

US EPA ARCHIVE DOCUMENT

Summit Petroleum Corporation Part 49 synthetic minor permit response to comments

EPA public noticed a draft synthetic minor “after the fact” construction permit number SYN-IS-N1617-2014-01 for Summit Petroleum Corp. (Summit) for its natural gas sweetening plant in Rosebush, Michigan. EPA provided notice in the Morning Sun newspaper published on December 8, 2014, and via EPA’s internet website. The notice provided pertinent information regarding the proposed action, the locations of available information, a telephone number to request additional information, where written comments should be sent, and the closing date of the public comment period. The comment period for the draft permit closed on January 21, 2015. EPA received comments from the Michigan Department of Environmental Quality (MDEQ) Saginaw Bay District Office and Summit. The follow is a summary of the comments received and EPA’s response to each of the comments.

Comments from Summit Petroleum

1) On January 20, 2015, Summit provided a comment on the caustic agent monitoring and feed rate into the caustic unit. Summit requested that the permit condition be revised so that Summit will monitor and record the volume of caustic agent used by the caustic unit when in use.

EPA’s response: EPA agrees to this comment and will revise the permit condition so the volume of the caustic agent used by the caustic unit will be monitored and recorded (Section 2.0(A)(2)(iii) of the final permit).

Comments from MDEQ

1) On January 15, 2015, MDEQ provided comments on the minimum efficiency of the caustic unit (operating requirements page 5, item 2). The draft permit proposes a not less than 74% efficiency for inlet sulfur quantities of 2 long tons per day. The MDEQ permit issued to Summit prescribed an 85% minimum efficiency when one stage is operating and 93.8% when two stages are operating.

EPA’s response: The MDEQ permit issued to Summit is not valid since the facility is within the exterior boundaries of a tribal reservation and State air quality control regulations do not apply. EPA is issuing this permit pursuant to the federal regulations under the Clean Air Act and those found in 40 C.F.R. Part 49.

Although Subpart LLL of 40 C.F.R. Part 60 does not apply to Summit because the Summit facility was built prior to the applicability date, Summit has requested that the minimum efficiency limits found in that subpart be included as a permit requirement. The permit condition of not less than 74% minimum efficiency is consistent with the federal requirements found in Subpart LLL, and no change will be made to this condition.

2) MDEQ commented on the operating requirements (page 5, item 6 of the draft permit) that the permit provides a reaction time of 45 minutes when the temperature of the incinerator falls below 1200° Fahrenheit. The MDEQ permit provided for a 15 minute reaction time when the temperature fell below 1200°F.

EPA's response: The reaction time for the incinerator is based on the amount of time it takes to raise the temperature of the incinerator to the appropriate operating temperature. A shorter reaction time may cause Summit to enact shut down procedures too frequently and unnecessarily for minor temperature fluctuations. If the incinerator temperature cannot be raised to 1400°F in 45 minutes, then the permitted shut down procedures are put in place. A shorter reaction time, such as the suggested 15 minutes, would require the facility to enact shut down procedures sooner and potentially increase air emissions during the shutdown process due to the greater amount of time spent in a state of incomplete combustion. EPA does not believe a shorter reaction time will increase the overall emissions from the facility, and no change will be made to this condition.

3) MDEQ commented on the operating requirements for acid gases being sent to the emergency flare (page 5 item 7, and page 6, item 12 of the draft permit). The two conditions that discuss acid gases to the emergency flare not being sent for more than 15 and 45 minutes contradict each other.

EPA's response: EPA agrees that the two conditions should be consistent and that both should state that acid gas may not be sent to the emergency flare for more than 45 minutes. EPA will revise the final permit to state the following at Section 2.0(A)(2)(viii): "If the temperature falls below 1200°F, the permittee shall automatically commence diverting the flow of acid gas to the emergency flare. The permittee shall not send acid gas to the emergency flare for more than 45 minutes. The permittee shall not send acid gas from the amine process to the flare except as allowed by this permit."

4) MDEQ commented on the technical support document that states that the flare has a continuously burning pilot flame (using sweet gas for fuel) and is equipped with an automatic re-igniter to maintain uninterrupted operation. The MDEQ-issued permit contains a condition outlining the requirements for proper operation of the flare and its various components. These conditions are not found in the EPA permit.

EPA's response: EPA agrees that the conditions outlining the requirements for proper operation of the flare and its various components should be in the permit. EPA will include the following condition at Section 2.0(A)(2)(xix) of the final permit: "The permittee shall operate a continuously burning pilot flame at the flare. The pilot flame shall be equipped with an automatic re-igniter."

5) MDEQ commented that the permit does not contain specify the heights for either the incinerator or the flare stacks.

EPA's response: EPA agrees and will include the following language at Section 2.0(A)(2)(xx) of the final permit: "The stack heights shall be at a minimum height of 20 feet for the flare, and 60 feet for the incinerator."

6) MDEQ commented on the permit not having any provision for action to be taken concerning oil well shut downs when/if the gas sweetening plant must be shut down.

EPA's response: It would not be necessary to shut the two adjoining wells when the sweetening plant is shut down. The sour gas from the adjoining wells is minimal and is eliminated by the flare that is in continuous operation. There are no applicable requirements for the two oil wells that would require a shutdown of the gas sweetening plant. EPA does not believe any change is necessary in the permit.

7) MDEQ commented on the technical support document regarding the current conditions of the Summit facility. MDEQ claims that the plant was essentially shut down since March 3, 2014, and remains so.

EPA's response: Summit Petroleum has requested an "after the fact" synthetic minor construction permit pursuant to 40 C.F.R. Part 49, which authorizes construction of the existing natural gas sweetening plant and two adjoining wells. Summit has not notified EPA of its intent to shut down the facility permanently. Since November 2014, due to economic considerations regarding the price of crude oil, Summit has been maintaining the sweetening plant in a "cold idle" standby mode. Summit has placed the compressors and tanks in standby and has taken actions to protect the equipment during this period for eventual re-engagement of the sweetening plant. The sour gas wells are not currently producing product. Summit uses its sweet gas wells to provide gas for internal plant usage and any quantity of gas from the sweet gas wells that is not fully sweetened is then flared. The permit would allow Summit to operate its natural gas sweetening plant and two adjoining wells should market conditions improve, while restricting its sulfur dioxide emissions to below the federal Prevention of Significant Deterioration major source thresholds at 40 C.F.R. § 52.21.

8) MDEQ commented that Summit has plugged or disconnected from the sweetening plant a number of high hydrogen sulfide (H₂S) concentration oil wells. These wells continue to produce but now flare the produced gases.

EPA's response: EPA proposed the draft permit for the Summit natural gas sweetening plant and two adjoining sour gas wells. These wells are not part of the facility being permitting in this action. EPA will consider any emissions information regarding these other wells and take appropriate action.