

4-27-06

Koerner, Jeff

From: Koerner, Jeff
Sent: Thursday, April 27, 2006 2:18 PM
To: 'Buff, Dave'
Subject: U.S. Sugar/Okeelanta Title V Renewal

Dave,

I called your office and you were out. Remind me about that call ... funny. When you get a chance, I would like to discuss some of the details of these applications. Now that we completed some of the minor permitting actions, I'm trying to draft up the permits and the Technical Evaluations/Statements of Basis. I plan to email my remaining questions to try to bring this to a close. Here's a few:

U.S. Sugar

SO2 Modeling: I have this portion of the Technical Evaluation completed, but I have two questions ... maybe just clarifications. Why is the Clewiston Mill listed as "7806 TPY" in Table 3-3? In paragraph 1 on page 3-1, what does "... and/or stack changes ..." mean? Are the diesel generators permitted for "0.05%" sulfur oil or "0.5%" sulfur oil? If 0.5% sulfur oil, is U.S. Sugar requesting a reduction from 0.5% to 0.05% for these units?

Bryant Raw Sugar: Does the majority of raw sugar get transported from the Bryant Mill to the Clewiston refinery? Does the rest of Bryant's raw sugar go to a refinery in Georgia? What's the name of the refinery?

New Mill: Is U.S. Sugar currently constructing the new electrically-powered sugar mill? Even though there are no air pollution sources, can I recognize the new construction in this permitting action?

Refinery Sources: Due to the way the original permits were written, it looks like a few units w/baghouses might be subject to CAM. The sugar dryers should have a PM limit and test requirement, but the smaller sources (i.e., < 10,000 acfm) with a baghouse could be modified to specify an design outlet grain loading and 5% opacity standard. It would be made clear that the lb/hr and TPY figures are "expected maximum rates". This would be similar to what I did for the Okeelanta transshipment sources.

CAM/Wet Scrubbers/SO2: Although the CAM applicability review indicates that there are "no controls" for SO2 emissions, the industry has documented that the wet scrubbers do remove SO2 from the exhaust - at least when firing bagasse. However, to be subject to CAM, there has to be an emissions standard. I don't believe that the Bryant boilers have SO2 standards. I believe that only Clewiston Boilers 4, 7 and 8 have SO2 standards. Each of these units has either a wet impingement scrubber or the wet cyclones. Based on the NESHAP HCl issues, my recollection is that U.S. Sugar does not add any chemicals to its pond water to change the pH level - it is what it is. In fact, the Bryant Boiler 5 permit requires daily monitoring of the pH level and notification if chemicals are added. From personal experience, it appears that these units can achieve the corresponding SO2 limit simply by assuring that the wet scrubbers are on line and injecting a nominal amount of pond water in a once-through process. Are there any records of the pH levels at the Clewiston Mill? What is the variability? Are there any SO2 tests available that we can correlate with the pond water pH? If the information shows that the scrubber pH level does not vary much, I'm considering setting CAM as the scrubber water pressure differential/flow rate (same as PM) and perhaps a daily pH recording. What do you think?

Boiler 8 Steam Rate and Revision of Bagasse Handling System: When do you think you will submit these? Will this likely include a request to revise the calculation of the NOx averaging period?

White Sugar Dryer 2: Have the shakedown problems been resolved? Do you plan to request a permit revision?

Wood: Have any tests been completed when firing wood chips?

Boiler 7: For the proposed membrane wall replacement, what would be the equivalent cost to just replace the tubes? Are there similar plans to replace the other walls?

Boiler 8: Is it common practice to design the ESP to comply with a BACT standard when operating only a portion of the fields?

New Hope/Okeelanta

Central Dust Collectors 1/2 and Coolers 1/2: The underlying permit for these units specify a "TPY" limit. As far as I can tell, there is no short term limit, no test requirement, or no method to determine compliance. This may mean that the limit is not practicably enforceable and therefore no CAM is required.

I'll probably put the draft package together for Okeelanta first - it looks more straight forward. I had just started looking at the "old" conditions for the Bryant boilers. I may have some historical questions on these. You can call to discuss these if you prefer.

Thanks!

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