

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF AIR
PERMIT SECTION

October 1, 2009

RESPONSIVENESS SUMMARY FOR
COMMENTS ON THE
CAAPP OPERATING PERMIT APPLICATION FROM
AFTON CHEMICAL CORPORATION FOR A MISCELLANEOUS ORGANIC
CHEMICAL MANUFACTURING PLANT IN SAUGET, ILLINOIS

Source Identification No.: 163121AAB
Application No.: 95120012

Table of Contents

	Page
Decision	2
Background	2
Comment Period	2
Availability of Documents	2
Questions and Comments with Responses by the Agency	3
For Additional Information	6

DECISION

On 10/01/2009, the Illinois Environmental Protection Agency (Illinois EPA) is proposing for a second time an air pollution control operating permit to Afton Chemical Corporation, for a CAAPP permit in Sauget, Illinois. During the public comment period and in conjunction with the initial 45-day review period, the Illinois EPA received minor comments to the draft permit. In response to these comments, the proposed permit is clarifying and making corrections to the first proposed permit.

BACKGROUND

On 01/05/2004, Afton Chemical Corporation timely filed an appeal of its CAAPP permit before the Illinois Pollution Control Board (Board), PCB 04-113.

The proposed CAAPP permit identifies the applicable rules governing emissions from the source, and establishes enforceable production and emission limitations on its various operations. The permit also establishes appropriate testing, monitoring, recordkeeping and reporting requirements for compliance demonstrations with those limits and applicable emission standards. Afton Chemical Corporation will be required to carry out these procedures on an ongoing basis to demonstrate that the source is operating within the limitations established by the permit and in accordance with the Consent Order entered by the St. Clair County Circuit Court in *People of the State of Illinois v. Afton Chemical Corporation f/k/a Etnyl Petroleum Additives, Inc.*, 05 CH 1258.

COMMENT PERIOD

The Illinois EPA Bureau of Air evaluates applications and issues permits for sources of emissions. An air permit application must appropriately address compliance with applicable air pollution control laws and regulations before a permit can be issued. Following its initial review of Afton's Chemical Corporation application submitted in response to Afton's appeal of the CAAPP permit before the Board, the Illinois EPA Bureau of Air made a preliminary determination that the application met the standards for issuance of a CAAPP permit and prepared a draft permit for public review and comment.

The notice of public hearing and public comment period was published in the East St. Louis Monitor and Belleville News Democrat on 2/5/2009. The comment period closed on March 7, 2009.

AVAILABILITY OF DOCUMENTS

Copies of the documents can be obtained from the contact listed at the end of this document. The permits and additional copies of this document can also be obtained from the Illinois EPA website www.epa.state.il.us/public-notices/.

The permit issued to Afton Chemical Corporation and this responsiveness summary is available on the Illinois Permit Database at www.epa.gov/region5/air/permits/ilonline.html (please look for the documents under All Permit Records (sorted by name), Title V Permit Records). Copies of these

documents may also be obtained by contacting the Illinois EPA at the telephone numbers listed at the end of this document.

QUESTIONS AND COMMENTS WITH RESPONSES BY THE AGENCY

I. Afton's Comments

1. Our most recent construction permit for Unit 270 (06020100) contains a requirement that we submit "a copy of all required reports and notifications, except the Annual Emission Report" to the IEPA Des Plaines office in addition to the Springfield and Collinsville offices.

This requirement is not found in any of our other permits or in the draft CAAPP Permit.

Is it IEPA's intent that I continue to submit copies of all required reports and notifications to the Des Plaines office? Does this requirement only apply to Unit 270? And would it be superseded by the CAAPP Permit when it is issued?

IEPA response: *All required CAAPP permit reports shall be submitted to the Illinois EPA headquarters in Springfield and the field office in Collinsville. Appropriate conditions of the CAAPP permit reiterate these requirements. The Illinois EPA has determined that the construction permit was in error with regards of the appropriate office for report submittals.*

2. Section 7.19.6(a), which should contain limits for Unit 270, now appears to contain an emission limit for Unit 267. It shows a limit for Unit 267 of 0.25 tons/hour and 1.2 tons/year.

It is not clear where these values come from. Total permitted VOM emissions for Unit 270 should be 15 tons/year and 2.5 tons/month, same as total HAP emissions shown in 7.19.6(c).

(These are not the appropriate limits for Unit 267 either. Limits for Unit 267 in the draft permit, section 7.16.6 are correct).

IEPA response: *No change was made. The 0.25 and 1.2 limits were directly carried into the CAAPP permit from construction permit number 08100024. The limits were however moved from Condition 7.19.6 to Condition 7.16.6 because they are in relation to Unit 267 and not Unit 270.*

3. Condition 7.16.6(a) should be modified by using the following language: "VOM emissions from the affected Unit 267 reactor systems shall not exceed the following limits....". Also, because the limits in question are for the gear blend reactor (27-0125) which is only vented to carbon drums, not to the flare, the flare should be removed.

IEPA response: *Changes have been made. The proposed language was incorporated and reference to a flare was removed. The IEPA confirmed this to be true in the application.*

4. Condition 7.16.6(d) should be modified by using the following language: "VOM emissions increases from the reactors due to increased Gear Oil Additives production in Unit 267 shall not exceed the following limits...." And emission calculations should reference Condition 7.19.12.

IEPA response: *Changes have been made. A review of the underlying construction permit indicated that the increases were all associated with the gear oil additives unit.*

5. The discrepancies in the numerical HAP limitations of the following conditions should be resolved:

Section 7.19.6(c) allows emissions from Unit 270 of 1.0 ton/month and 7.0 tons/year for hexane and methanol (each), and 2.5 tons/month and 15.0 tons/year total HAPs.

Section 5.5.2(a)(i) states that emission units other than Unit 270 shall not exceed 1.0 tons/month and 8.0 tons/year for any individual HAP other than hexane and methanol, and 1.0 tons/month and 9.5 tons/year of any combination of HAPs.

So, if these two requirements were combined, it would be reasonable to assume that we are allowed total HAP emissions of 3.5 tons/month and 24.5 tons/year from the source as a whole.

However, 5.5.2(a)(ii) states that emissions from the source shall not exceed 0.95 tons/month and 9.5 tons/year of any individual HAP or 2.5 tons/month and 24.5 tons/year total HAPs.

This seems like a discrepancy. As currently drafted, we could comply with 5.5.2(a)(i) and 7.19.6(c), but still be in violation of 5.5.2(a)(ii).

To be consistent with limits in other sections, could we change the limits in 5.5.2(a)(ii) to 1.0 tons/month and 8.0 tons/year for each individual HAP and 3.5 tons/month for total HAPs?

IEPA response: ***Changes have been made. Condition 5.5.2(a)(ii) was revised by increasing monthly HAP limits to 1.2 tons/month (for any individual hazardous air pollutant (HAP)) and 3.5 tons/month (total HAPs). After further investigation into this matter, the Illinois EPA concluded that this was a math error. This is due not only to the complexity of the conditions, but the fact that the yearly limits did not match the monthly limits. In addition, the Illinois EPA confirmed that the change to the HAP limits does not trigger any additional requirements.***

6. At Condition 7.10.3(e), replace the preliminary paragraph with the following:

The affected Emission Unit 27-0201 has dual modes of operation as allowed by Condition 7.10.11. When operating in continuous mode, the affected Emission Unit 27-0201 is subject to 35 IAC 219 Subpart RR, Miscellaneous Organic Chemical Manufacturing.

IEPA response: ***The Illinois EPA made the requested change as it provided a clearer statement of the applicable requirement.***

7. Replace Condition 7.10.4(a) with the following:

Except for Emission Unit 27-0201, the affected Unit 280 reactor systems are not subject to 35 IAC 219 Subpart RR, Miscellaneous Organic Chemical Manufacturing. Emission Unit 27-0201 also is not subject to 35 IAC 219 Subpart RR when it is operating in batch mode. (Condition 7.10.3(e) does not apply during batch mode of operation) [35 IAC 219.960(a)].

IEPA response: ***Changes have been made. See also response to (I)(6).***

8. Replace Condition 7.10.4(d) with the following:

The affected Emission Unit 27-0201 is not subject to 35 IAC 219 Subpart V, Batch Operations and Air Oxidation Processes, when it is operating in continuous mode. (Condition 7.10.3(c) does not apply during continuous mode of operation). [35 IAC 219.500(a)].

IEPA response: ***Changes have been made. See also response to (I)(6).***

9. We would like to revise the wording of Condition 7.13.5(e) to more closely track the language of the Consent Order, from which this Condition was taken. Specifically, we propose to add the following sentence: “Changes to the modification shall follow approval by Illinois EPA, Bureau of Air, Permits Section, as required by the Act or regulations thereunder.”

IEPA response: The Illinois EPA made the requested change to provide greater consistency with the Consent Order entered by the St. Clair County Circuit Court. The incorporation of the requested change to the permit will avoid conflicting language and interpretation between the Consent Order and the permit.

10. Condition 7.16.6(a) applies to the Gear Lube Blend Reactor (Emission Unit 27-0125). The sentence following the limit should be revised to remove the reference to the flare.

IEPA response: Changes have been made. See also response to (I)(2).

11. Concerning the requirement in Condition 7.13.13 to submit out first PSD status report by July 1, 2009, will the permit be issued by then? We don't want to be in a situation of potential noncompliance. While we can likely prepare the report fairly quickly, we will need sufficient warning that the report will actually be due by this date.

IEPA response: Given this date has passed, the Illinois EPA modified the date that the initial PSD status report will be due.

12. Concerning the non-applicability statements in Condition 5.3, we would like the condition to indicate that the source is not subject to the requirements in Section 112(j) of the Clean Air Act, Boiler Maximum Achievable Control Technology (MACT), because the source has taken on limits to ensure that the source is a synthetic minor.

IEPA response: Given the source has taken on synthetic minor limits, the Illinois EPA has made changes consistent with this comment.

II. USEPA Comment

1. Please clarify the origin and authority of all Title I Conditions in the permit.

IEPA response: Changes have been made clarifying the origin and authority of all Title I (T1) conditions in the permit.

FOR ADDITIONAL INFORMATION

Questions about the Responsiveness Summary and permit decision should be directed to:

Bradley Frost, Community Relations Coordinator
Illinois Environmental Protection Agency
Office of Community Relations
1021 North Grand Avenue, East
P.O. Box 19506
Springfield, Illinois 62794-9506

217-782-7027 Desk line
217-782-9143 TDD
217-524-5023 Facsimile

brad.frost@illinois.gov