,000 tons per year. These requirements were added as conditions 3.1.11 and 3.5.10.
- 3) **Removed Requirements from R13-2807T.** R13-2807T, issued on September 15, 2009 was a temporary permit to re-condition Therminol T-66 heat transfer fluid. This permit expired on March 15, 2010, so its requirements were not included in the Title V permit renewal. The changes resulting from the removal of R13-2807T requirements include: a) Removal of all references to R13-2807T; b) Changes to the emission limits for emission point 2P-9001 in Table 4.1.11.c (R13-1650, Appendix – Table C) and the removal of the footnote which explained the changes which would result after the expiration of R13-2807T; and c) Removal of Section 5.0.
- 4) Added the CP4 Box/Bag Loader (C4Q-F-5330) to the Section 1.1 Emission Units Table. This emission source was added per R13-1650H, but not included in R30-05300054-2005 (MM03).
- 5) Revised the design capacity for the Hot Oil Heaters (C3T-B-1600 and C4T-B-1600) in the Section 1.1 Emission Units Table from 33.5 MMBtu/hr for C3T-B-1600 and 35 MMBtu/hr for C4T-B-1600 to 53.1 MMBtu/hr each. These design capacities were increased in R13-1650D, but the changes to the design capacities in the Emission Units Table were not increased.
- 6) Revised the Emission Unit ID for the Warehouse Railcar Unloading System in the Section 1.1 Emission Units Table from NW11717 to MW11717; and the Emission Unit ID for the CSS-11 Preheater Surge Bin from C38-F-5420 to C3B-F-5420.
- 7) Added Diesel Generators P-66 and U3F-G-171 to the Section 1.1 Emission Units Table.
- 8) Added 4P-2002 and 4P-0001 to the list of sources subject to 45CSR§7-3.1 in Condition 4.1.10 and 45CSR§7-4.1 in Condition 4.1.11. 4P-2002 and 4P-0001 were added under R13-1650H, but were left out of the 4.1.10 and 4.1.11 lists under R30-05300054-2005 (MM03).
- 9) Added emission limits for 3P-1600 and 3P-1700 in Table 4.1.11.a. These were inadvertently left out of R30-05300054-2005 (MM03).

- 10) Added 3P-1700 to the list of emission points subject to the requirements of 45CSR§§2-3.1, 3.2, 4.1.b, 8.1.b, and 9.2 specified in Conditions 4.1.11, 4.1.12, 4.1.13, 4.1.14, and 4.3.5; and 45CSR§10-3.3.f specified in Condition 4.1.11. Also added C3T-F-1700 to the list of Hot Oil Heaters subject to the requirements of 45CSR§§2-8.3.c and 8.3.d, 45CSR§2A-7.1.a, and 40 C.F.R. §60.48(g)(2) specified in Condition 4.4.12.
- 11) Revised the reference in Condition 4.4.9 from “4.1.18” to “4.2.5.” This was a typographical error from the initial Title V permit. The reference to Condition 4.1.18 doesn’t make sense because 4.1.18 never contained Subpart JJJ wastewater provisions or operating parameters to be monitored.
- 12) Revised the recordkeeping requirements in Condition 4.4.12 for the Hot Oil Heaters C3T-B-1600 and C4T-B-1600. 40 C.F.R. 60, Subpart Dc was revised on June 13, 2007 such that for natural gas fired boilers, the quantity of fuel is required to be maintained on a monthly basis instead of daily.
- 13) **Addition of Applicable Requirements for Warehouse – West Silo (L26-F-6010).** Although the Warehouse – West Silo (L26-F-6010) was installed in 1959, it was left out of the initial Title V permit. The silo is subject to the requirements of 45CSR§§7-3.1, 3.7, and 4.1. As with the other silos at M & G Polymers, 45CSR§7-3.1 applies when material is being loaded into or out of the silos, while 45CSR§7-3.7 applies when material is being stored. The following was added to Condition 4.2.3 in order to require M & G Polymers to monitor the pressure drop across the baghouse (MWB-F-1080) which controls emissions from the Warehouse – West Silo (L26-F-6010): “and the emission limits set forth in 4.1.23 for emission point WF-6010.” The requirement to monitor the pressure drop across MWB-F-1080 was added per 45CSR§30-5.1.c and is consistent with the monitoring required for the other silos which have a baghouse to control particulate matter emissions. Since emission point WF-6010 is not subject to any particulate matter emission limitations under R13-16500, its 45CSR§7-4.1 hourly particulate matter emission limit could not be streamlined with an hourly particulate matter emission limit in Condition 4.1.11. The hourly particulate matter emission limitations of 45CSR§7-4.1 were included as Condition 4.1.23. Monitoring of the pressure drop across the baghouse should be an adequate demonstration of compliance with the 45CSR§7-4.1 hourly emission limit of 28 lb/hr for the Warehouse – West Silo.
- 14) **Addition of 40 C.F.R. 63, Subpart ZZZZ Requirements for P-66 and U3F-G-171.** Diesel generators P-66 and U3F-G-171 are subject to the requirements of 40 C.F.R. 63, Subpart ZZZZ – “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.” Since these generators each have a brake horsepower (HP) of 235, were constructed or reconstructed prior to June 12, 2006, and are located at a major source of HAP emissions, they are considered existing sources under 40 C.F.R. §63.6590(a)(1)(ii). The compliance date specified in 40 C.F.R. §63.6595(a) for an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions is May 3, 2013. In addition, Generators P-66 and U3F-G-171 are each defined as an emergency stationary RICE under 40 C.F.R. §63.6675.

For an emergency stationary CI RICE, 40 C.F.R. §63.6602 and Table 2c of 40 C.F.R. 63, Subpart ZZZZ specifies the following work practice standards (Condition 4.1.24(a)):

For each...	You must meet the following requirement, except during periods of startup...	During periods of startup you must...
Emergency stationary CI RICE and black start stationary CI RICE. ¹	<ol style="list-style-type: none"> a. Change oil and filter every 500 hours of operation or annually, whichever comes first;² b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary³ 	Minimize the engine’s time spent at idle and minimize the engine’s startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ³

¹If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local laws has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required under the Federal, State, or local law under which the risk was deemed unacceptable.

²Sources have the option to utilize an oil analysis program (Condition 4.1.24(g)) as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2c of this subpart.

³Sources can petition the Administrator pursuant to the requirements of 40 C.F.R. §63.6(g) for alternative work practices.

In addition to the work practice standards above, there is also a limit on the hours of operation for non-emergency situations. These requirements are specified in 40 C.F.R. §63.6640(f) (Condition 4.1.24.j).

Since P-66 and U3F-G-171 are emergency generators and subject to only work practice standards, an initial performance test under 40 C.F.R. §63.6612 is not required and the requirements in Tables 4 and 5 of Subpart ZZZZ do not apply.

The monitoring, installation, collection, operation, and maintenance required under 40 C.F.R. §63.6625(e), (f), and (h), 40 C.F.R. §63.6640(a), and Table 6 of Subpart ZZZZ for these generators is summarized as follows: 1) Operate and maintain according to manufacturer’s emission related written instructions or develop your own maintenance plan (Conditions 4.1.24(d) and 4.1.24(h)); 2) Install a non-resettable hour meter (Condition 4.1.24(e)); 3) Minimize the engine’s time spent at idle during startup and minimize the engine’s startup time (Condition 4.1.24(f)).

40 C.F.R. §63.6645(a)(5) exempts these emergency generators from the notification requirements specified in 40 C.F.R. §63.6645(a). Since emergency stationary CI RICE are not listed in Table 7 of Subpart ZZZZ, the permittee is also not required to submit the reports specified in 40 C.F.R. §63.6650. The only reporting required for these generators under 40 C.F.R. 63, Subpart ZZZZ is specified in Footnote 1 of Table 2c. The permittee is, however, required to submit annual compliance certifications and semiannual monitoring reports as specified in Conditions 3.5.5 and 3.5.6. In those reports, they would report any deviations from the operating limitations of Subpart ZZZZ.

Recordkeeping requirements for P-66 and U3F-G-171 are specified in Condition 4.4.17 and include the following: 1) Records required in Table 6 which show compliance with the operating limits; 2) Records of the maintenance conducted on the RICE; 3) Records of the hours of operation of the engine recorded through the non-resettable hour meter; 4) Documentation of how many hours were spent for emergency operation and how many hours were spent for non-emergency operation; and 5) Records of the notification of the emergency situation, and time the engine was operated as part of the demand response.

- 15) The numbering system in the Title V renewal permit was revised to more closely resemble R13-16500. The conditions for which the numbering changed in Section 4 are as follows:

Condition Number in R30-05300054-2005 (MM03)	Condition Number in R30-05300054-2011	Explanation, if needed.
4.1.3	4.1.3 and 4.1.4	These requirements were combined in the previous Title V permits, but were separated into two requirements in the Title V renewal.
4.1.4	4.1.5	NA
4.1.5	4.1.10	Condition 4.1.5 and 4.1.10 were combined and made into a new requirement, 4.1.10.
4.1.6	4.1.11	NA
4.1.7	4.1.12	NA
4.1.8	4.1.13	NA

Condition Number in R30-05300054-2005 (MM03)	Condition Number in R30-05300054-2011	Explanation, if needed.
4.1.9	4.1.14	NA
4.1.10	4.1.10	Condition 4.1.5 and 4.1.10 were combined and made into a new requirement, 4.1.10.
4.1.11	4.1.15	NA
4.1.12	4.1.16	NA
4.1.13	4.1.17	NA
4.1.14	4.1.18	NA
4.1.15	4.1.19	NA
4.1.16	4.1.20	NA
4.1.17	4.1.21	NA
4.1.18	4.1.22	NA
4.1.19	4.1.6	NA
4.1.20	4.1.7	NA
4.1.21	4.1.8	NA
4.1.22	4.1.9	NA
---	4.1.23	New Condition
4.3.2	4.3.5	NA
4.3.3	4.3.6	NA
4.3.4	4.3.7	NA
4.3.5	4.3.8	NA
4.3.6	4.3.2	NA
4.3.7	4.3.3	NA
4.3.8	4.3.4	NA

40 C.F.R. 64 - Compliance Assurance Monitoring (CAM)

According to 40 C.F.R. §64.2(a), CAM applies to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria: 1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under 40 C.F.R. §64.2(b)(1); 2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and 3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. 40 C.F.R. §64.2(b)(1)(i) exempts emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act; and 40 C.F.R. §64.2(b)(1)(vi) exempts emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method.

M & G Polymers conducted a review of their applicability to 40 C.F.R. 64 – “Compliance Assurance Monitoring” (CAM). Based on the information submitted, M & G Polymers determined that none of the control devices are subject to the requirements of CAM.

As specified in the table below, M & G Polymers has several different baghouses which are used to control particulate matter emissions from various pieces of process equipment. Since the emission units these baghouses control particulate emissions from do not have potential pre-control device emissions of particulate matter greater than 100 tons per year, these control devices are not subject to CAM. The following table links the baghouse with its emission unit(s), emission point, control efficiency, and pre-control device potential emissions (calculated from R13-16500 permit limits and the control device efficiency).

Baghouses

Baghouse	Emission Unit	Emission Point	Control Efficiency	Pre-Control Device Emissions TPY
C4S-M-3130	C4S-F-3010	3P-3130	99	19
L4A-M-0200	L4A-F-0200	3P-0200	99	1
C3S-M-1101	C3S-F-1101	3P-1101	99	18
C3S-M-1601	C3S-F-1601	3P-1601	99	18
L21-M-1050	L21-F-1020	3EC-15	99	18
L22-M-2120	L22-F-2040	3P-1510	99	18
C3S-M-5010	C3S-F-5010	3P-5010	99	18
C4S-M-1040	C4S-F-1020	4P-1020	99	46
C4S-M-2100	C4S-F-2050	4P-2100	99	1
C4S-M-3140	C4S-F-3080	4P-3130	99	23
C4A-M-0340	C4A-F-0410	4P-0340	99	1
L4B-M-0200	L4B-F-0200	4P-0200	99	1
C4Q-M-4140/ C4Q-M-4220	C4Q-F-1290	4P-4220	99	3
C4Q-M-4190	C4Q-F-2290	4P-4180	99	3
C4Q-M-4160	C4Q-F-3290	4P-4160	99	3
C4Q-M-2002	C4Q-F-5000	4P-2002	99.5	16
C4Q-M-0001/ C4Q-F-0001	C4Q-F-5010	4P-0001	99	1
C2A-M-2601	C2A-F-5410	7P-2601	99	1
C2A-M-5350	C2A-E-5240/ C2A-B-5010 C2B-B-7020/ C2B-E-5250	7P-2609	99	4
C2D-M-0520	C2D-E-5280	7P-0520	99	9
L36-M-0607	L36-F-6040	7P-0607	99	1
L21-M-1050	L21-F-1020	7EC-15	99	1
L22-M-2120	L22-F-2040	7P-1510	99	1
L14-M-4070	L14-F-4070	7P-4227A	99	1
L14-M-4080	L14-F-4080	7P-4227B	99	1
M-2603	C2B-F-5420 C2B-M-5040 C2C-R-5060	2P-9001	99	16
S8A-M-2390	S8A-F-2430	8E-02	99	1
S8A-M-3350	S8A-E-3240/ S8A-B-3010	8E-03	99	31
S8B-M-2420	S8B-E-2250/ S8B-B-2020	8E-04	99	18
S8D-M-1520	S8D-E-1280	8E-05	99	8
S8A-M-1590	S8A-M-1610/ S8E-F-1440	8E-06	99	1
L37-M-7130	L37-F-7050	8E-08	99	1
L12-M-2030	L12-M-2030	8EP-204A	99	1
L12-M-2040	8EP-204B	8EP-204B	99	1
L13-M-3050	L13-F-3050	8P-4127A	99	1
L13-M-3060	L13-F-3060	8P-4127B	99	1
L11-M-1010	L11-F-1010	8ECS4	99	6
L11-M-1020	L11-F-1020	8ECS5	99	6
L15-M-1701A	L15-F-1701A	9P-1701A	99	1
L15-M-1701B	L15-F-1701B	9P-1701B	99	1
L15-M-2701A	L15-F-2701A	9P-2701A	99	1
L15-M-2701B	L15-F-2701B	9P-2701B	99	1

Baghouse	Emission Unit	Emission Point	Control Efficiency	Pre-Control Device Emissions TPY
L17-M-7230	L17-F-7130/ L17-F-7140	9E-10	99	4
L15-M-1020	L15-F-1020	9ECS5	99	8
C3A-M-1340	C3A-F-1410	10P-1340	99	1
C3A-M-2390	C3A-F-2460	10P-2390	99	1
C3A-M-3350	C3A-E-3240	10P-3350	99	4
L1A-M-1130	L1A-F-1090/ L1A-F-1100	10P-1130	99	1
C3D-M-0520	C3D-E-1280/ C3D-E-5280	10P-0520	99	6
C3B-M-2420	C3B-E-2250	10P-2420	99	4
C3E-M-1590	C3E-F-1440	10P-1590	99	1
L3A-M-1050	L3A-F-1030	10P-1050	99	1
C3B-M-1430	C3B-F-1420	3P-1600	99	47
C3A-M-6340	C3A-F-5410	11P-6340	99	1
C3A-M-6390	C3A-F-5460	11P-6390	99	1
C3A-M-7350	C3A-E-7240	11P-7350	99	3
C3B-M-6420	C3B-E-6250	11P-6420	99	2
C3E-M-5590	C3E-F-5440	11P-5590	99	1
L3B-M-2060	L3B-F-2040	11P-1090	99	1
L1B-M-1160	L1B-F-2115/ L1B-F-2160	11P-1160	99	1
C3B-M-5430	C3B-F-5420	3P-1600	99	47
C4A-M-2390	C4A-F-2460	12P-2390	99	1
C4A-M-3350	C4A-E-3240	12P-3350	99	4
C4B-M-2420	C4B-E-2250	12P-2420	99	2
C4D-M-0520	C4D-E-1280/ C4D-E-5280	12P-0520	99	11
C4E-M-1590	C4E-F-1440	12P-1590	99	1
L1C-M-1130	L1C-F-1090/ L1C-F-1110	12P-1130	99	1
L4C-M-0390	L4C-F-0210	12P-0390	99	1
L3B-M-2060	L3B-F-2040	12P-2060	99	1
C4B-M-1430	C4B-F-1420/ C4C-R-3070	4P-1600	99	47
C4A-M-6390	C4A-F-6460	13P-6390	99	1
C4A-M-7350	C4A-E-7240	13P-7350	99	4
C4B-M-6420	C4B-E-6250	12P-6420	99	2
C4E-M-5590	C4E-F-5440	13P-5590	99	1
L1C-M-1130	L1D-F-1110/ L1D-F-1120	13P-1130	99	1
C4B-M-5430	C4B-F-5420/ E-7070	4P-1600	99	47
MWB-F-1080	L26-F-6010	WF-6010	99	0.4

The Seal Pot C3L-F-7020 is used to control ethylene glycol and total VOC from the CP3 Catalyst Mix Tank (C3L-F-6010), CP3 Catalyst Mix Tank (C3L-F-6510), CP3/CP4 Catalyst Feed Tank (C3L-F-7010), CP3/CP4 Toner Make-Up Tank (C3L-F-8010), and the CP3/CP4 Toner Charge Tank (C3L-F-9010). According to the Title V renewal application, this control device has a capture efficiency of 99.9% and a control efficiency of 90%. Since the pre-control device emissions total from all the equipment routed to Seal Pot C3L-F-7020 is less than 10 tons per year of ethylene glycol and 100 tons per year of VOCs, this control device is not subject to the requirements of 40 C.F.R. 64.

Hot Oil Heaters C3T-B-1600, C4T-B-1600, C2T-B-9001 are used to control VOC (including HAPs) from a variety of process equipment as shown in the following table:

Hot Oil Heaters

Hot Oil Heater	Emission Unit	Emission Point
C3T-B-1600	C3L-F-2220	3P-1600
	C3L-F-2201	
	C3L-F-3160	
	C3L-F-4211	
	C3L-F-4100	
	C3L-F-4210	
	C3L-F-5040	
	C3H-F-3010	
	C3H-F-4010	
	C31-E-1020	
	C32-E-1050	
	C33-F-2250	
	C33-F-5010	
	C31-F-1220	
	C33-F-2260	
	C34-F-2290	
	C34-F-3280	
	C34-F-8290	
	C34-F-9280	
	C3T-F-0600	
	C3H-F-4020	
	C3B-F-1420	
	C3C-R-1060	
C38-F-5420		
C3C-R-5060		
C4T-B-1600	C4L-F-3160	4P-1600
	C4L-F-2120	
	C4L-F-3170	
	C41-E-3020	
	C42-E-2050	
	C43-E-3250	
	C44-E-3280	
	C41-F-3220	
	C43-F-2260	
	C44-F-2290	
	C4L-F-2200	
	C4L-F-5980	
	C4T-F-2670	
	C4Q-A-1297	
	C4B-F-1420	
	C4C-R-3070	
	C4C-R-1060	
	C4C-E-2320	
	C4B-F-5420	
	E-7070	
C4C-R-5060		
C4C-E-6320		

Hot Oil Heater	Emission Unit	Emission Point
C2T-B-9001	C2B-F-5420 C2B-M-5040 C2C-R-5060 S8A-E-1420 S8C-R-1060 S8C-R-3070 C2T-F-2670 C2T-F-5660 F-5001	2P-9001

Most of these emission sources are subject to the requirements of 40 C.F.R. 63, Subpart JJJ – “National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins” or 40 C.F.R. 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutant Emissions: Miscellaneous Organic Chemical Manufacturing” and emissions are routed to the hot oil heaters C3T-B-1600, C4T-B-1600, and C2T-B-9001 to limit organic HAP emissions to comply with these limits. Also, these hot oil heaters had a continuous compliance determination method already specified in the initial Title V permit. Since Hot Oil Heaters C3T-B-1600, C4T-B-1600, and C2T-B-9001 are subject to the requirements of 40 C.F.R. 63, Subparts JJJ and FFFF and each had a continuous compliance determination method specified in the initial Title permit, they are not subject to the additional monitoring requirements of CAM, as specified under 40 C.F.R. §§64.2(b)(1)(i) and (b)(1)(vi).

Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule. Since M & G Polymers has not made any changes that trigger a PSD modification, the requirements of the Greenhouse Gas Tailoring Rule do not apply.

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 D – “Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971.” This subpart applies to each steam generating unit that commences construction or modification after August 17, 1971 and has a heat input capacity of more than 250 MMBtu/hr. M & G Polymers does not have any steam generating units with a heat input capacity of more than 250 MMBtu/hr.
- b. 40 C.F.R. 60, Subpart Db – “Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.” This subpart applies to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984 and has a heat input capacity of greater than 100 MMBtu/hr. M & G Polymers does not have any steam generating units with a heat input capacity of more than 100 MMBtu/hr.
- c. 40 C.F.R. 60, Subpart E – “Standards of Performance for Incinerators.” This subpart applies to each incinerator of more than 50 tons per day charging rate. An incinerator is defined by 40 C.F.R. §60.51 as any furnace used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible matter. The Apple Grove Plant does not operate a solid waste incinerator as defined by this rule.
- d. 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 at the Apple Grove Plant with a storage capacity greater than 151,412 liters (40,000 gallons), constructed, reconstructed, or modified after June 11, 1973 and prior to May 19, 1978.

- e. 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 at the Apple Grove Plant with a storage capacity greater than 151,416 liters (40,000 gallons) for which construction, reconstruction, or modification commenced after May 18, 1978 and prior to July 23, 1984.
- f. 40 C.F.R. 60, Subpart Kb - “Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.” 40 C.F.R. 60, Subpart Kb applies to each storage vessel with a capacity greater than or equal to 75 cubic meters (19,813 gallons) that is used to store volatile organic liquids (VOC) for which construction, reconstruction, or modification is commenced after July 23, 1984. Based on the applicability criteria of 40 C.F.R. §60.110b(a), only the CP4 EG Storage Tank (C4L-F-1800) is subject to the requirements of this subpart. In accordance with 40 C.F.R. §60.110b(b), the subpart does not apply to storage vessels with a capacity greater than or equal to 151 cubic meters (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kPa. Since the CP4 EG Storage Tank (C4L-F-1800) has a capacity of 675,000 gallons and a maximum true vapor pressure of less than 1 kPa, it is exempt from the requirements of 40 C.F.R. 60, Subpart Kb. The permittee is, however, required to maintain readily accessible records for the life of the source showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel in accordance with 40 C.F.R. §§60.116b(a) and (b).
- g. 40 C.F.R. 60, Subpart O – “Standards of Performance for Sewage Treatment Plants.” The Apple Grove Plant does not operate an incineration unit or boiler to burn sludge from a municipal sewage treatment plant.
- h. 40 C.F.R. 60 Subpart VV - “Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.” The Apple Grove Plant does not produce as intermediates or final products any of the materials listed in 40 C.F.R. §60.489.
- i. 40 C.F.R. 60 Subpart DDD - “Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.” Since M & G Polymers is subject to the requirements of 40 C.F.R. 63, Subpart JJJ, they are no longer subject to the requirements of 40 C.F.R. 60, Subpart DDD as specified in 40 C.F.R. §§63.1311(i)(1) and 63.1316(b).
- j. 40 C.F.R. 60, Subpart III – “Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes. The Apple Grove Plant does not produce any of the chemicals listed in 40 C.F.R. §60.617 as a product, co-product, by-product, or intermediate.
- k. 40 C.F.R. 60 Subpart NNN - “Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.” The Apple Grove Plant does not have a process unit that produces any of the chemicals listed in §60.667 as a product, co-product, by-product, or intermediate.
- l. 40 C.F.R. 60 Subpart RRR - “Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.” The Apple Grove Plant does not have a process unit that produces any of the chemicals listed in 40 C.F.R. §60.707 as a product, co-product, by-product, or intermediate.

- m. 40 C.F.R. 63, Subpart G – “National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. 40 C.F.R. 63, Subparts F, G, and H do not apply to manufacturing process units that do not meet the criteria in 40 C.F.R. §§ 63.100 (b) (1), (b) (2), and (b) (3). The Apple Grove Plant does not meet the applicability criteria and is only subject to the requirements of 40 C.F.R. 63, Subpart G as they apply under 40 C.F.R. 63, Subpart JJJ.
- n. 40 C.F.R. 63, Subpart I – National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks. The Apple Grove Plant is subject to the requirements of 40 C.F.R. 63, Subpart JJJ. 40 C.F.R. §63.1311(g)(1) states that after the compliance dates specified in 40 C.F.R. 63, Subpart JJJ, an affected source also subject to 40 C.F.R. 63, Subpart I is required to comply only with the provisions of Subpart JJJ and is no longer subject to Subpart I.
- o. 40 C.F.R. 63, Subpart EEEE – “National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). Table 1 constituents present are acetaldehyde, 1,4-dioxane, and ethylene glycol. Acetaldehyde and 1,4-dioxane are present only in impurity quantities in recupic. Those vessels containing recupic are already subject to 40 C.F.R. 63, Subpart JJJ, and according to 40 C.F.R. §63.2338(c)(1) are not subject to 40 C.F.R. 63, Subpart EEEE. Those sources containing ethylene glycol are not subject to 40 C.F.R. 63, Subpart EEEE because ethylene glycol has an annual average true vapor of less than 0.7 kilopascals (0.1 psia) and is therefore not defined as an organic liquid under 40 C.F.R. §63.2406.

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: March 10, 2011
Ending Date: April 11, 2011

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

Carrie McCumbers
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

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.

Point of Contact

Carrie McCumbers
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1226 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

No comments were received.