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February 22, 2001



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BUREAU OF AIR REGULATION

Florida Department of Environmental Protection
New Source Review Section
2600 Blair Stone Road
Tallahassee, FL

Attention : Jeffery Koerner, P.E.

RE: UNITED STATES SUGAR CORPORATION (U.S. SUGAR) – CLEWISTON MILL
NO. 7 VACUUM PAN

Dear Mr. Koerner:

In follow up to our recent discussions, the purpose of this correspondence is to provide you with additional information concerning the No. 7 Vacuum Pan (VP) associated with the sugar refinery at the United States Sugar Corporation's Clewiston mill.

REFINERY PERMITTING HISTORY

As previously discussed with you, the No. 7 VP was purchased in 1997, when the refinery was constructed. This vacuum pan was set in place in the refinery, but installation was not completed at that time. The No. 7 VP's associated centrifugals were also purchased and received, but not installed in 1997. The No. 7 VP was originally constructed to produce brown sugar, but because of a change in market conditions, installation was never completed and it was not started up.

The description of the refinery and the refinery flow diagram contained in the original refinery application (submitted to FDEP in August 1996) included the reference to the "concentration, crystallization and centrifuging" process. This is the step in the process where vacuum pans and centrifugals are used. The application did not mention the number of vacuum pans or related equipment that was to be installed. Ultimately, construction was completed on three vacuum pans as part of the initial refinery operations, each of 2,000 cubic foot capacity. As described above, a fourth vacuum pan (No. 7 VP) was purchased in 1997 and set into place, but was never hooked up or started up.

The original refinery permit was issued on October 25, 1996, and expires on October 25, 2001 (Permit No. 0510003-001-AC). This was a minor source permit. The design production capacity was specified as 830,000 tons per year (TPY). The permit was modified on February 14, 1997, to limit the annual operating hours of certain refinery sources (Permit No. 0510003-004-AC). The refinery began operating in 1997.

In June 1999, U. S. Sugar applied for a PSD permit to increase the annual operating limits for Boiler No. 4 as well as the sugar refinery. Once again, the description of the refinery and the refinery flow diagram contained in this application included the reference to the "concentration, crystallization and centrifuging" process. The application did not mention the number of vacuum pans or related equipment that was then installed, or were to be installed. The PSD permit for this modification was issued in November 1999 (permit no. 0510003-009-AC; PSD-FL-272). As a result of this permit, the sugar refinery sources all underwent PSD review, and a best available control technology (BACT) determination was issued.

CURRENT REQUEST

U. S. Sugar now desires to complete the installation of the No. 7 VP and related equipment, and to begin operating it during the coming summer. It will be used to produce additional refined white sugar. The No. 7 VP is already in-place in the refinery building, but final connections to it have not been made. The associated centrifugals are also on-site but have not yet been installed.

The No. 7 VP is of 1,800 cu. ft. capacity. The existing vacuum pans have a total capacity of 6,000 cu. ft., therefore, the No. 7 VP will provide up to a 30% increase in production capacity. During the past two calendar years, the refinery has produced 377,299 tons and 439,300 tons of white sugar, respectively, with the three existing vacuum pans.

The No. 7 VP will require up to 40,000 to 50,000 lb/hr steam during the off-season, for approximately 200 days per year. As originally envisioned, this steam would be provided from Boiler No. 7 to the extent possible, and from other boilers when Boiler No. 7 was not operating. During the crop season, the steam usage would be substantially less than this, due to steam savings in the sugar mill.

A revised flow diagram of the sugar refinery is presented in Figure 1 attached. This diagram presents more detail on the concentration/crystallization step. Additional clarifications are also provided in the figure in regards to the dust collectors associated with the refinery.

EFFECTS ON OTHER EMISSION UNITS

The use of the No. 7 VP will allow an increase in refined sugar production. However, the total permitted sugar production limit for the refinery of 803,000 TPY will not be exceeded. Several refinery emission sources will be affected by this increase, while others will not be affected, as described below:

- Granular carbon regeneration furnace – the operation of the GCRF depends on the color of the raw sugar produced in the mill, which can vary depending on a number of factors. Therefore, an increase in refined sugar production does not necessarily translate into an increase in GCRF operation. Also, fuel usage in the GCRF becomes a limiting factor on its operation.
- Isopropyl alcohol (IPA) usage in the refinery will increase as a result of the No. 7 VP. IPA usage is about one quart per 100,000 pounds of refined sugar produced.
- White sugar dryer – although more refined sugar will be processed through the white sugar dryer, the dryer is not expected to operate an increased number of hours. There is excess capacity available in the dryer, and therefore more sugar would be processed on an hourly basis to meet any increased demand.
- VHP dryer – this dryer receives and dries raw sugar from the sugar mill and therefore is not affected by an increase in refined sugar production.
- Screening, distribution, bulk shipping and packaging operations – these operations will increase slightly due to the increased refined sugar production, although this increase will be in the form of increased short-term throughput as opposed to an increase in operating hours.

The No. 7 VP will have no effect upon the raw sugar mill. The operation of the raw sugar mill is dependent upon the amount of sugar cane available to process each season. The mill will operate until all sugar cane is processed. The raw sugar is sent to the on-site refinery to the extent possible, with the remainder shipped to an off-site refinery.

The sugar mill bagasse/oil-fired boilers will not be affected by the No. 7 VP, other than the aforementioned steam usage during the off-season. Boiler No. 7 was originally constructed to support to the extent possible the new refinery during the off-season, including the No. 7 VP.

SUMMARY

The No. 7 VP and associated equipment was included in the original refinery application and permitting (permit no. 0510003-001-AC) in 1996. The No. 7 VP and centrifugals were purchased and brought on-site in 1997, but completion of construction was delayed due to market conditions, and the equipment was never started up.

The No. 7 VP is also considered to be included in the PSD permit issued for the refinery modification in November 1999 (permit no. 0510003-009-AC; PSD-FL-272). In both permits, the No. 7 VP was envisioned to be inclusive in the refinery operations. The refinery is still under this PSD construction permit. Federal PSD rules allow 18 months for construction to begin on a source following receipt of a PSD permit (40 CFR 52.21(r)(2)). Thus, the 18-month period for the latest PSD permit would not end until May 2001.

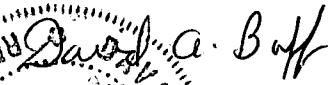
The No. 7 VP will help U. S. Sugar to achieve its original goal to produce up to 803,000 TPY of refined sugar in its on-site refinery. Steam for the operation of the No. 7 VP will be obtained from Boiler No. 7 to the extent possible, as envisioned in the permitting of Boiler No. 7. Therefore, all aspects of operation of the No. 7 VP have already been reviewed and accounted for in previous permitting efforts, including PSD review, application of BACT, air dispersion modeling analysis, and impacts upon soils, vegetation and visibility, including PSD Class I impacts. Additional permitting or regulatory review of the No. 7 VP prior to operation is not warranted, nor would it serve any useful purpose.

It is therefore requested that completion of construction of the No. 7 VP and associated equipment be approved by the Department.

Please call or e-mail me if you have any additional questions concerning this information.

Sincerely,

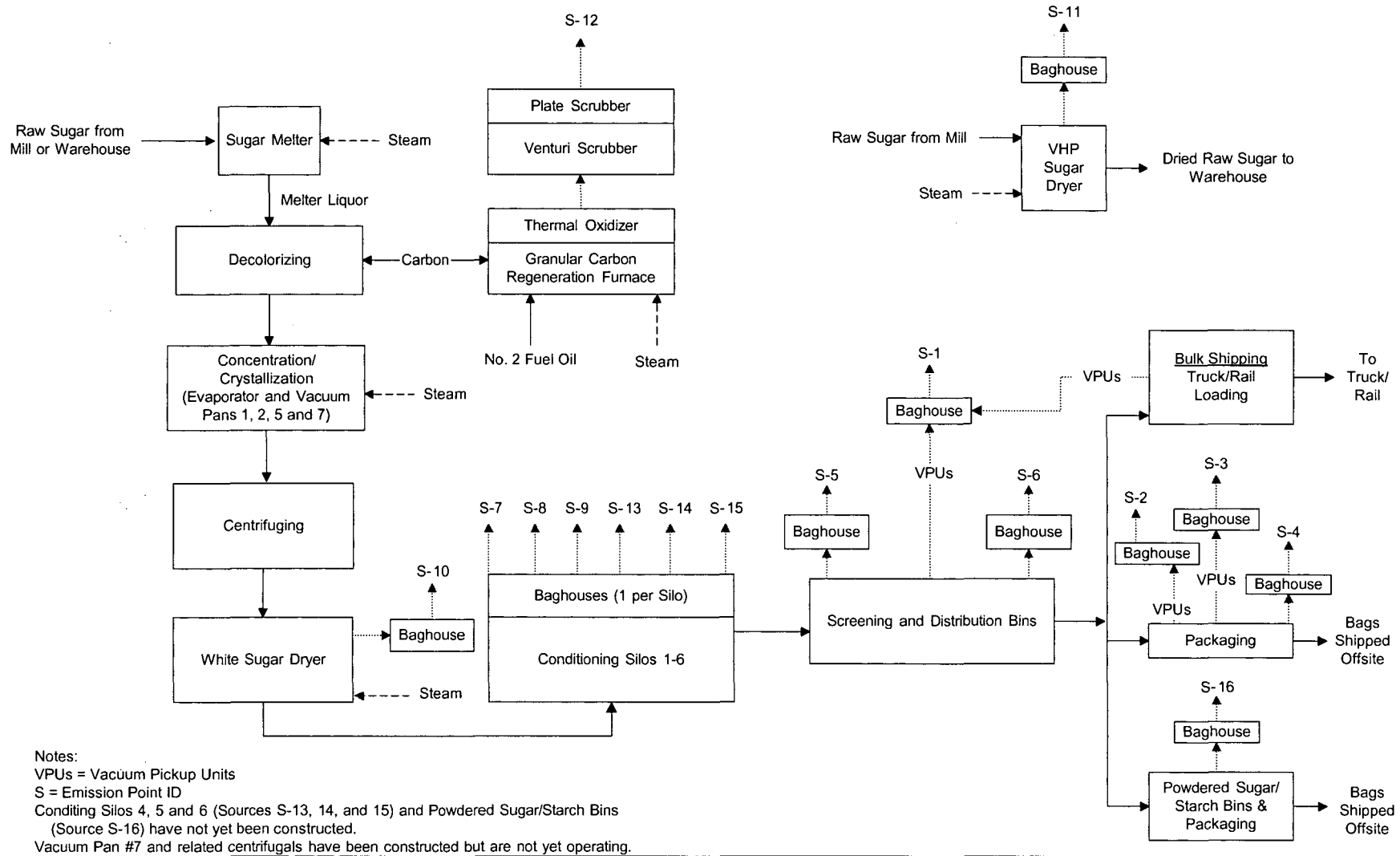
Golder Associates Inc.


David A. Buff, P.E., Q.E.P.
Principal Engineer
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SEAL
DB/jkw

Attachments

cc: Ron Blackburn, DEP Fort Myers
Don Griffin
Bill Wehrum

PRIVILEGED AND CONFIDENTIAL - PREPARED FOR COUNSEL



Attachment UC-EU1-L1
 Mill Expansion
 Process Flow Diagram
 U.S. Sugar Corporation
 Clewiston, FL

Process Flow Legend
 Solid/Liquid ———>
 Air>
 Steam - - - ->

Project Number: 013-7509-0100

Filename: UCEU1L1.VSD

Date: 2/22/01

