

West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

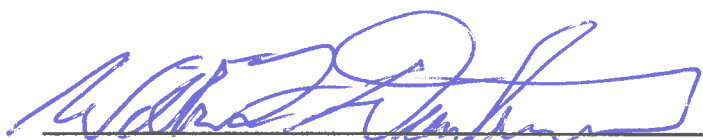
Randy C. Huffman
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
M & G Polymers USA, LLC
Apple Grove
R30-05300054-2016



William F. Durham
Director

Issued: October 24, 2016 • Effective: November 7, 2016
Expiration: October 24, 2021 • Renewal Application Due: April 24, 2021

Permit Number: **R30-05300054-2016**
Permittee: **M & G Polymers USA, LLC**
Facility Name: **Apple Grove**
Permittee Mailing Address: **State Route 2, Apple Grove, WV 25502**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

| | |
|---------------------------|--|
| Facility Location: | Apple Grove, Mason County, West Virginia |
| Facility Mailing Address: | State Route 2, Apple Grove, WV 25502 |
| Telephone Number: | (304) 576-2041 |
| Type of Business Entity: | LLC |
| Facility Description: | Manufacturer of polyester resin |
| SIC Codes: | 2821 |
| UTM Coordinates: | 397.86 km Easting • 4,279.97 km Northing • Zone 17 |

Permit Writer: Denton McDerment

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

| Emission Point ID | Control Device | Emission Unit ID | Emission Unit Description | Design Capacity | Year Installed |
|-------------------|---------------------|------------------|---------------------------------|-----------------------|----------------|
| <i>CP3</i> | | | | | |
| 3P-3130 | C4S-M-3130 Baghouse | C4S-F-3010 | CP3 Recycle Surge Bin | 1,170 ft ³ | 1994 |
| 3P-3190 | None | C3L-F-3190 | CP3 DEG Charge Tank | 275 Gallons | 1994 |
| 3P-1070 | None | C3L-F-1070 | CP3 Recupic EG Tank | 12,700 Gallons | 1994 |
| 3P-1071 | None | C3L-F-1071 | CP3 Recupic EG Tank | 12,700 Gallons | 1994 |
| 3P-1072 | None | C3L-F-1072 | CP3 Recupic EG Tank | 12,700 Gallons | 1994 |
| 3P-1032 | None | C3L-F-3180 | CP3 R/1 Recupic EG Charge Tank | 1,730 Gallons | 1994 |
| | | C3L-F-3140 | CP3 R/1 EG Charge Tank | 1,730 Gallons | 1994 |
| | | C3L-F-3150 | CP3 R/2 EG Charge Tank | 275 Gallons | 1994 |
| 3P-7020 | C3L-F-7020 Seal Pot | C3L-F-6010 | CP3 Catalyst Mix Tank | 455 ft ³ | 2001 |
| | | C3L-F-6510 | CP3 Catalyst Mix Tank | 455 ft ³ | 2009 |
| | | C3L-F-7010 | CP3/CP4 Catalyst Feed Tank | 455 ft ³ | 2001 |
| | | C3L-F-8010 | CP3/CP4 Toner Make-Up Tank | 277 ft ³ | 2001 |
| | | C3L-F-9010 | CP3/CP4 Toner Charge Tank | 277 ft ³ | 2001 |
| 3P-2570 | None | C3L-F-2570 | CP3 Catalyst Slurry Tank | 516 Gallons | 1994 |
| 3P-2580 | None | C3L-F-2580 | CP3 Catalyst Slurry Tank | 516 Gallons | 1994 |
| 3P-8 | None | UTG-F-3020 | CP3 EG Storage Tank | 675,000 Gallons | 1966 |
| 3P-9 | None | UTG-F-3010 | CP3 EG Storage Tank | 675,000 Gallons | 1966 |
| 3P-1120 | None | C3L-F-1120 | CP3/CP4 Recupic EG Dump Tank | 5,000 Gallons | 1994 |
| 3P-1210 | None | C38-E-1210 | CP3 Pellet Dryers | 12,500 pph | 1994 |
| 3P-3210 | None | C38-E-3210 | CP3 Pellet Dryers | 12,500 pph | 1994 |
| 3P-5210 | None | C38-E-5210 | CP3 Pellet Dryers | 12,500 pph | 1994 |
| 3P-7210 | None | C38-E-7210 | CP3 Pellet Dryers | 12,500 pph | 2007 |
| 3P-0200 | L4A-M-0200 Baghouse | L4A-F-0200 | CP3 Off Spec Silo | 8' x 32' s/s | 1994 |
| 3P-0650 | None | C3T-F-0650 | CP3 Condensate Holding Tank | 58 ft ³ | 1994 |
| 3P-1730 | None | C3U-F-1730 | CP3 R/3 TEG Bath | 8" x 30" t/t | 1994 |
| 3P-1900 | None | C3T-F-1900 | CP3 Refrigerant Surge Tank | 955 Gallons | 1994 |
| 3P-4620 | None | C3T-F-4620 | CP3 Condensed Dowtherm Receiver | 116 Gallons | 1994 |

| Emission Point ID | Control Device | Emission Unit ID | Emission Unit Description | Design Capacity | Year Installed |
|--------------------------|---------------------------|-------------------------|----------------------------------|------------------------|-----------------------|
| 3P-5010 | C3S-M-5010 Baghouse | C3S-F-5010 | Master Recycle Silo | 4,000 ft ³ | 1974/ 2010 |
| 3P-7260 | None | C3T-F-7260 | CP3 Hot Oil Storage Tank | 17,700 Gallons | 1994 |
| 3P-1600 | C3T-B-1600 Hot Oil Heater | C3L-F-2220 | CP3 Colorant Make-Up Tank | 400 Gallons | 1994 |
| | | C3L-F-2201 | CP3 Colorant Charge Tank | 400 Gallons | 1994 |
| | | C3L-F-3160 | CP3 Stabilizer Charge Tank | 275 Gallons | 1994 |
| | | C3L-F-4211 | CP3/CP4 Stabilizer Make-Up Tank | 400 Gallons | 1994 |
| | | C3L-F-4100 | CP3/CP4 Stabilizer Surge Tank | 516 Gallons | 1994 |
| | | C3L-F-4210 | CP3/CP4 Stabilizer Make-Up Tank | 400 Gallons | 1994 |
| | | C3L-F-5040 | CP3/CP4 Stabilizer Make-Up Tank | 486 Gallons | 1994 |
| | | C3H-F-3010 | CP3 Slurry Mix Tank | 607 ft ³ | 2001 |
| | | C3H-F-4010 | CP3 Slurry Feed Tank | 1,319 ft ³ | 2001 |
| | | C31-E-1020 | CP3 R/1 System | 2,970 Gallons | 1994 |
| | | C32-E-1050 | CP3 R/2 System | 2,970 Gallons | 1994 |
| | | C33-F-2250 | CP3 R/3 System | 2,517 Gallons | 1994 |
| | | C33-F-5010 | CP3 R/3 Bis System | 2,970 Gallons | 2001 |
| | | C34-F-3280 | CP3 R/4A System | 1,700 pph | 1994 |
| | | C31-F-1220 | CP3 R/1 & R/2 Condensate Tank | 7,383 pph | 1994 |
| | | C33-F-2260 | CP3 R/3 Condensate Tank | 679 gpm | 1994 |
| | | C34-F-2290 | CP3 R/4A Condensate Tank | 459 gpm | 1994 |
| | | C34-F-8290 | CP3 R/4B Condensate Tank | 744 gpm | 2007 |
| | | C34-F-9280 | CP3 R/4B System | 7,502 pph | 2007 |
| | | | | C3T-F-0600 | Knock Out Pot |
| | | C3H-F-4020 | Seal Pot | 5.6 pph | 1994 |
| CP4 | | | | | |
| 4P-1020 | C4S-M-1040 Baghouse | C4S-F-1020 | CP4 TPA Surge Silo | 178 ft ³ | 1996 |
| 4P-1101 | C3S-M-1101 Baghouse | F-8100 | Silo | 8,000 ft ³ | 1976 |
| 4P-2100 | C4S-M-2100 Baghouse | C4S-F-2050 | CP4 IPA Surge Silo | 8' x 18' t/s | 1996 |
| 4P-3130 | C4S-M-3140 Baghouse | C4S-F-3080 | CP4 Recycle Surge Bin | 1,170 ft ³ | 1999 |
| 4P-3190 | None | C4L-F-3190 | CP4 DEG Charge Tank | 275 Gallons | 1996 |
| 4P-1070 | None | C4L-A-1070 | CP4 Recupic EG Tank | 12,700 Gallons | 1996 |
| 4P-1071 | None | C4L-A-1071 | CP4 Recupic EG Tank | 12,700 Gallons | 1996 |
| 4P-1072 | None | C4L-A-1072 | CP4 Recupic EG Tank | 12,700 Gallons | 1996 |
| 4P-1800 | None | C4L-F-1800 | CP4 EG Storage Tank | 675,000 Gallons | 1996 |
| 4P-0430 | None | C4L-F-0430 | CP4 EG Feed Tank | 275 Gallons | 1996 |
| 4P-1032 | None | C4L-F-3140 | CP4 R/1 EG Charge Tank | 1,742 Gallons | 1996 |
| | | C4L-F-3180 | CP4 R/1 Recupic EG Charge Tank | 1,742 Gallons | 1996 |

| Emission Point ID | Control Device | Emission Unit ID | Emission Unit Description | Design Capacity | Year Installed |
|-------------------|--|-----------------------|---|-----------------------|----------------|
| 4P-1900 | None | C4R-F-1900 | CP4 Refrigerant Surge Tank | 955 Gallons | 1996 |
| 4P-4620 | None | C4T-F-4620 | CP4 Condensed Dowtherm Receiver | 125 Gallons | 1996 |
| 4P-1210 | None | C48-E-1210 | CP4 Pellet Dryers | 13,000 pph | 1996 |
| 4P-3210 | None | C48-E-3210 | CP4 Pellet Dryers | 13,000 pph | 1996 |
| 4P-5210 | None | C48-E-5210 | CP4 Pellet Dryers | 13,000 pph | 1996 |
| 4P-0340 | C4A-M-0340 Baghouse | C4A-F-0410 | CP4/CSS-12/CSS-13 Crystallizer Blending Silo | 3,500 ft ³ | 1994 |
| | | C4A-F-0411 | CP4 Crystallizer Blending Silo | 4,000 ft ³ | 2013 |
| 4P-4120 | None | L24-M-4120 | CP4 Pellet Filter Receiver | 318 ft ² | 1993 |
| 4P-1730 | None | C4U-F-1710 | CP4 R/4 TEG Bath | 32" x 60" t/t | 1996 |
| 4P-1296 | None | C4Q-A-1296 | CP4 Extruder | 4,760 pph | 2004 |
| 4P-4220 | C4Q-M-4140/ C4Q-M-4220 Baghouses | C4Q-F-1290 | CP4 Feed Hopper System | 0.75 m ³ | 2004 |
| 4P-4180 | C4Q-M-4190 Baghouse | C4Q-F-2290 | CP4 Feed Hopper System | 0.75 m ³ | 2004 |
| 4P-4160 | C4Q-M-4160 Baghouse | C4Q-F-3290 | CP4 Feed Hopper System | 0.75 m ³ | 2004 |
| 4P-1600 | C4T-B-1600 Hot Oil Heater | D-155 | CP3/CP4 MACT Tank | 10,000 Gallons | 2001 |
| | | C4L-F-3160 | CP4 Stabilizer Charge Tank | 275 Gallons | 1996 |
| | | C4L-F-2120 | CP4 Catalyst Charge Tank | 275 Gallons | 1996 |
| | | C4L-F-3170 | CP4 Catalyst Charge Tank | 830 Gallons | 1996 |
| | | C41-E-3020 | CP4 R/1 System | 2,970 Gallons | 1996 |
| | | C42-E-2050 | CP4 R/2 System | 2,970 Gallons | 1996 |
| | | C43-E-3250 | CP4 R/3 System | 2,970 Gallons | 1996 |
| | | C44-E-3280 | CP4 R/4 System | 26,000 Gallons | 1996 |
| | | C41-F-3220 | CP4 R/1 & R/2 Separator | 90 Gallons | 1996 |
| | | C43-F-2260 | CP4 R/3 Condensate Tank | 1,660 Gallons | 1996 |
| | | C44-F-2290 | CP4 R/4 Condensate Tank | 1,660 Gallons | 1996 |
| | | C4L-F-2200 | Catalyst Make-Up Tank | 400 Gallons | 1994 |
| | | C4L-F-5980 | Make-Up Tank | 533 Gallons | 1994 |
| | | C4T-F-2670 | Dowtherm Lights Tank | 6,000 Gallons | 1988 |
| | | C4Q-A-1297 | CP4 Extruder | 2,800 pph | 2007 |
| C4H-F-3010 | CP4 Slurry Mix/Feed Tank | 1.319 ft ³ | 2011 | | |
| C4T-F-0600 | Knock Out Pot | N/A | N/A | | |
| P-7640 | None | F-7640 | CP4 Hot Oil Storage Tank | 16,725 Gallons | 1996 |
| 4P-2002 | C4Q-M-2002 Baghouse | C4Q-F-5000 | CP4 Feed Hopper System | 0.75 m ³ | 2007 |
| 4P-0001 | C4Q-M-0001/ C4Q-F-0001 Baghouses | C4Q-F-5010 | CP4 Feed Bin | 530 ft ³ | 2007 |

| Emission Point ID | Control Device | Emission Unit ID | Emission Unit Description | Design Capacity | Year Installed |
|--------------------------|--|---------------------------|----------------------------------|---|-----------------------|
| NA | None | C4Q-F-5330 | CP4 Box/Bag Loader | NA | 2007 |
| CSS-7 | | | | | |
| 7P-2601 | C2A-M-2601 Baghouse | C2A-F-5410 | CSS-7 Crystallizer Surge Bin | 3,500 ft ³ | 1988 |
| 7P-2609 | C2A-M-5350 Baghouse | C2A-E-5240/ C2A-B-5010 | CSS-7 Crystallizer and Heater | 9,000 pph/ 1.4 MMBTU/hr | 1988 |
| | | C2B-B-7020/ C2B-E-5250 | CSS-7 Preheater and Heater | 9,000 pph/ 1.48 MMBTU/hr | 1988 |
| 7P-0520 | C2D-M-0520 Baghouse | C2D-E-5280 | CSS-7 Product Cooler | 14,156 acfm | 1988 |
| 7P-0607 | L36-M-0607 Baghouse | L36-F-6040 | CSS-7 Box & Bagging Blender | 85 ft ² | 1988 |
| 7EC-15 | L21-M-1050 Baghouse | L21-F-1020 | CSS-7 Off-Spec Silo A | 4,000 ft ³ | 1988 |
| 7P-1510 | L22-M-2120 Baghouse | L22-F-2040 | CSS-7 Off-Spec Silo B | 85 ft ² | 1987 |
| 7P-4227A | L14-M-4070 Baghouse | L14-F-4070 | CSS-7 Product Storage Silo | 4,000 ft ³ | 1987 |
| 7P-4227B | L14-M-4080 Baghouse | L14-F-4080 | CSS-7 Product Storage Silo | 4,000 ft ³ | 1987 |
| 7P-0430 | None | L14-U-4030 | CSS-7 Fines Elutriator | 150 ft ² | 1990 |
| 7P-2660 | None | L14-F-2660 | CSS-7/CSS-8 T-66 Dump Tank | 116 Gallons | 1994 |
| 7P-9002 | None | L14-F-9001 | CSS-7/CSS-8 Hot Oil Storage Tank | 17,700 Gallons | 1988 |
| 2P-9001 | M-2603 Baghouse C2T-B-9001 Hot Oil Heater | C2B-F-5420 | CSS-7 Preheater Surge Bin | 943 ft ³ | 1988 |
| | | C2B-M-5040 | CSS-7 Surge Bin Filter | 1,200 acfm | 1988 |
| | | C2C-R-5060 | CSS-7 R/6 Reactor | 1,958 ft ³ | 1988 |
| CSS-8 | | | | | |
| 8E-02 | S8A-M-2390 Baghouse | S8A-F-2430 | CSS-8 Crystallizer Surge Bin | 1,244 ft ³ | 1991 |
| 8E-03 | S8A-M-3350 Baghouse | S8A-E-3240/ S8A-B-3010 | CSS-8 Crystallizer and Heater | 68.4 ft ² / 2.15 MMBtu/hr | 1991 |
| 8E-04 | S8B-M-2420 Baghouse | S8B-E-2250/ S8B-B-2020 | CSS-8 Preheater and Heater | 27.7 ft ² / 0.98 MMBtu/hr | 1991 |
| 8E-05 | S8D-M-1520 Baghouse | S8D-E-1280 | CSS-8 Product Cooler | 18,000 pph | 1991 |
| 8E-06 | S8A-M-1590 Baghouse | S8A-M-1610 | CSS-8 Refeed Cyclone | 1,000 ft ³ | 1991 |
| | | S8E-F-1440 | CSS-8 Verification Bin | 18,000 pph | 1991 |
| None | None | S8E-F-1450 | CSS-8 Product Dense Phase Tank | 50 ft ³ | 1988 |
| 8E-08 | L37-M-7130 Baghouse | L37-F-7050 | CSS-8 Boxing Silo | 1,200 ft ³ | 1991 |
| 8E-09 | None | L37-P-7130 | CSS-8 Storage Air Classifier | 55 lb/ft ³ | 1991 |
| | | L37-M-7150 | CSS-8 Fines Elutriator | 700 acfm | 1991 |
| 8E-12 | None | L13-M-3020 | CSS-8 Pellet Filter Receiver | 25,500 acfm | 1991 |

| Emission Point ID | Control Device | Emission Unit ID | Emission Unit Description | Design Capacity | Year Installed |
|--------------------------|---------------------------|---------------------------|----------------------------------|------------------------|-----------------------|
| 8EP-204A | L12-M-2030 Baghouse | L12-F-2030 | CSS-8 Product Silo | 85ft ² | 1987 |
| 8EP-204B | L12-M-2040 Baghouse | L12-F-2040 | CSS-8 Product Silo | 85 ft ² | 1987 |
| 8P-4127A | L13-M-3050 Baghouse | L13-F-3050 | CSS-8 Product Silo | 4,000ft ³ | 1987 |
| 8P-4127B | L13-M-3060 Baghouse | L13-F-3060 | CSS-8 Product Silo | 4,000 ft ³ | 1987 |
| 8ECS4 | L11-M-1010 Baghouse | L11-F-1010 | CSS-8/CSS-9 Salvage Silo | 4,000 ft ³ | 1977 |
| 8P-1030 | None | L11-U-1030 | CSS-8 Fines Elutriator | 150 ft ² | 1991 |
| 8P-1050 | None | L13-U-3030 | CSS-8 Fines Elutriator | 150 ft ² | 1991 |
| 8EP-208 | None | L12-M-4030 | CSS-8 Fines Elutriator | 150 ft ² | 1991 |
| 7P-2660 | N/A | L14-F-2660 | T-66 Dump Tank | 116 Gallons | 1988 |
| 7P-9002 | N/A | L14-F-9001 | Hot Oil Storage | 17,700 Gallons | 1991 |
| 2P-9001 | C2T-B-9001 Hot Oil Heater | S8A-E-1420 | CSS-8 Preheater Surge Bin | 930 ft ³ | 1991 |
| | | S8C-R-1060/ S8C-R-3070 | CSS-8 Reactor | 2,404 ft ³ | 1991 |
| | | C2T-F-2670 | T-66 Lites Tank | 6,400 Gallons | 1994 |
| | | C2T-F-5660 | Knockout Drum | 55 Gallons | 1994 |
| | | F-5001 | T-66 Tank | NA | 1976 |
| CSS-9 | | | | | |
| 9P-1701A | L15-M-1701A Baghouse | L15-F-1701A | CSS-9 Verification Bin | 920 ft ³ | 1988 |
| 9P-1701B | L15-M-1701B Baghouse | L15-F-1701B | CSS-9 Verification Bin | 920 ft ³ | 1988 |
| 9P-5091 | None | L15-U-5090 | CSS-9 Fines Elutriator | 150 ft ² | 1991 |
| 9P-2701A | L15-M-2701A Baghouse | L15-F-2701A | CSS-9 Product Silo | 4,000 ft ³ | 1988 |
| 9P-2701B | L15-M-2701B Baghouse | L15-F-2701B | CSS-9 Product Silo | 4,000 ft ³ | 1988 |
| 9P-6110 | None | L15-U-6110 | CSS-9 Fines Elutriator | 150 ft ² | 1991 |
| 9E-10 | L17-M-7230 Baghouse | L17-F-7130 | CSS-9 Product Silo | 4,000 ft ³ | 1991 |
| | | L17-F-7140 | CSS-9 Product Silo | 4,000 ft ³ | 1991 |
| 9E-11 | None | L17-M-7240 | CSS-9 Fines Elutriator | 700 acfm | 1991 |
| 9ECS5 | L15-M-1020 Baghouse | L15-F-1020 | CSS-9 Salvage Silo | 4,000 ft ³ | 1977 |
| 9P-1030 | None | L15-U-1030 | CSS-9 Fines Elutriator | 150 ft ² | 1991 |

| Emission Point ID | Control Device | Emission Unit ID | Emission Unit Description | Design Capacity | Year Installed |
|--------------------------|--|-------------------------|-------------------------------------|--|-----------------------|
| <i>CSS-10</i> | | | | | |
| 10P-1340 | C3A-M-1340 Baghouse | C3A-F-1410 | CSS-10 Crystallizer Blending Silo | 3,500 ft ³ | 1994 |
| 10P-2390 | C3A-M-2390 Baghouse | C3A-F-2460 | CSS-10 Crystallizer Surge Bin | 1,570 ft ³ | 1994 |
| 10P-3350 | C3A-M-3350 Baghouse | C3A-E-3240 | CSS-10 Crystallizer and Heater | 93.5 ft ² / 3.04 MMBTU/hr | 1994 |
| 10P-1130 | L1A-M-1130 Baghouse | L1A-F-1090 | CSS-10 Product Silo | 4,000 ft ³ | 1994 |
| | | L1A-F-1100 | CSS-10 Product Silo | 4,000 ft ³ | 1994 |
| 10P-0520 | C3D-M-0520 Baghouse | C3D-E-1280 | CSS-10 Product Cooler | 9,000 pph | 1994 |
| | | C3D-E-5280 | CSS-11 Product Cooler | 27.7 ft ² | 1994 |
| 10P-2420 | C3B-M-2420 Baghouse | C3B-E-2250 | CSS-10 Preheater and Heater | 27.7 ft ² / 0.977 MMBTU/hr | 1994 |
| 10P-1590 | C3E-M-1590 Baghouse | C3E-F-1440 | CSS-10 Verification Bin | 1,450 ft ³ | 1994 |
| 10P-1050 | L3A-M-1050 Baghouse | L3A-F-1030 | CSS-10/CSS-11 Box & Bagging Blender | 1,200 ft ³ | 1994 |
| 10P-1100 | None | L3A-M-1070 | CSS-10 Fines Elutriator | 150 ft ² | 1994 |
| 10P-1140 | None | L1A-M-1140 | CSS-10 Fines Elutriator | 150 ft ² | 1994 |
| 3P-1600 | C3B-M-1430 Baghouse C3T-B-1600 Hot Oil Heater | C3B-F-1420 | CSS-10 Preheater Surge Bin | 785 ft ³ | 1994 |
| | C3T-B-1600 Hot Oil Heater | C3C-R-1060 | CSS-10 R/6 Reactors & Heater | 2,404 ft ³ | 1994 |
| <i>CSS-11</i> | | | | | |
| 11P-6340 | C3A-M-6340 Baghouse | C3A-F-5410 | CSS-11 Crystallizer Blending Silo | 3,500 ft ³ | 1994 |
| 11P-6390 | C3A-M-6390 Baghouse | C3A-F-5460 | CSS-11 Crystallizer Surge Bin | 1,244 ft ³ | 1994 |
| 11P-7350 | C3A-M-7350 Baghouse | C3A-E-7240 | CSS-11 Crystallizer and Heater | 93.5 ft ² / 3 MMBTU/hr | 1994 |
| 11P-6420 | C3B-M-6420 Baghouse | C3B-E-6250 | CSS-11 Preheater and Heater | 27.7 ft ² / 0.977 MMBTU/hr | 1994 |
| 11P-5590 | C3E-M-5590 Baghouse | C3E-F-5440 | CSS-11 Verification Bin | 1,450 ft ³ | 1994 |
| 11P-1090 | L3B-M-2060 Baghouse | L3B-F-2040 | CSS-11 Box and Bagging Blender | 1,200 ft ³ | 1994 |
| 11P-1080 | None | L3B-M-2080 | CSS-11 Fines Elutriator | 150 ft ² | 1994 |
| 11P-1160 | L1B-M-1160 Baghouse | L1B-F-2115 | CSS-11 Product Silo | 4,000 ft ³ | 1994 |
| | | L1B-F-2160 | CSS-11 Product Silo | 4,000 ft ³ | 1994 |
| 11P-2170 | None | L1B-M-2170 | CSS-11 Fines Elutriator | 150 ft ² | 1994 |

| Emission Point ID | Control Device | Emission Unit ID | Emission Unit Description | Design Capacity | Year Installed |
|--------------------------|--|--------------------------|---|---|-----------------------|
| 3P-1600 | C3B-M-5430 Baghouse C3T-B-1600 Hot Oil Heater | C3B-F-5420 | CSS-11 Preheater Surge Bin | 785 ft ³ | 1994 |
| | C3T-B-1600 Hot Oil Heater | C3C-R-5060 | CSS-11 R/6 Reactors & Heater | 2,404 ft ³ | 1994 |
| CSS-12 | | | | | |
| 12P-2390 | C4A-M-2390 Baghouse | C4A-F-2460 | CSS-12 Crystallizer Surge Bin | 1,570 ft ³ | 1996 |
| 12P-3350 | C4A-M-3350 Baghouse | C4A-E-3240 | CSS-12 Crystallizer & Heater | 93.5 ft ² / 3.04 MMBTU/hr | 1996 |
| 12P-2420 | C4B-M-2420 Baghouse | C4B-E-2250 | CSS-12 Preheater and Heater | 43 ft ² / 0.97 MMBTU/hr | 1996 |
| 12P-0520 | C4D-M-0520 Baghouse | C4D-E-1280 | CSS-12 Product Cooler | 42.6 ft ² | 1996 |
| | | C4D-E-5280 | CSS-13 Product Cooler | 42.6 ft ² | 1996 |
| 12P-1590 | C4E-M-1590 Baghouse | C4E-F-1440 | CSS-12 Verification Bin | 1,450 ft ³ | 1996 |
| 12P-1130 | L1C-M-1130 Baghouse | L1C-F-1090 | CSS-12 Product Silo | 4,000 ft ³ | 1996 |
| | | L1C-F-1110 | CSS-12 Product Silo | 4,000 ft ³ | 1996 |
| 12P-1140 | None | L1C-M-1140 | CSS-12 Fines Elutriator | 150 ft ² | 1996 |
| 12P-0390 | L4C-M-0390 Baghouse | L4C-F-0210 | CSS-12/CSS-13 Salvage Silo | 1,500 ft ² | 1996 |
| 12P-2060 | L3B-M-2060 Baghouse | L3B-F-2040 | CSS-12/CSS-13 Boxing & Bagging Blender | 1,200 ft ² | 1996 |
| 12P-2080 | None | L3B-M-2080 | CSS-12 Fines Elutriator | 150 ft ² | 1996 |
| 4P-1600 | C4B-M-1430 Baghouse C4T-B-1600 Hot Oil Heater | C4B-F-1420 | CSS-12 Preheater Surge Bin | 785 ft ² | 1996 |
| | | C4C-R-3070 | CSS-12 Reactor | 2,110 ft ³ | 1996 |
| | C4T-B-1600 Hot Oil Heater | C4C-R-1060 C4C-E-2320 | CSS-12 Reactor & Reheater | 1,958 ft ³ | 1996 |
| CSS-13 | | | | | |
| 13P-6390 | C4A-M-6390 Baghouse | C4A-F-6460 | CSS-13 Crystallizer Surge Bin | 1,570 ft ³ | 1996 |
| 13P-7350 | C4A-M-7350 Baghouse | C4A-E-7240 | CSS-13 Crystallizer & Heater | 93.5 ft ² / 3 MMBTU/hr | 1996 |
| 12P-6420 | C4B-M-6420 Baghouse | C4B-E-6250 | CSS-13 Preheater & Heater | 43 ft ² / 0.97 MMBTU/hr | 1996 |
| 13P-5590 | C4E-M-5590 Baghouse | C4E-F-5440 | CSS-13 Verification Bin | 1,450 ft ³ | 1996 |
| 13P-2080 | None | C4E-M-2080 | CSS-13 Fines Elutriator | 150 ft ² | 1996 |

| Emission Point ID | Control Device | Emission Unit ID | Emission Unit Description | Design Capacity | Year Installed |
|----------------------------|------------------------------|--------------------------|------------------------------------|------------------------|-----------------------|
| 13P-1130 | L1C-M-1130 Baghouse | L1D-F-1110 | CSS-13 Product Storage | 4,000 ft ³ | 1996 |
| | | L1D-F-1120 | CSS-13 Product Storage | 4,000 ft ³ | 1996 |
| 13P-1170 | None | L1D-M-1130 | CSS-13 Fines Elutriator | 150 ft ² | 1996 |
| 4P-1600 | C4B-M-5430 Baghouse | C4B-F-5420 | CSS-13 Preheater Surge Bin | 1,390 ft ³ | 1996 |
| | | E-7070 | CSS-13 Reactor | 2,110 ft ³ | 1996 |
| | C4T-B-1600 Hot Oil Heater | C4C-R-5060 C4C-E-6320 | CSS-13 Reactor & Reheater | 1,958 ft ³ | 1996 |
| Hot Oil Heaters | | | | | |
| 3P-1600 | None | C3T-B-1600 | Hot Oil Heater | 53.1 MMBtu/hr | 1994 |
| 4P-1600 | None | C4T-B-1600 | Hot Oil Heater | 53.1 MMBtu/hr | 1996 |
| 2P-9001 | None | C2T-B-9001 | Hot Oil Heater | 24 MMBtu/hr | 1988 |
| 3P-1700 | None | C3T-F-1700 | Hot Oil Heater | 23.0 MMBtu/hr | 2007 |
| Boilers and Heaters | | | | | |
| U-B-2010 | None | UGS-B-2010 | WWTP Portable Boiler | 14.2 MMBtu/hr | 2010 |
| U-B-3010 | None | UGS-B-3010 | Front Office Hot Water Boiler | 0.9 MMBtu/hr | 2009 |
| U-B-3011 | None | UGS-B-3011 | Front Office Hot Water Boiler | 0.9 MMBtu/hr | 2009 |
| U-B-4010 | None | UGS-B-4010 | CP-2 Ops Center Hot Water Boiler | 1.6 MMBtu/hr | 2009 |
| U-B-4011 | None | UGS-B-4011 | CP-2 Ops Center Hot Water Boiler | 1.6 MMBtu/hr | 2009 |
| U-B-1050 | None | UGS-B-1050 | D-155 Space Heater | 0.26 MMBtu/hr | 2009 |
| U-B-1060 | None | UGS-B-1060 | D-155 Space Heater | 0.26 MMBtu/hr | 2009 |
| U-B-1004 | None | UGS-B-1004 | Utility Space Heater | 0.26 MMBtu/hr | 2009 |
| U-B-1005 | None | UGS-B-1005 | Utility Space Heater | 0.26 MMBtu/hr | 2009 |
| U-B-1006 | None | UGS-B-1006 | Utility Space Heater | 0.26 MMBtu/hr | 2009 |
| U-B-1007 | None | UGS-B-1007 | Utility Space Heater | 0.26 MMBtu/hr | 2009 |
| U-B-4001 | None | UGS-B-4001 | CP-2 A/C Room Space Heater | 0.26 MMBtu/hr | 2009 |
| U-B-4002 | None | UGS-B-4002 | CP-2 A/C Room Space Heater | 0.26 MMBtu/hr | 2009 |
| U-B-4003 | None | UGS-B-4003 | Utility Space Heater | 0.26 MMBtu/hr | 2009 |
| U-B-4004 | None | UGS-B-4004 | Utility Space Heater | 0.26 MMBtu/hr | 2009 |
| Warehouse | | | | | |
| WF-6010 | MWB-F-1080 Baghouse | L26-F-6010 | Warehouse – West Silo | 750 ft ³ | 1959 |
| D56 | None | MW11717 | Warehouse Railcar Unloading System | NA | 1976 |
| Generators | | | | | |
| P-66 | None | UTF-G-1020A | #1 Diesel Fire Pump | 235 hp | 1959 |
| U3F-G-1710 | None | U3F-G-1710 | #2 Diesel Fire Pump | 235 hp | 1993 |
| DGM-U-1010 | None | DGM-U-1010 | Emergency Electrical Generator | 250 hp | 2005 |

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

| Permit Number | Date of Issuance |
|---------------|-------------------|
| R13-1650R | December 10, 2013 |

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

| | | | |
|---------------------------------------|---|------------------------|---|
| CAAA | Clean Air Act Amendments | NO_x | Nitrogen Oxides |
| CBI | Confidential Business Information | NSPS | New Source Performance Standards |
| CEM | Continuous Emission Monitor | PM | Particulate Matter |
| CES | Certified Emission Statement | PM₁₀ | Particulate Matter less than 10µm in diameter |
| C.F.R. or CFR | Code of Federal Regulations | pph | Pounds per Hour |
| CO | Carbon Monoxide | ppm | Parts per Million |
| C.S.R. or CSR | Codes of State Rules | PSD | Prevention of Significant Deterioration |
| DAQ | Division of Air Quality | psi | Pounds per Square Inch |
| DEP | Department of Environmental Protection | SIC | Standard Industrial Classification |
| FOIA | Freedom of Information Act | SIP | State Implementation Plan |
| HAP | Hazardous Air Pollutant | SO₂ | Sulfur Dioxide |
| HON | Hazardous Organic NESHAP | TAP | Toxic Air Pollutant |
| HP | Horsepower | TPY | Tons per Year |
| lbs/hr or lb/hr | Pounds per Hour | TRS | Total Reduced Sulfur |
| LDAR | Leak Detection and Repair | TSP | Total Suspended Particulate |
| m | Thousand | USEPA | United States Environmental Protection Agency |
| MACT | Maximum Achievable Control Technology | UTM | Universal Transverse Mercator |
| mm | Million | VEE | Visual Emissions Evaluation |
| mmBtu/hr | Million British Thermal Units per Hour | VOC | Volatile Organic Compounds |
| mmft³/hr or mmcf/hr | Million Cubic Feet Burned per Hour | | |
| NA or N/A | Not Applicable | | |
| NAAQS | National Ambient Air Quality Standards | | |
| NESHAPS | National Emissions Standards for Hazardous Air Pollutants | | |

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
 - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1 Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161. [40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.

[45CSR§13-10.5.]

3.2. Monitoring Requirements

- 3.2.1. Reserved.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-1650, 4.4.1]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.

[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. Reserved.

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
- 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.
- 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.
- p. 40 C.F.R. 60 Subpart IIII – “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines”. M & G Polymers’ emergency generator engine DGM-U-1010 is not subject to this subpart because it was constructed/installed in 2004/2005, which is prior to the applicability date in 40 C.F.R §60.4200(a)(2). The #1 and #2 Diesel Fire Pump engines UTF-G-1020A and U3F-G-1710 were constructed/installed prior to the applicability date in 40 C.F.R §60.4200(a)(2) and have not been modified or reconstructed after the date in 40 C.F.R §60.4200(a)(3); therefore, this subpart is not applicable.
- q. 40 C.F.R. Part 64 – Compliance Assurance Monitoring. While the permittee utilizes control devices to meet emission limitations, no emission unit has pre-control device potential emissions greater than the major source threshold for the respective pollutants. Since none of the emission units meet the applicability criterion at 40 C.F.R. §64.2(a)(3), CAM is not applicable.

4.0 Source-Specific Requirements

4.1. Limitations and Standards

- 4.1.1. The facility shall be limited to the maximum production rates for each of the associated operating units as shown in the following table:

Table 4.1.1.

| Unit | Production Rate | |
|--------|--------------------------------------|-----------------------|
| | Hourly ¹ (pounds/hour) | Annual (tons/year) |
| CP-3 | 70,000 | 306,600 |
| CP-4 | 40,000 | 157,680 |
| CSS-7 | 13,000 | 56,940 |
| CSS-8 | 18,000 | 78,840 |
| CSS-9 | 42,000 | 183,960 |
| CSS-10 | 18,000 | 78,840 |
| CSS-11 | 18,000 | 78,840 |
| CSS-12 | 18,000 | 78,840 |
| CSS-13 | 18,000 | 78,840 |

¹Hourly production limits are based on a maximum daily average rate.

[45CSR13, R13-1650, 4.1.1]

- 4.1.2. The Hot Oil Heater [C2T-B-9001] shall be operated in accordance to the following limits and requirements:
- a. The heater shall be limited to a maximum designed heat input rate of 24.0×10^6 Btu/hour.
 - b. Fuel consumption shall be limited to natural gas at a maximum rate of $55,312 \text{ ft}^3/\text{hour}$ and $278 \times 10^6 \text{ ft}^3/\text{year}$.
 - c. The heater shall be designed and operated so to provide a minimum destruction efficiency of 99.8% for VOCs from sources vented to emission point 2P-9001, as established in Section 1.1 – Emission Units, of this permit.
 - d. Visible emissions from Emission Point 2P-9001 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650, 4.1.2; 45CSR§2-3.1]

- 4.1.3. The Hot Oil Heater [C3T-B-1600] shall be operated in accordance to the following limits and requirements:
- a. The heater shall be limited to a maximum designed heat input rate of 53.1×10^6 Btu/hour.
 - b. Fuel consumption shall be limited to natural gas at a maximum rate of $55,312 \text{ ft}^3/\text{hour}$ and $411 \times 10^6 \text{ ft}^3/\text{year}$.

- c. The heater shall be designed and operated so to provide a minimum destruction efficiency of 99.8% for VOCs from sources vented to emission point 3P-1600, as established in Section 1.1 – Emission Units, of this permit.
- d. Visible emissions from Emission Point 3P-1600 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650, 4.1.3; 45CSR§2-3.1]

- 4.1.4. The Hot Oil Heater [C4T-B-1600] shall be operated in accordance to the following limits and requirements:
 - a. The heater shall be limited to a maximum designed heat input rate of 53.1×10^6 Btu/hour.
 - b. Fuel consumption shall be limited to natural gas at a maximum rate of 55,312 ft³/hour and 411 x 10⁶ ft³/year.
 - c. The heater shall be designed and operated so to provide a minimum destruction efficiency of 99.8% for VOCs from sources vented to emission point 4P-1600, as established in Section 1.1 – Emission Units, of this permit.
 - d. Visible emissions from Emission Point 4P-1600 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650, 4.1.4; 45CSR§2-3.1]

- 4.1.5. The Hot Oil Heater [C3T-F-1700] shall be operated in accordance to the following limits and requirements:
 - a. The heater shall be limited to a maximum designed heat input rate of 23.0×10^6 Btu/hour.
 - b. Fuel consumption shall be limited to natural gas at a maximum rate of 24,000 ft³/hour and 210 x 10⁶ ft³/year.
 - c. Visible emissions from Emission Point 3P-1700 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650, 4.1.5; 45CSR§2-3.1]

- 4.1.6. Carbon Monoxide (CO) emissions from the Hot Oil Heater [C3T-F-1700] shall be limited to no more than 400 ppm by volume on a dry basis corrected to 3 percent oxygen based on an average calculated from three (3) separate test runs, each test run lasting at least 1 hour.

[45CSR13, R13-1650, 4.1.6]

- 4.1.7. The permittee shall develop a written startup, shutdown, and malfunction plan (SSMP) for the Hot Oil Heater [C3T-F-1700] according to the provisions in 40 C.F.R. §63.6(e)(3).

[45CSR13, R13-1650, 4.1.7; 45CSR34; 40 C.F.R. §63.6(e)(3)]

- 4.1.8. The permittee shall develop a site-specific testing plan according to the requirements in 40 C.F.R. §63.7(c).

[45CSR13, R13-1650, 4.1.8; 45CSR34; 40 C.F.R. §63.7(c)]

- 4.1.9. The Small Boilers [UGS-B-2010, UGS-B-4010, UGS-B-4011, UGS-B-3010, and UGS-B-3011] and Space Heaters [UGS-B-1050, UGS-B-1060, UGS-B-1004, UGS-B-1005, UGS-B-1006, UGS-B-1007, UGS-B-4001, UGS-B-4002, UGS-B-4003, UGS-B-4004] shall be operated in accordance to the following limits and requirements:
- a. The boilers and heaters shall be limited to the maximum designed heat input rates defined in the Emission Units Table in Section 1.1 of this permit.
 - b. Fuel consumption shall be limited to natural gas. **[45CSR§13-15.1.c and 45CSR§34-3.2 for UGS-B-2010]**
 - c. Visible emissions from Emission Points U-B-2010, U-B-3010, U-B-3011, U-B-4010, U-B-4011, U-B-1050, U-B-1060, U-B-1004, U-B-1005, U-B-1006, U-B-1007, U-B-4001, U-B-4002, U-B-4003, and U-B-4004 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650, 4.1.9; 45CSR§2-3.1]

- 4.1.10. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity. (3P-3130, 3P-0200, 3P-5010, 4P-1020, 4P-1020, 4P-1101, 4P-3130, 4P-0340, 4P-4120, 4P-4220, 4P-4180, 4P-4160, 4P-2002, 4P-0001, 7P-2601, 7P-2609, 7P-0520, 7P-0607, 7EC-15, 7P-1510, 7P-4227A, 7P-4227B, 7P-0430, 8E-02, 8E-03, 8E-04, 8E-05, 8E-06, 8E-08, 8E-09, 8EP-204A, 8EP-204B, 8P-4127A, 8P-4127B, 8ECS4, 8E-12, 8P-1030, 8P-1050, 8EP-208, 9P-1701A, 9P-1701B, 9P-5091, 9P-2701A, 9P-2701B, 9P-6110, 9E-10, 9E-11, 9ECS5, 9P-1030, 10P-1340, 10P-2390, 10P-3350, 10P-2420, 10P-0520, 10P-1590, 10P-1050, 10P-1100, 10P-1130, 10P-1140, 11P-6340, 11P-6390, 11P-7350, 11P-6420, 11P-5590, 11P-1090, 11P-1080, 11P-1160, 11P-2170, 12P-2390, 12P-3350, 12P-2420, 12P-0520, 12P-1590, 12P-1130, 12P-1140, 12P-0390, 12P-2060, 12P-2080, 13P-6390, 13P-7350, 12P-6420, 13P-5590, 13P-2080, 13P-1130, 13P-1170, and WF-6010)

[45CSR13, R13-1650, 4.1.10 and 4.1.13.; 45CSR§7-3.1]

- 4.1.11. Emissions released from sources affected by this permit shall be limited to emission points, pollutants, and associated emission rates as established by Tables 4.1.11.a through 4.1.11.j.

Table 4.1.11.a. – CP3 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|---------------------|------------------|------------------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 3P-3130 | C4S-M-3130 Baghouse | C4S-F-3010 | Particulate Matter | 0.13 | 0.19 |
| 3P-3190 | None | C3L-F-3190 | Total VOC | 0.01 | 0.01 |
| 3P-1070 | None | C3L-F-1070 | Ethylene Glycol Total VOC | 0.01 0.01 | 0.02 0.02 |
| 3P-1071 | None | C3L-F-1071 | Ethylene Glycol Total VOC | 0.01 0.01 | 0.02 0.02 |
| 3P-1072 | None | C3L-F-1072 | Ethylene Glycol Total VOC | 0.01 0.01 | 0.02 0.02 |

Table 4.1.11.a. – CP3 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|------------------------|------------------|------------------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 3P-1032 | None | C3L-F-3180 | Ethylene Glycol Total VOC | 0.23 | 0.23 |
| | | C3L-F-3140 | | 0.52 | 0.52 |
| | | C3L-F-3150 | | | |
| 3P-7020 | C3L-F-7020 | C3L-F-6010 | Ethylene Glycol Total VOC | 0.71 | 0.49 |
| | | C3L-F-7010 | | 0.71 | 0.49 |
| | | C3L-F-6510 | | | |
| 3P-2570 | None | C3L-F-2570 | Ethylene Glycol Total VOC | 0.03 0.01 | 0.03 0.01 |
| 3P-2580 | None | C3L-F-2580 | Ethylene Glycol Total VOC | 0.03 0.01 | 0.03 0.01 |
| 3P-8 | None | UTG-F-3020 | Ethylene Glycol Total VOC | 0.02 0.02 | 0.09 0.09 |
| 3P-9 | None | UTG-F-3010 | Ethylene Glycol Total VOC | 0.02 0.02 | 0.09 0.09 |
| 3P-1120 | None | C3L-F-1120 | Ethylene Glycol Total VOC | 0.01 0.01 | 0.02 0.02 |
| 3P-1210 | None | C38-E-1210 | Ethylene Glycol | 0.19 | 0.77 |
| | | | Acetaldehyde | 0.06 | 0.22 |
| | | | Total VOC | 0.37 | 1.48 |
| 3P-3210 | None | C38-E-3210 | Ethylene Glycol | 0.19 | 0.77 |
| | | | Acetaldehyde | 0.06 | 0.22 |
| | | | Total VOC | 0.37 | 1.48 |
| 3P-5210 | None | C38-E-5210 | Ethylene Glycol | 0.19 | 0.77 |
| | | | Acetaldehyde | 0.06 | 0.22 |
| | | | Total VOC | 0.37 | 1.48 |
| 3P-7210 | None | C38-E-7210 | Ethylene Glycol | 0.19 | 0.77 |
| | | | Acetaldehyde | 0.06 | 0.22 |
| | | | Total VOC | 0.37 | 1.48 |
| 3P-0200 | L4A-M-0200 Baghouse | L4A-F-0200 | Particulate Matter | 0.35 | 0.01 |
| 3P-0650 | None | C3T-F-0650 | Ethylene Glycol Total VOC | 0.01 0.01 | 0.01 0.01 |
| 3P-1730 | None | C3U-F-1730 | Total VOC | 0.02 | 0.01 |
| 3P-1900 | None | C3T-F-1900 | Total VOC | 0.01 | 0.01 |
| 3P-4620 | None | C3T-F-4620 | Total VOC | 0.01 | 0.01 |
| 3P-7260 | None | C3T-F-7260 | Total VOC | 0.01 | 0.01 |

Table 4.1.11.a. – CP3 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|------------------------------|------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 3P-1600 | C3T-B-1600 Hot Oil Heater | C3T-B-1600 | | | |
| | | C3H-F-3010 | | | |
| | | C3H-F-4010 | | | |
| | | C31-E-1020 | | | |
| | | C32-E-1050 | | | |
| | | C33-E-2250 | | | |
| | | C33-E-5010 | Ethylene Glycol | 0.01 | 0.02 |
| | | C34-F-3280 | Acetaldehyde | 1.04 | 1.50 |
| | | C34-F-8290 | 1,4-Dioxane | 0.01 | 0.01 |
| | | C34-F-9280 | Total VOC | 1.32 | 2.77 |
| | | C31-F-1220 | Particulate Matter | 0.11 | 0.47 |
| | | C33-F-2260 | Carbon Monoxide | 1.86 | 8.14 |
| | | C34-F-2290 | NO _x | 3.19 | 14.00 |
| | | C3H-F-3010 | SO _x | 0.05 | 0.23 |
| | | C3H-F-4010 | | | |
| C3H-F-4020 | | | | | |
| C3B-F-1420 | | | | | |
| C3B-F-5420 | | | | | |
| C3H-F-4020 | | | | | |
| 3P-1700 | None | C3T-F-1700 | Total VOC | 0.12 | 0.50 |
| | | | Particulate Matter | 0.17 | 0.76 |
| | | | Carbon Monoxide | 1.89 | 8.26 |
| | | | NO _x | 2.25 | 9.87 |
| | | | SO _x | 0.01 | 0.06 |
| 3P-5010 | C3S-M-5010 | C3S-F-5010 | Particulate Matter | 0.04 | 0.18 |

Table 4.1.11.b. – CP4 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|------------------------|------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 4P-1020 | C4S-M-1040 Baghouse | C4S-F-1020 | Particulate Matter | 0.11 | 0.46 |
| 4P-1101 | C3S-M-1101 | F-8100 | Particulate Matter | 0.04 | 0.18 |
| 4P-2100 | C4S-M-2100 Baghouse | C4S-F-2050 | Particulate Matter | 0.01 | 0.01 |
| 4P-3130 | C4S-M-3140 Baghouse | C4S-F-3080 | Particulate Matter | 0.11 | 0.23 |
| 4P-3190 | None | C4L-F-3190 | Total VOC | 0.01 | 0.01 |
| 4P-1070 | None | C4L-A-1070 | Ethylene Glycol | 0.03 | 0.10 |
| | | | Total VOC | 0.03 | 0.10 |
| 4P-1071 | None | C4L-A-1071 | Ethylene Glycol | 0.03 | 0.10 |
| | | | Total VOC | 0.03 | 0.10 |
| 4P-1072 | None | C4L-A-1072 | Ethylene Glycol | 0.03 | 0.10 |
| | | | Total VOC | 0.03 | 0.10 |

Table 4.1.11.b. – CP4 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|--|--------------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 4P-1800 | None | C4L-F-1800 | Ethylene Glycol | 0.01 | 0.04 |
| | | | Total VOC | 0.01 | 0.04 |
| 4P-1032 | None | C4L-F-3140 | Ethylene Glycol | 0.09 | 0.42 |
| | | C4L-F-3180 | Total VOC | 0.09 | 0.42 |
| 4P-1900 | None | C4R-F-1900 | Ethylene Glycol | 0.01 | 0.01 |
| 4P-4620 | None | C4T-F-4620 | Total VOC | 0.01 | 0.01 |
| | | | Ethylene Glycol | 0.07 | 0.29 |
| 4P-1210 | None | C48-E-1210 | Acetaldehyde | 0.02 | 0.09 |
| | | | Total VOC | 0.13 | 0.57 |
| | | | Ethylene Glycol | 0.07 | 0.29 |
| 4P-3210 | None | C48-E-3210 | Acetaldehyde | 0.02 | 0.09 |
| | | | Total VOC | 0.13 | 0.57 |
| | | | Ethylene Glycol | 0.07 | 0.29 |
| 4P-5210 | None | C48-E-5210 | Acetaldehyde | 0.02 | 0.09 |
| | | | Total VOC | 0.13 | 0.57 |
| | | | Ethylene Glycol | 0.07 | 0.29 |
| 4P-0340 | C4A-M-0340 Baghouse | C4A-F-0410 or C4A-F-0411 | Particulate Matter | 0.03 | 0.01 |
| 4P-4120 | None | L24-M-4120 | Particulate Matter | 0.01 | 0.02 |
| 4P-1730 | None | C4U-F-1710 | Total VOC | 0.01 | 0.01 |
| 4P-4220 | C4Q-M-4140/ C4Q-M-4220 Baghouses | C4Q-F-1290 | Particulate Matter | 0.006 | 0.03 |
| 4P-4180 | C4Q-M-4190 Baghouse | C4Q-F-2290 | Particulate Matter | 0.006 | 0.03 |
| 4P-4160 | C4Q-M-4160 Baghouse | C4Q-F-3290 | Particulate Matter | 0.006 | 0.03 |
| P-7640 | None | F-7640 | Total VOC | 0.01 | 0.01 |

Table 4.1.11.b. – CP4 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|---------------------------------|------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 4P-1600 | C4T-B-1600 Hot Oil Heater | D-155 | | | |
| | | C4L-F-3160 | | | |
| | | C4L-F-2120 | | | |
| | | C4L-F-3170 | | | |
| | | C41-E-3020 | | | |
| | | C42-E-2050 | | | |
| | | C43-E-3250 | | | |
| | | C44-E-3280 | | | |
| | | C41-F-3220 | Particulate Matter | 0.11 | 0.47 |
| | | C43-F-2260 | Carbon Monoxide | 1.90 | 8.14 |
| | | C44-F-2290 | NO _x | 3.2 | 14.0 |
| | | C4L-F-2200 | SO ₂ | 0.06 | 0.23 |
| | | C4L-F-5980 | Total VOC | 0.34 | 1.45 |
| | | C4Q-A-1297 | Ethylene Glycol | 0.01 | 0.02 |
| | | C4B-F-1420 | Acetaldehyde | 0.05 | 0.19 |
| | | C4C-R-3070 | 1,4 Dioxane | 0.001 | 0.001 |
| | | C4C-R-1060 | | | |
| | | C4C-E-2320 | | | |
| | | C4B-F-5420 | | | |
| | | E-7070 | | | |
| C4C-R-5060 | | | | | |
| C4C-E-6320 | | | | | |
| C4H-F-3010 | | | | | |
| C4T-F-0600 | | | | | |
| 4P-1600 | C4T-B-1600 Hot Oil Heater | C4T-F-2670* | Total VOC | 0.01 | 0.01 |
| | | | Total HAPs** | 0.01 | 0.01 |
| | | | Benzene | 0.01 | 0.01 |
| 4P-2002 | C4Q-M-2002 | C4Q-F-5000 | Particulate Matter | 0.04 | 0.08 |
| 4P-0001 | C4Q-M-0001/ C4Q-0001 | C4Q-F-5010 | Particulate Matter | 0.01 | 0.01 |
| 3P-7020 | C3L-F-7020 | C3L-F-6010 | Ethylene Glycol | 0.39 | 0.27 |
| | | C3L-F-7010 | Total VOC | 0.39 | 0.27 |

* Emissions become effective at start-up of the system on DOWTHERM® RP heat transfer fluid

** Total HAPs include: Benzene, Toluene, Ethyl Benzene, and Naphthalene

Table 4.1.11.c. – CSS-7 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|---------------------------|---------------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 7P-2601 | C2A-M-2601 Baghouse | C2A-F-5410 | Particulate Matter | 0.01 | 0.01 |
| 7P-2609 | C2A-M-5350 Baghouse | C2A-E-5240/ | Particulate Matter | 0.01 | 0.04 |
| | | C2A-B-5010 | Carbon Monoxide | 0.05 | 0.18 |
| | | C2B-B-7020/ C2B-E-5250 | NO _x | 0.23 | 0.91 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 0.42 | 1.80 |
| Ethylene Glycol | 0.26 | 1.10 | | | |
| Acetaldehyde | 0.13 | 0.54 | | | |
| 7P-0520 | C2D-M-0520 Baghouse | C2D-E-5280 | Particulate Matter | 0.03 | 0.09 |
| | | | Total VOC | 0.14 | 0.57 |
| | | | Ethylene Glycol | 0.12 | 0.46 |
| | | | Acetaldehyde | 0.01 | 0.02 |
| 7P-0607 | L36-M-0607 Baghouse | L36-F-6040 | Particulate Matter | 0.01 | 0.01 |
| 7EC-15 | L21-M-1050 Baghouse | L21-F-1020 | Particulate Matter | 0.01 | 0.01 |
| 7P-1510 | L22-M-2120 Baghouse | L22-F-2040 | Particulate Matter | 0.01 | 0.01 |
| 7P-4227A | L14-M-4070 Baghouse | L14-F-4070 | Particulate Matter | 0.01 | 0.01 |
| 7P-4227B | L14-M-4080 Baghouse | L14-F-4080 | Particulate Matter | 0.01 | 0.01 |
| 7P-4030 | None | L14-U-4030 | Particulate Matter | 0.01 | 0.01 |
| 7P-2660 | None | L14-F-2660 | Total VOC | 0.01 | 0.01 |
| 7P-9002 | None | L14-F-9001 | Total VOC | 0.01 | 0.01 |
| 2P-9001 | M-2603 Baghouse | C2B-F-5420 | PM | 0.04 | 0.16 |
| | | | CO | 0.91 | 3.6 |
| | C2T-B-9001 Hot Oil Heater | C2B-M-5040 | NO _x | 1.7 | 6.7 |
| | | | SO ₂ | 0.05 | 0.2 |
| | | | VOC | 0.09 | 0.38 |
| | | | Total HAPs | 0.07 | 0.27 |
| C2C-R-5060 | Ethylene Glycol | 0.04 | 0.16 | | |
| | Acetaldehyde | 0.03 | 0.11 | | |

Table 4.1.11.d. – CSS-8 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|---------------------|---------------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 8E-02 | S8A-M-2390 Baghouse | S8A-F-2430 | Particulate Matter | 0.01 | 0.01 |
| 8E-03 | S8A-M-3350 Baghouse | S8A-E-3240/ S8A-B-3010 | Particulate Matter | 0.07 | 0.31 |
| | | | Ethylene Glycol | 0.04 | 0.16 |
| | | | Carbon Monoxide | 0.05 | 0.19 |
| | | | NO _x | 0.22 | 0.90 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 0.09 | 0.38 |
| 8E-04 | S8B-M-2420 Baghouse | S8B-E-2250/ S8B-B-2020 | Particulate Matter | 0.04 | 0.18 |
| | | | Ethylene Glycol | 0.03 | 0.12 |
| | | | Acetaldehyde | 0.04 | 0.19 |
| | | | Carbon Monoxide | 0.02 | 0.09 |
| | | | NO _x | 0.10 | 0.40 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 0.08 | 0.35 |
| 8E-05 | S8D-M-1520 Baghouse | S8D-E-1280 | Particulate Matter | 0.02 | 0.08 |
| 8E-06 | S8A-M-1590 Baghouse | S8A-M-1610 | Particulate Matter | 0.01 | 0.01 |
| | | S8E-F-1440 | | | |
| 8E-08 | L37-M-7130 Baghouse | L37-F-7050 | Particulate Matter | 0.01 | 0.01 |
| 8E-09 | None | L37-M-7150 | Particulate Matter | 0.01 | 0.02 |
| 8EP-204A | L12-M-2030 Baghouse | L12-F-2030 | Particulate Matter | 0.01 | 0.01 |
| 8EP-204B | L12-M-2040 Baghouse | L12-F-2040 | Particulate Matter | 0.01 | 0.01 |
| 8P-4127A | L13-M-3050 Baghouse | L13-F-3050 | Particulate Matter | 0.01 | 0.01 |
| 8P-4127B | L13-M-3060 Baghouse | L13-F-3060 | Particulate Matter | 0.01 | 0.01 |
| 8ECS4 | L11-M-1010 Baghouse | L11-F-1010 | Particulate Matter | 0.01 | 0.06 |
| 8E-12 | None | L13-M-3020 | Particulate Matter | 0.06 | 0.06 |
| 8P-1030 | None | L11-U-1030 | Particulate Matter | 0.01 | 0.05 |
| 8P-1050 | None | L13-U-3030 | Particulate Matter | 0.01 | 0.05 |
| 8EP-208 | None | L12-M-4030 | Particulate Matter | 0.01 | 0.02 |
| 7P-2660 | None | L14-F-2660 | Total VOCs | 0.01 | 0.01 |
| 7P-9002 | None | L14-F-9001 | Total VOCs | 0.01 | 0.01 |

Table 4.1.11.d. – CSS-8 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|-----------------|-------------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 2P-9001 | C2T-B-9001 | S8A-E-1420 | Particulate Matter | 0.04 | 0.16 |
| | | S8C-R-1060 / S8C-R-3070 | Ethylene Glycol | 0.05 | 0.19 |
| | | | Acetaldehyde | 0.04 | 0.13 |
| | | C2T-F-2670 | Total VOC | 0.11 | 3.60 |
| | | T-66 | Carbon Monoxide | 0.91 | 6.70 |
| C2T-B-9001 | NO _x | 1.70 | 0.20 | | |
| | | SO ₂ | 0.05 | 0.46 | |

Table 4.1.11.e. – CSS-9 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|----------------------|------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 9P-1701A | L15-M-1701A Baghouse | L15-F-1701A | Particulate Matter | 0.01 | 0.01 |
| 9P-1701B | L15-M-1701B Baghouse | L15-F-1701B | Particulate Matter | 0.01 | 0.01 |
| 9P-5091 | None | L15-U-5090 | Particulate Matter | 0.01 | 0.02 |
| 9P-2701A | L15-M-2701A Baghouse | L15-F-2701A | Particulate Matter | 0.01 | 0.01 |
| 9P-2701B | L15-M-2701B Baghouse | L15-F-2701B | Particulate Matter | 0.01 | 0.01 |
| 9P-6110 | None | L15-U-6110 | Particulate Matter | 0.01 | 0.02 |
| 9E-10 | L17-M-7230 Baghouse | L17-F-7130 | Particulate Matter | 0.01 | 0.04 |
| | | L17-F-7140 | | | |
| 9E-11 | None | L17-M-7240 | Particulate Matter | 0.01 | 0.03 |
| 9ECS5 | L15-M-1020 Baghouse | L15-F-1020 | Particulate Matter | 0.02 | 0.08 |
| 9P-1030 | None | L15-U-1030 | Particulate Matter | 0.01 | 0.06 |
| 8ECS4 | M-1010 | F-1010 | Particulate Matter | 0.02 | 0.08 |

Table 4.1.11.f. – CSS-10 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|---------------------|------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 10P-1340 | C3A-M-1340 Baghouse | C3A-F-1410 | Particulate Matter | 0.01 | 0.01 |
| 10P-2390 | C3A-M-2390 Baghouse | C3A-F-2460 | Particulate Matter | 0.01 | 0.01 |
| 10P-3350 | C3A-M-3350 Baghouse | C3A-E-3240 | Particulate Matter | 0.04 | 0.04 |
| | | | Carbon Monoxide | 0.13 | 0.13 |
| | | | NO _x | 0.65 | 0.65 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 1.53 | 1.53 |
| | | | Ethylene Glycol | 0.30 | 1.25 |
| | | | Acetaldehyde | 0.06 | 0.23 |
| 10P-2420 | C3B-M-2420 Baghouse | C3B-E-2250 | Particulate Matter | 0.01 | 0.04 |
| | | | Carbon Monoxide | 0.02 | 0.06 |
| | | | NO _x | 0.07 | 0.28 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 0.24 | 1.00 |
| | | | Ethylene Glycol | 0.08 | 0.34 |
| | | | Acetaldehyde | 0.13 | 0.53 |
| 10P-0520 | C3D-M-0520 Baghouse | C3D-E-1280 | Particulate Matter | 0.02 | 0.06 |
| | | C3D-E-5280 | Total VOC | 0.19 | 0.80 |
| | | | Ethylene Glycol | 0.15 | 0.62 |
| | | | Acetaldehyde | 0.01 | 0.02 |
| 10P-1590 | C3E-M-1590 Baghouse | C3E-F-1440 | Particulate Matter | 0.01 | 0.01 |
| 10P-1050 | L3A-M-1050 Baghouse | L3A-F-1030 | Particulate Matter | 0.01 | 0.01 |
| 10P-1100 | None | L3A-M-1070 | Particulate Matter | 0.01 | 0.01 |
| 10P-1130 | L1A-M-1130 Baghouse | L1A-F-1090 | Particulate Matter | 0.01 | 0.01 |
| | | L1A-F-1100 | | | |
| 10P-1140 | None | L1A-M-1140 | Particulate Matter | 0.01 | 0.01 |

Table 4.1.11.g. – CSS-11 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|---------------------|------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 11P-6340 | C3A-M-6340 Baghouse | C3A-F-5410 | Particulate Matter | 0.01 | 0.01 |
| 11P-6390 | C3A-M-6390 Baghouse | C3A-F-5460 | Particulate Matter | 0.01 | 0.01 |
| 11P-7350 | C3A-M-7350 Baghouse | C3A-E-7240 | Particulate Matter | 0.07 | 0.03 |
| | | | Carbon Monoxide | 0.03 | 0.13 |
| | | | NO _x | 0.15 | 0.65 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 0.37 | 1.53 |
| | | | Ethylene Glycol | 0.30 | 1.25 |
| | | | Acetaldehyde | 0.06 | 0.23 |
| 11P-6420 | C3B-M-6420 Baghouse | C3B-E-6250 | Particulate Matter | 0.01 | 0.02 |
| | | | Carbon Monoxide | 0.02 | 0.06 |
| | | | NO _x | 0.07 | 0.28 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 0.24 | 1.01 |
| | | | Ethylene Glycol | 0.08 | 0.34 |
| | | | Acetaldehyde | 0.13 | 0.53 |
| 11P-5590 | C3E-M-5590 Baghouse | C3E-F-5440 | Particulate Matter | 0.01 | 0.01 |
| 11P-1090 | L3B-M-2060 Baghouse | L3B-F-2040 | Particulate Matter | 0.01 | 0.01 |
| 11P-1080 | None | L3B-M-2080 | Particulate Matter | 0.01 | 0.01 |
| 11P-1160 | L1B-M-1160 Baghouse | L1B-F-2115 | Particulate Matter | 0.01 | 0.01 |
| | | L1B-F-2160 | | | |
| 11P-2170 | None | L1B-M-2170 | Particulate Matter | 0.01 | 0.01 |

Table 4.1.11.h. – CSS-12 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|---------------------|------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 12P-2390 | C4A-M-2390 Baghouse | C4A-F-2460 | Particulate Matter | 0.01 | 0.01 |
| 12P-3350 | C4A-M-3350 Baghouse | C4A-E-3240 | Particulate Matter | 0.01 | 0.04 |
| | | | Carbon Monoxide | 0.04 | 0.16 |
| | | | NO _x | 0.19 | 0.80 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 0.37 | 1.53 |
| | | | Ethylene Glycol | 0.30 | 1.25 |
| | | | Aldehyde | 0.06 | 0.23 |
| 12P-2420 | C4B-M-2420 Baghouse | C4B-E-2250 | Particulate Matter | 0.01 | 0.02 |
| | | | Carbon Monoxide | 0.02 | 0.07 |
| | | | NO _x | 0.08 | 0.34 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 0.23 | 0.98 |
| | | | Ethylene Glycol | 0.08 | 0.30 |
| | | | Aldehyde | 0.13 | 0.54 |
| 12P-0520 | C4D-M-0520 Baghouse | C4D-E-1280 | Particulate Matter | 0.03 | 0.11 |
| | | C4D-E-5280 | Total VOC | 0.20 | 0.84 |
| | | | Ethylene Glycol | 0.16 | 0.66 |
| | | | Acetaldehyde | 0.01 | 0.02 |
| 12P-1590 | C4E-M-1590 Baghouse | C4E-F-1440 | Particulate Matter | 0.01 | 0.01 |
| 12P-1130 | L1C-M-1130 Baghouse | L1C-F-1090 | Particulate Matter | 0.01 | 0.01 |
| | | L1C-F-1110 | | | |
| 12P-1140 | None | L1C-M-1140 | Particulate Matter | 0.01 | 0.01 |
| 12P-0390 | L4C-M-0390 Baghouse | L4C-F-0210 | Particulate Matter | 0.10 | 0.01 |
| 12P-2060 | L3B-M-2060 Baghouse | L3B-F-2040 | Particulate Matter | 0.01 | 0.01 |
| 12P-2080 | None | L3B-M-2080 | Particulate Matter | 0.01 | 0.01 |

Table 4.1.11.i. – CSS-13 Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|---------------------|------------------|--------------------|----------------------|--------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual (tons/year) |
| 13P-6390 | C4A-M-6390 Baghouse | C4A-F-6460 | Particulate Matter | 0.01 | 0.01 |
| 13P-7350 | C4A-M-7350 Baghouse | C4A-E-7240 | Particulate Matter | 0.01 | 0.04 |
| | | | Carbon Monoxide | 0.04 | 0.16 |
| | | | NO _x | 0.19 | 0.80 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 0.37 | 1.53 |
| | | | Ethylene Glycol | 0.30 | 1.25 |
| 12P-6420 | C4B-M-6420 Baghouse | C4B-E-6250 | Acetaldehyde | 0.06 | 0.23 |
| | | | Particulate Matter | 0.01 | 0.02 |
| | | | Carbon Monoxide | 0.02 | 0.07 |
| | | | NO _x | 0.08 | 0.34 |
| | | | SO ₂ | 0.01 | 0.01 |
| | | | Total VOC | 0.23 | 0.98 |
| 13P-5590 | C4E-M-5590 Baghouse | C4E-F-5440 | Ethylene Glycol | 0.08 | 0.30 |
| | | | Acetaldehyde | 0.13 | 0.54 |
| 13P-2080 | None | C4E-M-2080 | Particulate Matter | 0.01 | 0.01 |
| 13P-1130 | L1C-M-1130 Baghouse | L1D-F-1110 | Particulate Matter | 0.01 | 0.01 |
| | | L1D-F-1120 | | | |
| 13P-1170 | None | L1D-M-1130 | Particulate Matter | 0.01 | 0.01 |

Table 4.1.11.j. – Boilers and Heaters Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | | | | | | | | |
|-------------------|----------------|------------------|-----------|------|-----------------|------|------------------|------|-----------------|------|-------|------|
| | | | CO | | NO _x | | PM ₁₀ | | SO _x | | VOC | |
| | | | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy |
| U-B-2010 | None | UGS-B-2010 | 1.17 | 3.43 | 1.40 | 4.08 | 0.11 | 0.31 | 0.01 | 0.03 | 0.08 | 0.23 |
| U-B-3010 | None | UGS-B-3010 | 0.08 | 0.33 | 0.09 | 0.39 | 0.01 | 0.03 | 0.01 | 0.01 | 0.01 | 0.02 |
| U-B-3011 | None | UGS-B-3011 | 0.08 | 0.33 | 0.09 | 0.39 | 0.01 | 0.03 | 0.01 | 0.01 | 0.01 | 0.02 |
| U-B-4010 | None | UGS-B-4010 | 0.13 | 0.58 | 0.16 | 0.69 | 0.12 | 0.06 | 0.01 | 0.01 | 0.01 | 0.04 |
| U-B-4011 | None | UGS-B-4011 | 0.13 | 0.58 | 0.16 | 0.69 | 0.12 | 0.06 | 0.01 | 0.01 | 0.01 | 0.04 |
| U-B-1050 | None | UGS-B-1050 | 0.01 | 0.05 | 0.03 | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| U-B-1060 | None | UGS-B-1060 | 0.01 | 0.05 | 0.03 | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| U-B-1004 | None | UGS-B-1004 | 0.01 | 0.05 | 0.03 | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| U-B-1005 | None | UGS-B-1005 | 0.01 | 0.05 | 0.03 | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| U-B-1006 | None | UGS-B-1006 | 0.01 | 0.05 | 0.03 | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| U-B-1007 | None | UGS-B-1007 | 0.01 | 0.05 | 0.03 | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| U-B-4001 | None | UGS-B-4001 | 0.01 | 0.05 | 0.03 | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Table 4.1.11.j. – Boilers and Heaters Maximum Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | | | | | | | | |
|-------------------|----------------|------------------|-----------|------|-----------------|------|------------------|------|-----------------|------|-------|------|
| | | | CO | | NO _x | | PM ₁₀ | | SO _x | | VOC | |
| | | | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy |
| U-B-4002 | None | UGS-B-4002 | 0.01 | 0.05 | 0.03 | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| U-B-4003 | None | UGS-B-4003 | 0.01 | 0.05 | 0.03 | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| U-B-4004 | None | UGS-B-4004 | 0.01 | 0.05 | 0.03 | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Table 4.1.11.k. - Emergency Electrical Generator Permitted Emissions

| Emission Point ID | Control Device | Emission Unit ID | Emissions | | |
|-------------------|----------------|------------------|--------------------|----------------------|-----------------------------------|
| | | | Pollutants | Hourly (pounds/hour) | Annual ⁽¹⁾ (tons/year) |
| DGM-U-1010 | None | DGM-U-1010 | Particulate Matter | 0.04 | 0.01 |
| | | | Carbon Monoxide | 0.26 | 0.07 |
| | | | NO _x | 2.42 | 0.61 |
| | | | SO ₂ | 0.51 | 0.13 |
| | | | Total VOC | 0.67 | 0.17 |

⁽¹⁾ Based on operating the generator a maximum of 500 hr/yr.

Compliance with the hourly PM and SO₂ emission limits for 3P-1600, 4P-1600, 2P-9001, 3P-1700, and U-B-2010, shall demonstrate compliance with the less stringent 45CSR§2-4.1.b hourly PM emission limits and the 45CSR§10-3.3.f hourly SO₂ emission limits. Compliance with the hourly PM emission limits for 3P-3130, 3P-0200, 3P-5010, 4P-1020, 4P11-01, 4P-2100, 4P-3130, 4P-0340, 4P-4120, 4P-4220, 4P-4180, 4P-4160, 4P-2002, 4P-0001, 7P-2601, 7P-2609, 7P-0520, 7P-0607, 7EC-15, 7P-1510, 7P-4227A, 7P-4227B, 7P-4030, 8E-02, 8E-03, 8E-04, 8E-05, 8E-06, 8E-08, 8E-09, 8EP-204A, 8EP-204B, 8P-4127A, 8P-4127B, 8ECS4, 8E-12, 8P-1030, 8P-1050, 8EP-208, 9P-1701A, 9P-1701B, 9P-5091, 9P-2701A, 9P-2701B, 9P-6110, 9E-10, 9E-11, 9ECS5, 9P-1030, 10P-1340, 10P-2390, 10P-3350, 10P-2420, 10P-0520, 10P-1590, 10P-1050, 10P-1100, 10P-1130, 10P-1140, 11P-6340, 11P-6390, 11P-7350, 11P-6420, 11P-5590, 11P-1090, 11P-1080, 11P-1160, 11P-2170, 12P-2390, 12P-3350, 12P-2420, 12P-0520, 12P-1590, 12P-1130, 12P-1140, 12P-0390, 12P-2060, 12P-2080, 13P-6390, 13P-7350, 12P-6420, 13P-5590, 13P-2080, 13P-1130, and 13P-1170 shall demonstrate compliance with the less stringent 45CSR§7-4.1 PM emission limits.

[45CSR13, R13-1650, 4.1.11, 4.1.12, 4.1.13, 4.1.14, and APPENDIX A; 45CSR§2-4.1.b; 45CSR§7-4.1; 45CSR§10-3.3.f]

- 4.1.12. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. Compliance with the opacity limits specified in 4.1.12 shall demonstrate compliance with similar opacity limits specified in Conditions 4.1.2.d, 4.1.3.d, 4.1.4.d, 4.1.5.c, and 4.1.9.c. (3P-1600, 4P-1600, 2P-9001, 3P-1700, and U-B-2010)

[45CSR13, R13-1650, 4.1.12; 45CSR§2-3.1]

- 4.1.13. Compliance with the visible emission requirements of 4.1.12 shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish polices for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 4.1.12. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubber systems for emission control. (3P-1600, 4P-1600, 2P-9001, 3P-1700, and U-B-2010)
[45CSR13, R13-1650, 4.1.12; 45CSR§2-3.2]
- 4.1.14. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source. (3P-1600, 4P-1600, 2P-9001, 3P-1700, and U-B-2010)
[45CSR§2-9.2]
- 4.1.15. No person shall cause, suffer, allow or permit emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device. (3P-0200, 3P-5010, 4P-1020, 4P-1101, 4P-2100, 4P-0340, 7EC-15, 7P-1510, 7P-4227A, 7P-4227B, 8E-08, 8EP-204A, 8EP-204B, 8P-4127A, 8P-4127B, 8ECS4, 9P-2701A, 9P-2701B, 9E-10, 9ECS5, 10P-1340, 10P-1130, 11P-6340, 11P-1160, 12P-1130, 12P-0390, 13P-1130, and WF-6010)
[45CSR13, R13-1650, 4.1.13; 45CSR§7-3.7]
- 4.1.16. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR13, R13-1650, 4.1.13; 45CSR§7-5.1]
- 4.1.17. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.
[45CSR13, R13-1650, 4.1.13; 45CSR§7-5.2]
- 4.1.18. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR13, R13-1650, 4.1.13; 45CSR§7-9.1]

4.1.19. The pertinent emissions control provisions of 40 C.F.R. 63, Subpart JJJ – “National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins” applicable to continuous process vents include the following:

- a. The owner or operator of an affected source producing PET using a continuous terephthalic acid process shall limit organic HAP emissions from continuous process vents in the collection of raw material preparation sections (emission points C3L-F-3190, C3L-F-3140, C3L-F-3150, C3L-F-3160, C3L-F-4100, C3L-F-4211, C3L-F-4210, C3L-F-5040, C3L-F-6010, C3L-F-7010, C3L-F-2570, C3L-F-2580, C31-E-1020, C32-E-1050, C31-F-1220, C3L-F-0430, C4L-F-3190, C4L-F-3140, C4L-F-3160, C4L-F-2120, C4L-F-3170, C41-E-3020, C42-E-2050, C41-F-3220, and C4L-F-0430) within the affected source by complying with the following:

Organic HAP emissions from all continuous process vents associated with the esterification vessels in each individual raw materials preparation section shall, as a whole, be no greater than 0.04 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents associated with the esterification vessels in the collection of raw material preparation sections within the affected source shall, as a whole, be no greater than 0.04 kg organic HAP per Mg of product from all associated TPPU(s). Other continuous process vents (i.e., those not associated with the esterification vessels) in the collection of raw materials preparation sections within the affected source shall comply with 40 C.F.R. §63.1315.

[45CSR13, R13-1650, 4.1.15; 45CSR34; 40 C.F.R. §§63.1316(b)(2)(i) and 63.1316(b)(2)(i)(A)]

- b. The owner or operator of an affected source producing PET using a continuous terephthalic acid process shall limit organic HAP emissions from continuous process vents in the collection of polymerization reaction sections (emission points C3L-F-1070, C3L-F-1071, C3L-F-1072, C3L-F-3180, C33-F-2250, C33-F-5010, C34-F-3280, C33-F-2260, C34-F-2290, C4L-A-1070, C4L-A-1071, C4L-A-1072, C4L-F-3180, C43-E-3250, C44-E-3280, C43-F-2260, and C44-F-2290) within the affected source by complying with the following:

Organic HAP emissions from all continuous process vents in each individual polymerization reaction section (including emissions from any equipment used to further recover ethylene glycol, but excluding emissions from process contact cooling towers) shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of polymerization reactions sections within the affected source shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from all associated TPPU(s).

[45CSR13, R13-1650, 4.1.15; 45CSR34; 40 C.F.R. §§63.1316(b)(2)(ii) and 63.1316(b)(2)(ii)(A)]

4.1.20. The permittee shall comply with the requirements of 40 C.F.R. §§63.132 through 63.149 for wastewater, with the differences noted in 40 C.F.R. §§63.1330(b)(1) through (b)(22). The pertinent emission control provisions of 40 C.F.R. §§63.132 through 63.149 applicable to Group I wastewater streams include the following:

- a. For each wastewater tank that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the permittee shall operate and maintain a fixed roof.
- b. For each container that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the permittee shall comply with the requirements of 40 C.F.R. §§63.135(b) through (f).

- c. The owner or operator shall achieve the required mass removal (RMR) of Table 9 compounds for a wastewater stream that is Group 1 for Table 9 compounds.

[45CSR13, R13-1650, 4.1.15; 45CSR34; 40 C.F.R. §§63.1330(b), 63.132(a)(2)(i), 63.133(a)(1), 63.135(a) through (f), and 63.138(f)]

- 4.1.21. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak standards include 40 C.F.R. §§63.162 (Standards: General.), 63.163 (Standards: Pumps in light liquid service.), 63.164 (Standards: Compressors.), 63.165 (Standards: Pressure relief devices in gas/vapor service.), 63.166 (Standards: Sampling connection system.), 63.167 (Standards: Open-ended valves or lines.), 63.168 (Standards: Valves in gas/vapor service and in light liquid service.), 63.169 (Standards: Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service.), 63.170 (Standards: Surge control vessels and bottoms receivers.), 63.171 (Standards: Delay of repair.), 63.172 (Standards: Closed-vent systems and control devices.), 63.173 (Standards: Agitators in gas/vapor service and in light liquid service.), 63.174 (Standards: Connectors in gas/vapor service and in light liquid service.), 63.175 (Quality improvement program for valves.), and 63.176 (Quality improvement program for pumps.).

[45CSR13, R13-1650, 4.1.15; 45CSR34; 40 C.F.R. §§63.1331(a), 63.162, 63.163, 63.164, 63.165, 63.166, 63.167, 63.168, 63.169, 63.170, 63.171, 63.172, 63.173, 63.174, 63.175, and 63.176]

- 4.1.22. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. **[45CSR13, R13-1650, 4.1.18; 45CSR§13-5.11]**

- 4.1.23. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified as follows:

| Emission Point | 45CSR7 Hourly Particulate Emission Limit pph |
|----------------|--|
| WF-6010 | 28 |

[45CSR§7-4.1.]

- 4.1.24. The permittee shall comply with the following requirements of 40 C.F.R. 63, Subpart ZZZZ – “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines” for Fire Pumps UTF-G-1020A and U3F-G-1710 and Emergency Electric Generator DGM-U-1010 by no later than May 3, 2013.

- (a) If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in 40 C.F.R. 63, Subpart ZZZZ - Table 2c. For an emergency stationary CI RICE, the following apply:

| 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 | <ul 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, and replace as necessary; 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.

- (b) You must be in compliance with the emission limitations, operating limitations, and other requirements in 40 C.F.R. 63, Subpart ZZZZ that apply to you at all times.
- (c) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- (d) For an existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- (e) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

- (f) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine’s time spent at idle during startup and minimize the engine’s startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in 4.1.24(a) apply.
- (g) You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 4.1.24(a). The oil analysis must be performed at the same frequency specified for changing the oil in 4.1.24(a). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5 percent. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
- (h) For an existing emergency and black start stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must demonstrate continuous compliance with each operating limitation in 4.1.24(a) according to the methods specified below:

| For each... | Comply with the requirement to... | You must demonstrate continuous compliance by... |
|---|--|---|
| Existing emergency and black start stationary RICE ≤ 500 HP located at a major source of HAP... | a. Work or Management practices | <ul style="list-style-type: none"> i. Operating and maintaining the stationary RICE according to the manufacturer’s emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. |

- (i) You must report each instance in which you did not meet each operating limitation in 4.1.24(a). These instances are deviations from the operating limitations in 40 C.F.R. 63, Subpart ZZZZ. These deviations must be reported according to the requirements in 40 C.F.R. §63.6650.
- (j) *Requirements for emergency stationary RICE.*
 - (1) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs 4.1.24(j)(1)(i) through (iii) of this section. In order for the engine to be considered an emergency Stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 4.1.24(j)(1)(i) through (iii) of this section is prohibited. If you do not operate the engine according to the requirements in paragraphs 4.1.24(j)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

- (i) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (ii) You may operate your emergency stationary RICE for any combination of the purposes specified below in paragraphs 4.1.24(j)(1)(ii)(A) through (C) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 4.1.24(j)(1)(iii) of this section counts as part of the 100 hours per calendar year allowed by this paragraph 4.1.24(j)(1)(ii).
 - (A) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - (B) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-03.
 - (C) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (iii) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph 4.1.24(j)(1)(ii) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (k) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel or operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Section 4.1.24 (j)(1)(ii)(B) and (C) of this permit, you must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
- (l) You must also report each instance in which you did not meet the requirements in 40 C.F.R. 63, Subpart ZZZZ - Table 8 (entitled: Applicability of General Provisions to Subpart ZZZZ) that apply to you.

[45CSR34; 40 C.F.R. §§63.6595(a), 63.6602, 63.6604(b), 63.6605(a) and (b), 63.6625(e), 63.6625(e)(2), 63.6625(f), 63.6625(h), 63.6625(i), 63.6640(a), 63.6640(b), 63.6640(e) and 63.6640(f)(1) through (3); Tables 2c and 6 of 40 C.F.R. 63, Subpart ZZZZ, 45CSR13, R13-1650, 4.1.19]

4.2. Monitoring Requirements

- 4.2.1. For the purpose of determining compliance with the production limits set forth in Section 4.1.1 of this permit, the permitted facility shall monitor the daily average hourly and total annual production rates for each of the process units identified in Table 4.1.1 of this permit.
[45CSR13, R13-1650, 4.2.1]
- 4.2.2. For the purpose of determining compliance with the operating limits set forth in Section 4.1.2., 4.1.3., 4.1.4., 4.1.5, and 4.1.9 of this permit, the permitted facility shall monitor the hourly and annual fuel consumption rates associated with the routine operation of the Hot Oil Heaters [C2T-B-9001, C3T-B-1600, C4T-B-1600, and C3T-F-1700], the Small Boilers [UGS-B-2010, UGS-B-4010, UGS-B-4011, UGS-B-3010, and UGS-B-3011], and the Space Heaters [UGS-B-1050, UGS-B-1060, UGS-B-1004, UGS-B-1005, UGS-B-1006, UGS-B-1007, UGS-B-4001, UGS-B-4002, UGS-B-4003, UGS-B-4004].
[45CSR13, R13-1650, 4.2.2; 45CSR§13-15.1.c and 45CSR§34-3.2 for UGS-B-2010]
- 4.2.3. For the purpose of determining compliance with the particulate emission limits set forth in sections 4.1.10 and 4.1.11 of this permit and the emission limits set forth in 4.1.23 for emission point WF-6010, the permitted facility shall monitor the pressure differential across each of the dust collectors identified in Section 1.0 of this permit during periods of routine operation.
[45CSR13, R13-1650, 4.2.3; 45CSR§30-5.1.c]
- 4.2.4. Continuous process vents using a control or recovery device to comply with 4.1.19 shall comply with all applicable monitoring provisions specified for continuous process vents in 40 C.F.R. §63.114 except for the differences noted in 40 C.F.R. §63.1315(a). The pertinent sections of 40 C.F.R. §63.114 applicable to continuous process vents include the following:
- a. For any bypass line between the origin of the gas stream and the point where the gas stream reaches the process vent that could divert the gas stream directly to the atmosphere, the owner or operator of a process vent shall properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in 40 C.F.R. §63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert the gas stream to the atmosphere.
- [45CSR13, R13-1650, 4.2.4; 45CSR34; 40 C.F.R. §§63.1317, 63.1315(a), 63.114(d) and (d)(1)]**
- 4.2.5. To demonstrate compliance with the wastewater provisions of 4.1.20, the permittee shall monitor the effluent BOD, effluent TSS, effluent pH, effluent flow, effluent priority pollutants, and effluent bioassay of the wastewater system in accordance with their NPDES permit (Permit No. WV0000132).
[45CSR13, R13-1650, 4.2.5; 45CSR34; 40 C.F.R. §§63.143(c) and 63.146(a)]

4.3. Testing Requirements

- 4.3.1. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak testing provisions include 40 C.F.R. §63.180 (Test methods and procedures).
[45CSR13, R13-1650, 4.3.1; 45CSR34; 40 C.F.R. §§63.1331(a) and 63.180]
- 4.3.2. An initial performance test shall be conducted to determine if CO emissions from the Hot Oil Heater [C3T-F-1700] do not exceed the limitation specified in 4.1.6. The performance test for CO shall be conducted according to testing requirements specified in Table 4.3.2.

Table 4.3.2. Carbon Monoxide (CO) Performance Testing Requirements.

| Step | Reference to be Followed |
|--|--|
| a. Select the sampling ports location and the number of traverse points. | Carbon Monoxide Method 1 in appendix A to 40 C.F.R. 60. |
| b. Determine oxygen and carbon dioxide concentrations of the stack gas. | Method 3A or 3B in appendix A to 40 C.F.R. 60, or ASTM D6522-00 (IBR, see 40 C.F.R. §63.14(b)), or ASME PTC 19, Part 10 (1981) (IBR, see 40 C.F.R. §63.14(i)). |
| c. Measure the moisture content of the stack gas. | Method 4 in appendix A to 40 C.F.R. 60. |
| d. Measure the carbon monoxide emission concentration. | Method 10, 10A, or 10B in appendix A to 40 C.F.R. 60, or ASTM D6522-00 (IBR, see 40 C.F.R. §63.14(b)) when the fuel is natural gas. |

[45CSR13, R13-1650, 4.3.2]

4.3.3. Following the initial performance test, annual performance tests shall be conducted to determine if CO emissions from the Hot Oil Heater [C3T-F-1700] do not exceed the limitation specified in 4.1.6. The annual performance test for CO shall be conducted according to testing requirements specified in Table 4.3.2. Each annual performance test must be conducted between 10 and 12 months after the previous performance test.

[45CSR13, R13-1650, 4.3.3]

4.3.4. The permittee shall conduct performance tests for CO according to 40 C.F.R. §63.7(c),(d),(f), and (h).

[45CSR13, R13-1650, 4.3.4; 40 C.F.R. §§63.7(c), (d), (f), and (h)]

4.3.5. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of 4.1.11. Such tests shall be conducted in accordance with the appropriate method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. Sufficient information on temperatures, velocities, pressures, weights and dimensional values shall be reported to the Director, with such necessary commentary as he may require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained. (3P-1600, 4P-1600, 2P-9001, 3P-1700, and U-B-2010)

[45CSR§§2-8.1.b and 8.1.b.1]

4.3.6. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in 4.1.11.

[45CSR§2-8.1.c]

4.3.7. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.

[45CSR13, R13-1650, 4.1.13; 45CSR§7-8.1]

4.3.8. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.

[45CSR13, R13-1650, 4.1.13; 45CSR§7-8.2]

4.4. Recordkeeping Requirements

4.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-1650, 4.4.2]

4.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction

[45CSR13, R13-1650, 4.4.3]

4.4.3. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.1 of this permit (monitoring of the daily average hourly and total annual production rates for each of the process units) the permittee shall maintain monthly records of the production rates for each of the units identified in Table 4.1.1 of this permit.

[45CSR13, R13-1650, 4.4.4]

- 4.4.4. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.2 of this permit (monitoring of the hourly and annual fuel consumption rates), the permittee shall maintain monthly records of the fuel consumption rates for each of the Hot Oil Heaters [C2T-B-9001, C3T-B-1600, C4T-B-1600, and C3T-F-1700] the Small Boilers [UGS-B-2010, UGS-B-4010, UGS-B-4011, UGS-B-3010, and UGS-B-3011], and the Space Heaters [UGS-B-1050, UGS-B-1060, UGS-B-1004, UGS-B-1005, UGS-B-1006, UGS-B-1007, UGS-B-4001, UGS-B-4002, UGS-B-4003, UGS-B-4004]. These records shall include, but not limited to, the fuel type(s) and the associated daily average hourly and annual consumption rate during equipment start-up and routine operation.
[45CSR13, R13-1650, 4.4.5; 45CSR§13-15.1.c and 45CSR§34-3.2 for UGS-B-2010]
- 4.4.5. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.3 of this permit, the permittee shall maintain monthly records of the pressure differential readings across the dust collection systems.
[45CSR13, R13-1650, 4.4.6]
- 4.4.6. Continuous process vents using a control or recovery device to comply with 4.1.19 shall comply with all applicable recordkeeping provisions specified for continuous process vents in 40 C.F.R. §§63.117 and 63.118 except for the differences noted in 40 C.F.R. §63.1315(a). The pertinent sections of 40 C.F.R. §§63.117 and 63.118 applicable to continuous process vents include the following:
- a. The permittee shall keep up-to-date and readily accessible hourly records of whether the flow indicator specified under 4.2.4 [40 C.F.R. §63.114(d)(1)] was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the gas stream is diverted to the atmosphere or the monitor is not operating.
 - b. For a boiler or process heater, a description of the location at which the vent stream is introduced into the boiler or process heater shall be recorded.
- [45CSR13, R13-1650, 4.4.7.1.1 and 4.4.7.1.2; 45CSR34; 40 C.F.R. §§63.1319(a), 63.1315(a), 63.117(a)(4)(i), 63.117(a)(4)(iii), and 63.118(a)(3)]**
- 4.4.7. Owners or operators required to keep continuous records in accordance with 40 C.F.R. 63, Subpart JJJ shall keep records as specified in 40 C.F.R. §§63.1335(d)(1) through (d)(7).
[45CSR13, R13-1650, 4.4.7.2; 45CSR34; 40 C.F.R. §§63.1315(d), (d)(1) through (d)(7), 63.1335(d)(1) through (d)(7)]
- 4.4.8. The owner or operator of an affected source shall comply with the applicable recordkeeping and reporting requirements in 40 C.F.R. 63, Subpart A as specified in Table 1 of 40 C.F.R. 63, Subpart JJJ. These requirements include the requirements specified in 40 C.F.R. §63.1335(b)(1).
[45CSR13, R13-1650, 4.4.7.3; 45CSR34; 40 C.F.R. §§63.1335(b) and (b)(1)]
- 4.4.9. The permittee shall maintain records of the NPDES permit (Permit No. WV0000132) parameters monitored in 4.2.5.
[45CSR34; 40 C.F.R. §63.147(b)(4)]
- 4.4.10. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak recordkeeping provisions include 40 C.F.R. §63.181 (Recordkeeping requirements.).
[45CSR13, R13-1650, 4.4.7.4; 45CSR34; 40 C.F.R. §§63.1331(a) and 63.181]

- 4.4.11. Copies of all applicable records and reports required by 40 C.F.R. 63, Subpart JJJ shall be kept for at least 5 years, as specified in 40 C.F.R. §63.1335(a)(1), with the exception listed in 40 C.F.R. §63.1335(a)(2). **[45CSR34; 40 C.F.R. §§63.1335(a)(1), and 63.1335(a)(2)]**
- 4.4.12. The permittee shall maintain records of the operating schedule and the quantity and quality of fuel consumed in Hot Oil Heaters C3T-B-1600, C4T-B-1600, C3T-F-1700; and Boiler UGS-B-2010. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request. Where appropriate the owner or operator of a fuel burning unit(s) may maintain such records in electronic form. **[45CSR§§2-8.3.c and 8.3.d; 45CSR§2A-7.1.a; 45CSR16; 40 C.F.R. §60.48c(g)(2)]**
- 4.4.13. The permittee shall maintain records of the operating schedule and the quantity and quality of fuel consumed in Hot Oil Heater C2T-B-9001. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request. Where appropriate the owner or operator of a fuel burning unit(s) may maintain such records in electronic form. **[45CSR§§2-8.3.c and 8.3.d; 45CSR§2A-7.1.a]**
- 4.4.14. The permittee shall monitor all fugitive particulate emission sources as required by 4.1.16 to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site for a period of no less than five (5) years stating the types of fugitive particulate capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems. **[45CSR§30-5.1.c.]**
- 4.4.15. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by 4.1.17 applied at the facility. These records shall be maintained on site for a period of no less than five (5) years. **[45CSR§30-5.1.c.]**
- 4.4.16. The permittee shall comply with the following recordkeeping requirements of 40 C.F.R. 63, Subpart ZZZZ – “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines” for Fire Pumps UTF-G-1020A and U3F-G-1710, and Emergency Generator DGM-U-1010 no later than May 3, 2013.
- a) You must keep the records required in Table 6 of 40 C.F.R. 63, Subpart ZZZZ to show continuous compliance with each operating limitation that applies to you.
 - b) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.
 - c) You must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of the demand response.

- d) Records must be in a form suitable and readily available for expeditious review according to 40 C.F.R. §63.10(b)(1).
- e) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- f) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 C.F.R. §63.10(b)(1).

[45CSR34; 40 C.F.R. §§63.6655(d), (e), and (f) and 63.6660(a), (b), and (c)]
[45CSR13, R13-1650, 4.4.9] (DGM-U-1010)

4.5. Reporting Requirements

- 4.5.1. In addition to the reports and notifications required by 40 C.F.R. 63, Subpart A as specified in Table 1 of 40 C.F.R. 63, Subpart JJJ, the owner or operator of an affected source shall prepare and submit periodic reports as specified in 40 C.F.R. §63.1335(e)(6). All reports required by this subpart, and the schedule for their submittal, are listed in Table 9 of 40 C.F.R. 63, Subpart JJJ. All reports shall be sent to the Administrator at the appropriate address listed in 40 C.F.R. §63.13. If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media.
[45CSR13, R13-1650, 4.5.1.1; 45CSR34; 40 C.F.R. §§63.1335(e), (e)(2), (e)(6)]
- 4.5.2. The permittee shall submit as part of the next Periodic Report required by 40 C.F.R. §63.1335(e)(6) the information specified in 40 C.F.R. §§63.146(d)(1) and (3) for process wastewater.
[45CSR13, R13-1650, 4.5.1.2; 45CSR34; 40 C.F.R. §§63.146(d), (d)(1) and (d)(3)]
- 4.5.3. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak reporting provisions include 40 C.F.R. §63.182 (Reporting requirements.).
[45CSR13, R13-1650, 4.5.1.3; 45CSR34; 40 C.F.R. §§63.1331(a) and 63.182]
- 4.5.4. If you have a Group 2 emission point that becomes a Group 1 emission point after the compliance date for your affected source, you must comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration as specified in 40 C.F.R. 63, Subpart FFFF must be conducted within 150 days after the switch occurs.
[45CSR13, R13-1650, 4.1.17; 45CSR34; 40 C.F.R. §63.2445(d)]
- 4.5.5. Notification of process change.
 - a. Except as specified in paragraph 4.5.5.b, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all the information in 4.5.5.a.1 through 4.5.5.a.3.
 - (1) A description of the process change.

- (2) Revisions to any of the information reported in the original notification of compliance status report under 40 C.F.R. §63.2520(d).
 - (3) Information required by the notification of compliance status report under 40 C.F.R. §63.2520(d) for changes involving the addition of processes or equipment at the affected source.
- b. You must submit a report 60 days before the scheduled implementation date of any of the changes identified in 4.5.5.b.1, 4.5.5.b.2, or 4.5.5.b.3.
- (1) Any change to the information contained in the precompliance report.
 - (2) A change in the status of a control device from small to large.
 - (3) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in 40 C.F.R. §63.2460(b)(6)(i).

[45CSR13, R13-1650, 4.1.17; 45CSR34; 40 C.F.R. §63.2520(e)(10)]

- 4.5.6. For the Emergency Electric Generator DGM-U-1010 (diesel-fueled), and Fire Pumps UTF-G-1020A and U3F-G-1710, per footnote 1 of the table given in Section 4.1.24 (a) of this permit, the permittee must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

**[45CSR34; Footnote 1 of Table 2c of 40 C.F.R. 63, Subpart ZZZZ]
[45CSR13, R13-1650, 4.5.2] (DGM-U-1010)**

- 4.5.7. For the Emergency Electric Generator DGM-U-1010 (diesel-fueled): If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Section 4.1.24(j)(1)(ii)(B) and (C) of this permit, you must submit an annual report according to the requirements in 40 C.F.R. §§63.6500(h)(1) through (3).

[45CSR34; 40 C.F.R. §63.6650(h); 45CSR13, R13-1650, 4.5.3]

4.6. Compliance Plan

- 4.6.1. Reserved.

5.0 Hot Oil Heater Boiler MACT Requirements [Em. Unit. ID: C3T-F-1700; Em. Pt. ID: 3P-1700]

5.1. Limitations and Standards

5.1.1. **Initial and Periodic Tune-ups under 40 C.F.R. 63 Subpart DDDDD.** If your unit is a new or existing process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio, you must conduct a tune-up of the process heater every 5 years as specified in §63.7540.

- (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
 - (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).
 - (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
 - (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
 - (vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (vi)(A) and (B) of this condition.
 - (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - (B) A description of any corrective actions taken as a part of the tune-up.
- Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up.
 - If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[40 C.F.R. §§ 63.7500(a), Table 3 – Work Practice Standards, Item #1; 40 C.F.R. §§ 63.7540(a)(12), 63.7540(a)(10)(i) through (vi), 63.7515(d), 63.7540(a)(13), 63.7515(g), 63.7505(a); 45CSR34]

- 5.1.2. At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 C.F.R. §63.7500(a)(3); 45CSR34]

5.2. Monitoring Requirements

- 5.2.1. Reserved.

5.3. Testing Requirements

- 5.3.1. Reserved.

5.4. Recordkeeping Requirements

- 5.4.1. You must keep records according to paragraphs (1) and (2) of this condition.

- (1) A copy of each notification and report that you submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual* compliance report that you submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).

** Note – Compliance reports are required once every 5 years for C3T-F-1700 pursuant to 40 C.F.R. §63.7550(b) in permit condition 5.5.2.*

- (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 C.F.R. §63.10(b)(2)(viii).

[40 C.F.R. §63.7555(a); 45CSR34]

- 5.4.2. Format and Retention of Records for 40 C.F.R. 63 Subpart DDDDD.

- (a) Your records must be in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.10(b)(1).
- (b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). You can keep the records off site for the remaining 3 years.

[40 C.F.R. §§63.7560(a), (b), and (c); 45CSR34]

5.5. Reporting Requirements

- 5.5.1. You must report each instance in which you did not meet the work practice standard in Table 3 to Subpart DDDDD (permit condition 5.1.1.). These instances are deviations from the work practice standards, in this subpart. These deviations must be reported according to the requirements in §63.7550 (permit condition 5.5.2.). **[40 C.F.R. §63.7540(b); 45CSR34]**
- 5.5.2. You must submit a Compliance report for 40 C.F.R. 63 Subpart DDDDD containing:
- a. The information in §63.7550(c)(5)(i) through (iii), (xiv), and (xvii) which is:
 - (i) Company and Facility name and address.
 - (ii) Process unit information, emissions limitations, and operating parameter limitations.
 - (iii) Date of report and beginning and ending dates of the reporting period.
 - (xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up according to 40 C.F.R. §63.7540(a)(12). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
 - (xvii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - b. If there are no deviations from the requirements for work practice standards in Table 3 to 40 C.F.R. 63 Subpart DDDDD that apply to you (condition 5.1.1.), a statement that there were no deviations from the work practice standards during the reporting period.

You must submit the report every 5 years according to the requirements in 40 C.F.R. §63.7550(b), which are:

- (1) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 C.F.R. §63.7495 and ending on December 31 within 5 years after the compliance date that is specified for your source in 40 C.F.R. §63.7495.
- (2) The first 5-year compliance report must be postmarked or submitted no later than January 31.
- (3) Each subsequent 5-year compliance report must cover the 5-year periods from January 1 to December 31.
- (4) Each subsequent 5-year compliance report must be postmarked or submitted no later than January 31.
- (5) You may submit the first and subsequent compliance reports according to the dates established in permit condition 3.5.6. instead of according to the dates in paragraphs (1) through (4) of this condition.

You must submit all reports required by Table 9 of 40 C.F.R. 63 Subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

[40 C.F.R. §§63.7550(a), Table 9, Items # 1.a. and # 1.b.; 40 C.F.R. §§63.7550(b), and (c)(1); 40 C.F.R. §63.7550(h)(3); 45CSR34]

5.6. Compliance Plan

5.6.1. Reserved.