PERMITTING MEMORANDUM AND TECHNICAL EVALUATION & PRELIMINARY DETERMINATION

TO: Cindy Zhang-Torres, P.E.
Air Permitting Manager

FROM: Nedin Bahtic
Air Compliance/Permitting Engineer

DATE: 06/23/11

SUBJECT: Draft/Proposed Permit 1050001-012-AV and Draft Permit 1050001-013-AC
Facility Name: Citrosuco North America, Inc.

Day 90: 08/10/11

(This memo also serves as the technical evaluation and preliminary determination for project 1050001-013-AC since there is no increase in potential, permitted or actual emissions.)

On 02/21/11, the Department received an application to renew Title V Air Operation Permit 1050001-011-AV for this citrus processing facility. In the application, the applicant requested that the following changes be made to the current permit:

1. Move the regulated 125 HP Boiler (EU 014) to the insignificant source category;
2. Replace individual maximum heat input limitations for 800 HP Boiler (EU 001), 2000 HP Boiler (EU 008), and 1000 HP Boiler (EU 012) with a combined maximum heat input limitation of 153.85 mmBtu/hr; and
3. Reduce particulate matter emissions testing frequency for Pellet Coolers 2 and 3 (EUs 009 and 010) from annually to once per permit period.

(Note: PM/PM_{10} recordkeeping required for the two pellet coolers (EUs 009 and 010) is also being removed since the frequency of particulate emissions testing is being decreased.)

In the e-mails sent to the Department on 05/24/11 and 05/25/11, the applicant also requested that:

4. The method of operation be modified for the two dryers (EUs 006 and 007) and three boilers (EUs 001, 008, and 012) by specifying that the No. 2 distillate fuel oil can only be burned during periods of gas curtailment.

Request for the changes was approved since:

1. The 125 HP Boiler is fired by natural gas only and is rated at 5.4 mmBtu/hr maximum heat input rate. Its highest potential emissions (NO_x) are less than 5.0 tpy ((0.005 mmcf/hr) x (100 lb NO_x/mmcf) x (8760 hr/yr) / (2000 lb/ton) = 2.19 tpy). Therefore, it can be considered insignificant under Rule 62-213.300(2)(a)1., F.A.C.
2. As stated in the permit renewal application, "these 3 boilers are located in one building and act together as one process unit to supply steam for the facility needs".
3. Permitting note for Specific Condition B.8. of permit 1050001-011-AV states that the testing frequency may be reduced "following five consecutive tests showing compliance with the combined PM/PM_{10} limit of Specific Condition B.3.". Even though the tests were only performed for three years during the life of permit 1050001-011-AV (2009, 0.590 lb/hr PM total; 2010, 0.315 lb/hr PM total; 2011, 0.690 lb/hr PM total), enough

assurance has been provided to justify a decrease in testing frequency from annually to once per permit period.

4. This reflects facility's actual mode of operation: fuel oil is only burned during period of natural gas curtailment. AOR data shows that fuel oil has not been burned for at least the last ten years. By modifying the method of operation, facility is not subject to 40 CFR 63 Subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers), which became effective in May 2011. This rule is not applicable to gas-fired boilers (§ 63.11195(e)); gas-fired boiler is defined as "any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel" (§ 63.11237).

Since the items above were established by a construction permit (1050001-010-AC), a minor construction permit is required to make the changes (1050001-013-AC). The public notice for the construction permit revision (project 1050001-013-AC) is combined with the public notice for the Title V air operation permit renewal (project 1050001-012-AV).

After initial application review, Request for Additional Information was sent out on 03/10/11. RAI response was received on 04/19/11, but application was not deemed complete until 05/18/11 because the official test report was needed to confirm PM emission test results for the two pellet coolers (test report was received on 05/12/11 and reviewed on 05/18/11).

Enforcement status:
Warning Letter WL09-0040AS53SWD was issued on 03/11/11 for failure to calibrate new gas flow meters upon startup and heat input exceedances for EU 008. The case has not been resolved as of the date of this memo.

In addition to the changes listed above, the following changes were also made as part of project 1050001-012-AV:

- Permit was written using the new Tallahassee Title V template.
- In Facility-Wide Condition FW7, the value for K1, which is used in oil recovery calculations, was changed from 0.65 to 0.72 since the facility is required to achieve at least a 72% recovery of oil from citrus fruits (the value was incorrectly listed as 0.65 in permit 1050001-011-AV).
- New Emissions Unit 015 was added for the two existing emergency stationary CI RICE diesel engines. These engines are subject to NESHAP 40 CFR 63, Subpart ZZZZ.
- Language was added to specify operation during testing for the two citrus peel dryers (EUs 006 and 007) since they are served by three waste heat evaporators.
- Compliance testing prior to renewal for the two pellet coolers was made required to be conducted between January 1, 2015 and April 30, 2015. This was done in order to ensure that the testing is conducted during the last citrus season before the permit renewal application is due.
- Testing requirement permit conditions for EUs 001, 006-010, and 012 were clarified to clearly state which compliance tests are required and when.

I recommend that the draft/proposed permit 1050001-012-AV and draft permit 1050001-013-AC for Citrosuco North America be issued.