September 6, 2018

Shell Chemical LP
10 Mococo Road
Martinez, CA 94553

Attention: Eric Brink, Senior Environmental Manager

Application Number: 28712
Plant Number: 12870
Equipment Location: Same as above

Dear Applicant:

SUBJECT: ISSUANCE OF SYNTHETIC MINOR OPERATING PERMIT

This letter is to advise you that your application for an initial Synthetic Minor Operating Permit for the following facility has been approved:

Site # 12870 Shell Chemical LP

The facility described above is subject to Conditions 26751, 15124, 15316, 19945, 24359, 25215, 25801, and 26292.

Please include your permit number with any correspondence with the District. If you have any questions regarding this matter, please call **Anne Werth, Senior Air Quality Engineer at (415) 749-8672**.

Very truly yours,

Jack P. Broadbent
Executive Officer/Air Pollution Control Officer

Signed by Pamela J. Leong
Pamela J. Leong, Director of Engineering

ACW:DTJ
Enclosure

Condition 26751

Shell Chemical, Plant 12870, is operating under a synthetic minor operating permit. This permit covers all sources at the facility, including exempt sources. The following conditions establish the federally enforceable permit terms that ensure the facility is classified as a Synthetic Minor Facility under BAAQMD Regulation 2, Rule 6 – Major Facility Review and ensure it is not subject to the permitting requirements of Title V of the Federal Clean Air Act as amended in 1990 and 40 CFR Part 70. Any revision to a condition establishing this facility's status as a Synthetic Minor Facility or any new permit term that would limit emissions of a new or modified source for the purposes of maintaining the facility as a synthetic minor must follow the requirements of Regulation 2, Rule 6, Section 423. The basis for the synthetic minor conditions is an emission limit for regulated air pollutants of 95 tons per year, an emission limit for a single HAP (hazardous air pollutant) of 9 tons per year, and an emission limit for a combination of HAPs of 23 tons per year.

1. The owner /operator shall in no event emit from this site exceeding any of the emission limits listed below, totaled over any consecutive twelve-month period.

   NOx .....95 tons/year
   CO .....95 tons/year
   POC .....95 tons/year
   PM_{10} .....95 tons/year
   SO_2 .....95 tons/year
   Any Single HAP ..... 9 tons/year
   Combination of HAPs ...23 tons/year

(basis: Regulation 2-6-423.2)

2. The owner/operator shall demonstrate compliance with the emission limit for CO as outlined below:

The owner /operator shall use hours of operation or fuel firing rate and emission factors listed below for each source or the emission factors from the most current source test reports to calculate CO emissions.

S-1398: .....0.31 lb/MMBtu
S-1399 (A-1399): .....0.5 lb/MMBtu
A-6012:.....0.5 lb/MMBtu
A-6026:.....0.39 lb/MMBtu
Registered Boiler.....0.082 lb/MMBtu
S-6028 (exempt):.....0.17 lb/MMBtu
Heater 22-F (exempt):....0.082 lb/MMBtu

Emissions of CO from each source shall be calculated and recorded on a monthly basis. Annual emissions shall be summarized on a rolling 12-month basis. *All* records required by the Synthetic Minor Operation Permit shall be kept on site and be available for inspection by BAAQMD personnel for at least 5 years from the date that a record was made.
(basis: Regulation 2-6-423.2).

3. The owner/operator shall develop and maintain monitoring tables to clearly demonstrate compliance with the CO Synthetic Minor Operating Permit limits on a rolling 12-month basis beginning with the first calendar month after the issuance of the Synthetic Minor Operating Permit. All monitoring tables shall be updated as applicable when equipment is added to or removed from the facility. A copy of the monitoring tables and CO emission calculation report demonstrating compliance with the CO Synthetic Minor Operation Permit Limits shall be submitted to the District's Compliance & Enforcement Division on an annual basis to coincide with the annual update request.
(basis: Regulation 2-6-423.2).

4. The requirement for temperature and fuel meters for Sources S-1398, S-1399 (A-1399), A-6012, A-6026, S-6028 and for source testing for CO in Condition 19945, Part 7a and Condition 15316, Part 15 are part of this synthetic minor condition.
(basis Regulation 2-6-503).

End of Conditions

Condition 15124

Conditions for S-1203, S-1204, S-1296, S-1297:

1. The material stored in these tanks shall not have a vapor pressure exceeding 0.5 psia.

2. The owner/operator of these tanks shall maintain records of the materials stored in the tanks to confirm compliance with condition #1.

Conditions for S-1340:

1. The true vapor pressure of each and all material(s) stored in S-1340 shall not exceed 1.0 psia.

2. To comply with Regulation 8, Rule 5, Section 311.3, emissions from S-1340 shall be vented to and abated by S-1399 Incinerator or S-1398 Flare at all times (except during periods of breakdown relief or variance relief granted by the District) that organic liquids and/or vapors are present at S-1340.

3. The permittee for S-1340 shall maintain records of all the material stored in this tank to confirm compliance with condition #1.

Conditions for S-1341:

1. The material stored in this tank shall not have a vapor pressure exceeding 0.5 psia.

2. The emissions from S-1341 shall be vented to and abated by S-1399 Incinerator or S-1398 Flare.

3. The owner/operator of these tanks shall maintain records of all the material stored in this tank to confirm compliance with condition #1.

End of Conditions

Condition 15316

Plant No. 12870, Shell Chemical LP
S-6010, 6012, 6013, 6018

Revised 12/11/00:
(AN 384, replace A-1396 with A-6012),

Revised 4/3/12:
(AN 24194, increase throughputs at S-6010, S-6012, S-6013, and S-6018)

Revised 5/23/16:
(A/N 26871, S-6010 moved to separate condition)

1. The owner/operator shall not use more than 876,000 therms of fuel at A-6012 in any consecutive 12 month period.
   (Basis: Cumulative Increase)

2. The owner/operator shall not exceed 6,500 tons of materials loaded (i.e., "dry" catalyst) at S-6012 the following throughput limits during any consecutive twelve-month period.
   (Basis: Cumulative Increase)

3. The owner/operator shall comply with the following requirements:
   a. The owner/operator shall abate S-6012 and S-6013 at all times of operation (except during periods of breakdown relief or variance granted by the District) by the properly maintained and properly operated A-615 Baghouse. The owner/operator shall equip the A-615 baghouse with a device for measuring the pressure drop across the baghouse. The owner/operator shall check each pressure drop device for plugging at least every three months.
   b. The owner/operator shall abate S-6012 and S-6013 at all times of operation when product (organic containing material) is being

processed (except during periods of breakdown relief or variance granted by the District) by the properly maintained and operated A-6012 Thermal Oxidizer. (Basis: Cumulative Increase)

4. The owner/operator shall abate S-6018 at all times of operation (except during periods breakdown relief or variance granted by the District) by the properly maintained and properly operated A-602 baghouse. The owner/operator shall equip the A-602 baghouse with a device for measuring the pressure drop across the baghouse. The owner/operator shall check each pressure drop device for plugging at least every three months. (Basis: Cumulative Increase)

5. The owner/operator shall ensure that A-6012 Thermal Oxidizer achieves a minimum POC destruction efficiency of at least 95% by weight (except during periods of breakdown relief or variance granted by the District). This condition may be changed administratively to an equivalent level of control based on the recommendation of the District Source Test Manager. (Basis: BACT)

6. The owner/operator of A-6012 shall maintain a minimum temperature of at least 1410 degrees F at all times of operation of S-6012 and S-6013 (except during periods of breakdown relief or variance granted by the District). The minimum temperature may be adjusted administratively based on source test data demonstrating that compliance with condition #5 is achievable at a lower or higher temperature. (Basis: BACT)

7. The minimum temperature requirement of Condition 6 shall not apply during an "Allowable Temperature Excursion" below the minimum temperature, provided that the

controller set temperature is at or above the minimum temperature requirement. An Allowable Temperature Excursion is one of the following:

a. A temperature excursion not exceeding 20 degrees F; or

b. A temperature excursion for a period or periods aggregating less than or equal to15 minutes in any hour; or

c. A temperature excursion for a period or periods aggregating more than 15 minutes in any hour, provided that both of the following criteria are met. Only twelve such excursions are allowed per calendar year.

1) The excursion does not exceed 50 degrees F; and

2) The duration of the excursion does not exceed 24 hours.

Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion toward the 12 excursion limit. (Basis: Regulation 2-1-403)

d. d. Any temperature excursion of more than 50 degrees Fahrenheit for more than 15 minutes in any hour is not an "Allowable Temperature Excursion".

8. For each Allowable Temperature Excursion that exceeds 20 degrees F and 15 minutes in duration, the owner/operator shall keep sufficient records to demonstrate that they meet the qualifying criteria described above in condition #7. The owner/operator shall retain records for a minimum of five years from the date of entry, and shall make them available to the District upon request. Records shall include at least the following information:

a. Thermal oxidizer controller set temperature;

b. Starting date and time, and duration of each Allowable Temperature Excursion;

c. Minimum temperature during each Allowable Temperature Excursion;
d. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and
e. All strip charts or other temperature records.
(Basis: Regulation 2-1-403)

9. The owner/operator shall equip A-6012 with a continuous temperature monitor and recorder (except during periods of breakdown relief or variance granted by the District for the monitor and recorder).
(Basis: BACT)

10. The owner/operator shall operate A-6012 within the following emission limits (except during periods of breakdown relief or variance granted by the District)
a. 4.6 pounds of NOx per hour
b. 5.0 pounds of CO per hour
The NOx emission limit may be adjusted administratively based on source test data demonstrating to the satisfaction of the APCO that the NOx contribution from the vent gas would make the NOx limit technically unfeasible. (Basis: RACT)

11. The owner/operator shall ensure that A-615 achieves a maximum grain loading of 0.006 grains per dry standard cubic foot (except during periods of breakdown relief or variance granted by the District). This condition and the cumulative increase may be adjusted administratively base on the accuracy/detection level of the source test.
(Basis: Cumulative Increase)

12. (A/C startup source test condition deleted)

13. The owner/operator of A-6012 and A-615 shall maintain a District approved monthly log of all fuel usage, and temperature chart recorder data at A-6012 and all source test data associated with A-6012 and A-615. The owner/operator shall keep this log on site for at least 5 years from the date of entry and make it available to District staff upon request.
(Basis:Cumulative Increase)

14. The owner/operator of S-6010 and S-6012 shall maintain a District approved monthly log of material (i.e., EDA, oxalic acid, and silver compounds) throughput at S-6010 and material (i.e., "dry" catalyst) throughput at S-6012. The owner/operator shall keep this log on site for at least 5 years from the date of entry and make it available to District staff upon request.
(Basis: Cumulative Increase)

15. The owner /operator shall perform a source test on A-6012 to determine compliance with emission limits listed in part 10 not later than 60 days after A-train startup and at least once every 36 consecutive months thereafter. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements as specified in Volume V of the District's Manual of Procedures. The owner /operator shall notify the District's Source Test Section, in writing, of the source test protocols and projected test dates at least 7 days prior to testing.

End of Conditions

Condition 19945

The following conditions apply to the RM-17 Plant and associated storage tanks and vessels at Shell Chemical, PN 12870.

1. The owner/operator shall not exceed the following annual throughputs to S-1357, RM-17 Process. (Basis: cumulative increase)

RM-17 (Finished Product) 450,000 gallons
Toluene (Raw Material) 125,000 gallons

2. The total fuel usage for A-1399 (RM-17 Thermal Oxidizer) shall not exceed 1,051,200 therms in any consecutive 12-month period. (Basis: cumulative increase)

3. The owner/operator shall not store any material with a vapor pressure exceeding 0.5 psia at actual storage temperature in any of the sources listed below. (Basis: Reg. 8-5-117)

S-1204 CHEMICAL STORAGE TANK 199-T
S-1210 CHEMICAL STORAGE TANK 228-T
S-1211 CHEMICAL STORAGE TANK 229-T
S-1212 CHEMICAL STORAGE TANK 230-T
S-1214 CHEMICAL STORAGE TANK 237-T
S-1215 CHEMICAL STORAGE TANK 238-T
S-1218 CHEMICAL STORAGE TANK 241-T
S-1219 CHEMICAL STORAGE TANK 242-T
S-1335 Chemical Process Vessel 390-V
S-1336 Chemical Storage Vessel 391-V
S-1376 STORAGE TANK #1240

4. The owner/operator shall not store any material with a vapor pressure exceeding 1.5 psia at actual storage temperature in any of the sources listed below. (Basis: cumulative increase).

S-1337 CHEMICAL PROCESS VESSEL 392-V
S-1338 CHEMICAL PROCESS VESSEL 393-V
S-1339 CHEMICAL PROCESS VESSEL 438-V
S-1340 CHEMICAL PROCESS VESSEL 439-V
S-1343 Vessel 472-V Recovered Chem Lube Oil
S-1400 480-V (RC-78H Storage Vessel)
S-1401 481-V (RC-78H Storage Vessel)
S-1402 482-V (RM-17 Waste Liquid Vessel)

5. Except during periods of breakdown relief or variance relief granted by the District, the owner/operator shall abate emissions from the sources listed below by venting the storage tanks to either A-1399, RM-17 Thermal Oxidizer, or S-1398, Flare, at all times that organic liquids and/or vapors are present in the tank. (Basis:
Reg. 8-5-311, cumulative increase)

S-1337 CHEMICAL PROCESS VESSEL 392-V
S-1338 CHEMICAL PROCESS VESSEL 393-V
S-1339 CHEMICAL PROCESS VESSEL 438-V
S-1340 CHEMICAL PROCESS VESSEL 439-V
S-1343 Vessel 472-V Recovered Chem Lube Oil
S-1400 480-V (RC-78H Storage Vessel)
S-1401 481-V (RC-78H Storage Vessel)
S-1402 482-V (RM-17 Waste Liquid Vessel)

6. Except during periods of breakdown relief or variance relief granted by the District, the owner/operator shall abate emissions from the sources listed below by venting the sources to either A-1399, RM-17 Thermal Oxidizer, or S-1398, Flare, at all times during operation. (Basis: cumulative increase)

S-1357 RM-17 Plant
S-1551 Chemical Unloading Rack for RC78H/Toluene/RCLO

7. Except during periods of breakdown relief or variance relief granted by the District, the owner/operator shall operate A-1399, RM-17 Thermal Oxidizer, such that the POC destruction efficiency is at least 95% by weight. (Basis: cumulative increase)
   a. The owner/operator shall perform a source test on S-1399 (A-1399) to determine compliance with POC abatement efficiency and emission limits listed in Part 13 at least once every 36 consecutive months.
   b. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the source test protocols and projected test dates at least 7 days prior to testing.

8. Except during periods of breakdown relief or variance relief granted by the District, the owner/operator shall maintain a minimum temperature of 1200 degrees F in A-1399 when used to control emissions from the sources listed in Conditions 5 and 6. This minimum temperature may be adjusted administratively based on source test data demonstrating that compliance with Condition 7 is achievable at a lower temperature. (Basis: cumulative increase)

9. The owner/operator shall continuously monitor and record the operating temperature of A-1399 RM-17 Thermal Oxidizer at all times during operation, except during times of breakdown relief or variance granted by the District for the monitor and recorder. (Basis: cumulative increase)

10. The minimum temperature requirement of Condition #8 shall not apply during an "Allowable Temperature Excursion" below the minimum temperature provided that the controller set temperature is at or above the minimum temperature requirement. An Allowable Temperature Excursion is one of the following:
    a. A temperature excursion not exceeding 20 degrees F; or
    b. A temperature excursion for a period or periods aggregating less than or equal to 15 minutes in any hour; or
    c. A temperature excursion for a period or periods aggregating more than 15 minutes in any hour, provided that both of the following criteria are met. Only twelve (12) such excursions are allowed per calendar year.
        i. The excursion does not exceed 50 degrees F;
        ii. The duration of the excursion does not exceed 24 hours.
    d. Any temperature excursion of more than 50 degrees Fahrenheit for more than 15 minutes in any hour is not an "Allowable Temperature Excursion".

Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion towards the 12-excursion limit. (basis: Regulation 2-1-403)

11. For each Allowable Temperature Excursion that exceeds 20 degrees F and 15 minutes in duration, the owner/operator shall keep sufficient records to demonstrate that they meet the qualifying criteria described above in Condition #10. Records shall be retained for a minimum of five years from the date of entry, and shall be made available to the District upon request. Records shall include at least

the following information:
a. Thermal oxidizer controller set temperature;
b. Starting date and time, and duration of each Allowable Temperature Excursion;
c. Minimum temperature during each Allowable Temperature Excursion;
d. Number of Allowable Temperature Excursions per month, and total number for the current year;
e. All strip chart or other equivalent temperature records (Basis: Regulation 2-1-403).

12. The owner/operator shall operate S-1399 (A-1399) such that NOx emissions do not exceed 50 ppmvd @ 15% oxygen and CO emissions do not exdeed 0.5 lb/MMBtu except during periods of breakdown relief or variance relief granted by the District. (Basis: RACT)

13. The owner/operator of A-1399 shall maintain the following records, in a District-approved log. The owner/operator shall retain this log on site for at least 5 years from the date of entry and be shall make these records available to District staff upon request. (Basis: cumulative increase, Reg. 8-5)
a. temperature records per Condition 9;
b. all source tests records for A-1399;
c. The type, amount and vapor pressure of all materials stored in tanks subject to Conditions 3 and 4.

14. (Start-up source test condition deleted)

End of Conditions

Condition 24359

1. The owner/operator shall abate E.O. Catalyst Impregnation Vessels S-6001 and S-6011 at all times of operation (except during periods breakdown relief or variance granted by the District) by the properly maintained and properly operated A-616 or A-602 Baghouse. (Basis: Cumulative Increase)

2. The owner/operator shall equip each of the A-616 and A-602 Baghouses with a device for measuring the pressure drop across the baghouse. The owner/operator shall check each pressure drop device for plugging at least every three months. (Basis: Cumulative Increase)

End of Conditions

Condition 25215

Shell Chemical LP
S-6019 EO Catalyst Conveyor
S-6020 EO Catalyst Blend Hopper
S-6021 EO Catalyst Screener
S-6022 EO Catalyst Bulk Bagging System
S-6023 EO Catalyst Drumming System (consisting of a bucket elevator and a hopper)
A-6019 Baghouse, abating S-6019 through S-6023

Application 24130 (March 2012)

1. The owner/operator shall route all particulate matter emissions from Sources S-6019, S-6020, S-6021, S-6022, and S-6023 to Baghouse, A-6019, during all times of operation of the sources. The owner/operator shall ensure that the outlet PM10 grain loading for A-6019 Baghouse shall not exceed 0.01 grains per dry standard cubic foot. (basis: Cumulative Increase, Regulation 6-301, 6-310, 6-311)

2. The owner/operator shall properly maintain and keep in good operating condition A-6019 Baghouse at all times. The owner/operator shall equip the A-6019 Baghouse with a device for measuring the pressure drop across the baghouse. Each device shall be checked for plugging at least every three months. (basis: Regulation 6-301, 6-310, 6-3111, 2-1-403)

3. The owner/operator shall not discharge an air contaminant into the atmosphere for a period or periods aggregating more than 3 minutes in any hour, which is as dark or darker than a Ringelmann 1.0. (basis: Regulation 6-301)

4. To ensure proper operation of A-6019 Baghouse, the owner/operator shall:
   a. Equip A-6019 Baghouse with a device for continuously measuring pressure drop across the baghouse. The device shall be set to alarm at pressure drop readings exceeding the manufacturer's maximum recommended pressure drop of 17 inches of water. The owner/operator shall check the pressure drop across the baghouse weekly.
   b. Equip A-6019 Baghouse with a continuously monitored broken bag detector with alarm. The owner/operator shall visually check the baghouse exhaust for evidence of particulate breakthrough weekly. If particulate breakthrough is indicated by the broken bag detector or is evident from plume observations, dust buildup near the stack outlet, or abnormal pressure drops, the filter bags shall be checked for any tears, holes, abrasions, and scuffs, and be replaced as needed.
   c. Check weekly and ensure that all hoppers shall be discharged in a timely manner to maintain compliance with 4(a) above.
   d. Check weekly and ensure that the pulsejet, shaker cleaning system shall be maintained and operated at sufficient intervals to maintain compliance with 4(a) above.

   (basis: Regulation 2-1-403)

5. In order to demonstrate compliance with the above permit conditions, the following records shall be maintained in a District approved log:
   a. Records of all inspections. Records of each inspection shall consist of a log containing the date of inspection and the initials of the personnel that inspects the baghouse.
   b. All maintenance work including bag replacement for the baghouse.

   These records shall be kept on site and made available for District inspection for a period of at least five years from the date on which a record is made.
   (basis: Regulation 1-441)

End of Conditions

Condition 25801

S-6024 EO Catalyst Tube Packager
A-6024 EO Catalyst Tube Packager Baghouse
Application 26085 (April 2014)

1. The owner/operator shall route all particulate matter emissions from Source S-6024 to Baghouse, A-6024. The owner/operator shall operate S-6024 and A-6024 such that the outlet PM10 (filterable and condensable) grain loading for A-6024 shall not exceed 0.010 grains per dry standard cubic foot. (basis: Cumulative Increase, Regulation 6-301, 6-310, 6-311)

2. The owner/operator shall properly maintain and keep in good operating condition A-6024 at all times. The owner/operator shall equip A-6024 with a device for measuring the pressure drop across the baghouse. When S-6024 is operated, each device shall be checked for plugging at least every week. (basis: Regulation 6-301, 6-310, 6-311, 2-1-403)

3. To ensure proper operation of A-6024 Baghouse, the owner/operator shall:

   a. Equip A-6024 with a device for continuously measuring pressure drop across the baghouse. The device shall be set to alarm at pressure drop readings exceeding the manufacturer's maximum recommended pressure drop of 9 inches of water. The pressure drop shall be no lower than 0 inches of water and no greater than 9 inches of water. When S-60424 is operated, the owner/operator shall check the pressure drop across the baghouse weekly.

   b. Equip A-6024 with a continuously broken bag detector with alarm. When S-6024 is operated, the owner/operator shall visually

check the baghouse exhaust for evidence of a particulate breakthrough weekly. If particulate breakthrough is indicated by the broken bag detector or is evident from plume observations, dust buildup near the stack outlet, or abnormal pressure drops, the filter bags shall be checked for any tears, holes, abrasions, and scuffs, and be replaced as needed.

c. When S-6024 is operated, check weekly and ensure that the hoppers shall be discharged in a timely manner to maintain compliance with Part 3(a) above.

d. When S-6024 is operated, check weekly and ensure that the pulse-jet, shaker cleaning system shall be maintained and operated at sufficient intervals to maintain compliance with Part 3(a) above. (basis: Regulation 2-1-403)

4. In order to demonstrate compliance with the above permit conditions, the following records shall be maintained in a District approved log:

a. Records of all inspections of the baghouse. Records of each inspection shall consist of a log containing the date of inspection and the initials of the personnel that inspects the baghouses.
b. Records of all maintenance work including bag replacement for the baghouse.
c. Records of all source tests performed at A-6024.

These records shall be kept on site and made available for District inspection for a period of at least five years from the date on which a record is made. (basis:
Regulation 1-441)

5. A/C startup condition deleted. (1/5/17)

6. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements as specified in Volume IV of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the source test protocols and projected test date at least 7 days prior to testing. (basis: Cumulative Increase)

End of Conditions

Condition 26292

S-1338 Chemical Process Vessel 393-V (19% aqueous ammonia)
S-6001 Catalyst Impregnation Vessel for A-train
S-6025 A-train Catalyst Dryer
S-6026 A-train Catalyst Conveyor System
S-6027 EO Catalyst Packing Station for A-train
S-6028 A-train Catalyst Dryer Heater
A-602 Baghouse (Abating S-6026, S-6027)
A-6025 Baghouse (Abating S-6025)
A-6026 Thermal Oxidizer (Abating S-6010, S-6025)
A-6029 Selective Catalyst Reduction (Abating S-6025, A-6026)

Application 26871 (May 2016) A-Train Replacement

1. The owner/operator shall route all particulate matter emissions from S-6025 to the properly operated and properly maintained A-6025 whenever S-6025 is in operation. [Basis: BACT, Regulation 6-1-301, 6-1-310, 6-1-311]

2. The owner/operator shall route all particulate matter emissions from S-6026 and S-6027 to the properly operated and properly maintained A-602 whenever S-6026 or S-6027 is in operation. [Basis: BACT avoidance, Regulation 6-1-310, Regulation 2-1-403]

3. The owner/operator shall equip baghouses A-602 and A-6025 with devices for measuring the pressure drop across each baghouse. Each device shall be set to alarm at or below the manufacturer's recommended pressure drop. The owner/operator shall operate A-602 such that the pressure drop does not exceed a maximum pressure drop of 9.0 inches of water gauge. The owner/operator shall operate A-6025 such that the pressure drop does not exceed a maximum pressure drop of 9.0 inches of water gauge. Each device shall be checked for plugging at

least every week.
[Basis: Regulation 6-1-301, 2-1-403]

4. The owner/operator shall equip each baghouse A-602 and A-6025 with a properly operated and properly maintained continuously monitored broken bag detector with alarm. [Basis: Cumulative Increase, Regulation 6-1-310, 2-1-403]

5. The owner/operator shall inspect baghouses A-602 and A-6025 exhaust weekly for evidence of particulate breakthrough. If breakthrough is evident from plume observations, dust buildup near the stack outlet, or abnormal pressure drops, the filter bags shall be checked for any tears, holes, abrasions, and scuffs, and replaced as needed.
[Basis: Regulation 2-1-403]

6. The owner/operator shall operate S-6025 and A-6025 such that the outlet PM10, as defined in Regulation 2, Rule 2, grain loading for Baghouse A-6025 does not exceed 0.0017 grains per dry, standard cubic foot. The owner/operator shall operate A-6025 such that the exhaust gas flowrate does not exceed 8,483 dry, standard cubic feet per minute. [BACT, Cumulative Increase]

7. The owner/operator shall operate such that the outlet PM10, as defined in Regulation 2, Rule 2, grain loading for Baghouse A-602 does not exceed 0.007 grains per dry, standard cubic foot. The owner/operator shall operate A-602 such that the exhaust gas flowrate does not exceed 2,400 dry standard cubic feet per minute. [BACT Avoidance, Cumulative Increase, Regulation 6-1-310]

8. The owner/operator shall not exceed any of the following throughput limits during any consecutive twelve-month period: a.12,735 tons

of dry materials loaded at S-6001; b.9,125 tons of dry materials loaded at S-6025 c.9,125 tons of dry materials loaded at S-6026; d.9,125 tons of dry material loaded at S-6027;

To demonstrate compliance with these limits, the owner/operator shall maintain District-approved logs of throughput on a monthly and annual basis and maintain such records on site for at least two years from the date of entry. These records shall be made available to District staff upon request. [Basis: Cumulative Increase]

9. The owner/operator shall not emit any TAC (as defined in Regulation 2, Rule 5) from S-1338, S-6025, S-6026, S-6027, A-6026, or A-6029 in excess of any of the thresholds listed within Regulation 2, Rule 5. If emissions of any TAC exceed the thresholds of Regulation 2-5, the owner/operator shall submit to the District a permit application for a health risk screening analysis within 60 days of discovering a TAC emission exceed a Regulation 2, Rule 5 threshold.

[Basis: Toxics]

10. The owner/operator shall do the following:
    a. The owner/operator shall abate all POC emissions from S-6025 by the properly maintained and properly operated A-6026.
    b. The owner/operator shall operate A-6026 such that the overall POC abatement efficiency (capture efficiency x destruction efficiency) shall be maintained at a minimum of 99.0 percent (on a weight basis) during all periods of S-6025 operation. The minimum abatement efficiency requirement shall not apply when outlet POC concentration is at or less than 2 ppmv, as C1 (one hour average).
    c. The owner/operator shall operate A-6026 such that the outlet exhaust flow rate does not exceed 8,483 dry, standard cubic feet per minute.

d. The owner/operator shall operate A-6026 at a minimum temperature of 1470 degrees F. The District may adjust this minimum temperature, if source test data demonstrates that an alternate temperature is necessary for or capable of maintaining compliance with Part 10b above.

e. To determine compliance with Part 10d, the owner/operator shall equip A-6026 with a temperature measuring device capable of continuously measuring and recording the temperature in A-6026. The owner/operator shall install, and maintain in accordance with manufacturer's recommendations, a temperature measuring device that is capable of reading the temperature range of 1300 degrees F to 1600 degrees F and the minimum accuracy of the device over this temperature range shall be 1.0 percent of full scale.

f. The owner/operator shall not emit more than 4,256 pounds of POC in any consecutive 12-month period from S-6025 and A-6026. To demonstrate compliance with this limit, the owner/operator shall use source test results, or best available engineering estimates if sources test results are not available, to derive an emission factor of pound POC emitted per ton of wet catalyst throughput and multiply the emission factor by the annual throughput of wet catalyst.

g. The owner/operator shall keep records of wet catalyst throughput on a daily, monthly, and annual basis.

[Basis: BACT, Cumulative Increase, Regulation 2-1-403]

11. The owner/operator shall do the following:

a. The owner/operator shall abate NOx emissions from S-6025 and A-6026 by the properly maintained and properly operated A-6029.

b. The owner/operator shall not emit from A-6029 more than 10 ppmv NOx at 3 percent O2.

c. The owner/operator shall not emit from A-6029 more than 10 ppmv ammonia (NH3) at 15 percent O2.

d. The owner/operator shall operate A-6029 such that the outlet exhaust flow rate does not exceed 8,483 dry, standard cubic feet per minute.

e. To prevent damaging the A-6029 catalyst, the owner/operator shall not exceed an inlet temperature of 700 degrees F or the maximum temperature recommend by the catalyst manufacturer.

f. To verify compliance with Part 11e, the owner/operator shall install, and maintain in accordance with manufacturer's recommendations, a temperature measuring device that is capable of reading the temperature range of 400 degrees F to 1000 degrees F and the minimum accuracy of the device over this temperature range shall be one percent of full scale.

g. The owner/operator shall install, and maintain in accordance with manufacturer's recommendations, an ammonia injection measuring device and ammonia injection recording device.

h. The owner/operator shall maintain records of all parameters deemed sufficient by the A-6029 manufacturer and catalyst manufacturer to guarantee meeting the emission limits of 11b and 11c.

i. The owner/operator shall maintain, and make available to the District upon request, a copy of the A-6029 manufacturer recommendations regarding A-6029 operation, (e. g. catalyst operational parameters, maintenance schedule, etc.). [Basis: BACT, Cumulative Increase, Regulation 2-1-403]

12. The owner/operator shall not use any organic compound other than ethylene diamine at S-6001, S-6025, S-6026, or S-6027.

[Basis: Cumulative Increase, Toxics]

13. The owner/operator shall not use more than 1,455,912 therms of fuel at A-6026 in any consecutive 12 months. [Basis: Cumulative Increase]

14. The owner/operator shall not emit more than 175 ppmvd CO at 15% O2 (0.40 lb/MMBtu) from A-6026 Thermal Oxidizer.
[Basis: Cumulative Increase, RACT]

15. Whenever a source test is conducted for the purposes of demonstrating compliance with applicable emission limits, the owner/operator shall ensure that the source test is conducted to demonstrate compliance with all applicable emission limits and may not segregate source tests based on pollutant (i.e. separate source tests for NOX, POC, NH3, CO, etc.). [Basis: Regulation 2-1-403]

16. The owner/operator shall ensure that all source tests conducted to demonstrate compliance with emission limits are conducted during normal operation (occurring within the range of routine operation) of the affected source and abatement device being tested. [Basis: Regulation 2-1-403]

17. To demonstrate compliance with the emission limits listed within this condition, the owner/operator shall do the following:
    a. No later than 60 days from the startup of S-6025, A-6026, and A-6029 and annually thereafter, the owner/operator shall conduct a District-approved source test to determine compliance with the limits in Part 10b for POC, Part 11b for NOX, Part 11c for NH3, and Part 14 for CO. The owner/operator shall submit the source test results to the District no later than 60 days after the source test.

b. If the owner/operator exceeds an emission limit two or more times, the owner/operator shall install a continuous emissions monitor (CEM) for the pollutant(s) that was exceeded. If a CEM is not available for a particular pollutant (i.e. NH3), the owner/operator shall petition to install an alternative continuous parametric monitoring system. The owner/operator shall follow the procedures outlined within the Districts Manual of Procedures, Volume V (Continuous Emission Monitoring). The date of the second failed source test shall serve as the date of notification that a monitor or alternative monitoring system, if applicable, is required.

c. After three consecutive tests that demonstrate compliance with all applicable limits in Part 11, the source test frequency of Part 17a may be reduced from annually to once every three years for NOx, CO, and ammonia.

d. After three consecutive tests that demonstrate compliance with all applicable limits in Part 10, the source test frequency of Part 17a may be reduced from annually to once every three years for POC provided that one of the source tests included testing the product formulation with the highest organic content (on a percentage basis) at S-6025. The source test frequency shall revert back to annually whenever a new product formulation is developed that includes a greater percentage of organics than any previously tested formulations.

e. The owner/operator shall first obtain written approval from the District's Engineering Division before a source test frequency may be reduced. Once reduced, the source test frequency shall revert back to an annual basis if a source test shows an exceedance of an applicable limit.

f. When demonstrating compliance with the PM10 emission limit in Part 6 or Part 7, the owner/operator shall use EPA Method 201A and Method 202. If stack gas conditions or port size do not allow the use of EPA Method 201A, the District Source Test Manager may approve a filterable PM method to be used with EPA Method 202. However, in such cases the total measured filterable PM would be assumed to be PM10 [Basis: BACT, Cumulative Increase, Regulation 2-5, Regulation 2-1-403]

18. In order to demonstrate compliance with the above permit conditions, the following records shall be maintained in a District approved log. These records shall be kept on site and made available for District inspection for a period of at least five years from the date on which a record is made.
    a. Records of all inspections and all maintenance work including bag replacement for the baghouse. Records of each inspection shall consist of a log containing the date of inspection and the initials of the personnel that inspects the baghouse.
    b. Records of all throughput data.
    c. Records of all source tests results.
    d. Records of all required emissions calculations.
    e. Records of A-6029 manufacturer recommendations.
    f. Records of all temperature data and ammonia injection for A-6029.
    g. Records of fuel usage and temperature data for A-6026.

[Basis: Regulation 2-1-403]

19. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all

applicable testing requirements as specified in Volume IV of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the source test protocols and projected test dates at least 7 days prior to testing. [Basis: BACT, Cumulative Increase]

20. The owner/operator shall not operate S-6000, S-6002, or S-6003 after startup of S-6025, S-6026, or S-6027. [Basis: Cumulative Increase, Regulation 2-1-403, Regulation 2-2-302]

End of Condition