

PTI No. 133482
 APPLICATION NUMBER: 13-18-17-0304
 FACILITY NAME: Ashland Chemical Co.
 EQUIPMENT DESCRIPTION: LP Mixer and Baghouse

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Operational Restrictions:

1) The pressure drop across the baghouse shall be maintained within the range of 0.5 - 6 inches of water while the emissions unit is in operation.

2) The maximum annual throughput shall not exceed 1,000,000 lbs of refractories, organic compounds and HAPs per rolling 12 month period.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the throughput employed level specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Throughput:</u>	
1	83,333	lb
1-2	166,666	lb
1-3	250,000	lb
1-4	333,333	lb
1-5	416,666	lb
1-6	500,000	lb
1-7	583,333	lb
1-8	666,666	lb
1-9	750,000	lb
1-10	833,333	lb
1-11	916,666	lb
1-12	1,000,000	lb

B. Monitoring and Recordkeeping Requirements

1) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once-per-shift basis.

2) The permittee shall maintain daily records of the refractories(solids materials), OC and HAPs usage in the emission unit:

a. The name and identification number of each paste, slurry and coating material;

b. The volume, in gallons, of each OC and HAP employed;

- c. The OC and HAP content in pounds per gallon of all pastes, slurries and coatings employed;
- d. The density of OC and HAPs in each blend of paste, slurry and coating employed;
- e. The vapor pressure of the loaded material;
- f. The molecular weight of the loaded material;
- g. The temperature of the loaded material;
- h. The total OC and HAPs emission rates for all pastes, slurries and coatings in lbs/hr;
- i. The total OC and HAPs emission rates for all pastes, slurries and coatings in lbs/day;
- j. The total OC and HAPs emission rates for all pastes, slurries and coatings in TPY;
- k. The total refractories content in for all pastes, slurries and coatings in lbs/hr;
- l. The throughput weight in pounds/hour.

C. Reporting Requirements

1) The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2) The permittee shall submit any daily, monthly or yearly reports identifying any exceedances in OC and/or HAP(s) usage and/or production throughput, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted within 30 days following the end of the calendar month.

3) The permittee shall submit quarterly reports summarizing the following information for the emission unit:

- a. daily or monthly records OC and HAPs emissions.
- b. daily or monthly records of production throughput.

The reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months (October through December, January through March, April through June, and July through September, respectively).

D. Testing Requirements

1) Compliance with the emissions limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission limitation:
8 lb/hr OC and HAPs

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements as specified in term B.2. and the following equation:

AP-42, section 5.2 (1/95), "Loading loss equation".

$$E = \frac{12.46 * S * P * M}{T}$$

for splash filling)

$E_t = E_c + E_m + E_p$

$E =$ OC and HAPs emissions (lbs/1000gallons)
 T = 1.45 saturation factor (1.45)
 $P =$ vapor pressure of material loaded at T (psia)
 $M =$ molecular weight of material loaded
 $T =$ temperature of material loaded (R) = 460 + deg.F

$E_c =$ charging OC and HAPs emissions
 $E_m =$ mixing OC and HAPs emissions
 $E_p =$ packaging OC and HAPs emissions
 $E_t =$ total OC and HAPs emissions (lbs/1000 gal)

Therefore, lbs/hr OC and HAPs emissions = E_t times X
gal/hr, where X equals (lbs/hr of OC and HAPs used) times (1/density of OC and HAPs materials)

- b. Emission limitation:
40 lb/day OC and HAPs

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements as specified in term B.2., the AP-42, section 5.2 (1/95), "Loading loss equation" and the following equation: $E_t =$ total OC and HAPs emissions (lbs/1000 gal)

Pounds/day OC emissions = E_t times X gal/day, where X equals (lbs/day of OC and HAPs used) times (1/density of OC and HAPs materials)

- c. Emission limitation:
0.95 tons per rolling 12 month period OC and HAPs

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements as specified in term B.2., the AP-42, section 5.2 (1/95), "Loading loss equation" and the following equation:

$E_t =$
total
OC
and
HAPs
emissions
(lbs/
1000
gal)

Tons per rolling 12-month OC and HAPs emissions =
[E_t x (lbs of OC and HAPs used per rolling 12-month period)
x (1/density of OC and HAPs materials)] /2000 lbs

d. Throughput Limitation -

The maximum annual throughput shall not exceed 1,000,000 lbs of refractories, organic compounds and HAPs per rolling 12 month period.

Applicable Compliance Method -

Compliance shall be based on the record keeping requirements as specified in term B.2.

e. Emission Limitation -

PM: 1.0 lb/hr total

Applicable Compliance Method -

Compliance shall be based on AP-42, section 6.4.1 (5/83), using a maximum process weight rate of 4000 lbs/hr, worst case emission factor of 1%, 50% solids content, baghouse capture efficiency 97% and control efficiency 98%.

f. Emission Limitation -

PM: 4.38 TPY

Applicable Compliance Method -

Compliance shall be based on the hourly rate multiplied by 8760 hr/year divided by 2000 lbs/ton.

g. Emission Limitation:

5 % visible emissions of PM

Applicable Compliance Method:

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03 (B) (1).