

**Sheplak, Scott**

**From:** Koerner, Jeff  
**Sent:** Tuesday, February 27, 2001 2:36 PM  
**To:** Shannon Todd (E-mail); Patrick Shell (E-mail); Jerry Campbell (E-mail); Dianna Lee (E-mail); Kissel, Gerald  
**Cc:** Linero, Alvaro; Sheplak, Scott  
**Subject:** TECO Screening Operation and Big Bend Slag Material

To all:

On February 21st, I teleconferenced with TECO, HEPC, and the SWD Office. I summarized the issues for Al Linero (New Source Review) and Scott Sheplak (Title V). Our collective comments follow.

1. Gannon Screening Operation: TECO wants to dredge an on-site retention pond, screen the material, and sell it to Florida Crushed Stone (to be used as road base, concrete mix, sand blasting media, etc.). The material consists of fines washed from the coal piles and ESP ash. It will be dredged from the pond, dumped wet onto a 3" screen, and conveyed to a storage pile to await removal by truck. The screen is simply to separate large materials such as concrete chunks - there will be no crushing. Large materials will be hauled off to a landfill. Material will be kept wet while on site. It is estimated that there is approximately 250,000 tons of material that will take about 6 - 9 months to remove. TECO believes it has conservatively estimated that < 5 TPY of particulate matter will be emitted from this activity. HEPC and the SWD Office don't seem to have any real concerns as long as "reasonable precautions" are taken to prevent fugitive dust.

Comments: From the information provided, we believe that this request for such a temporary operation could meet the requirements for a generic emissions unit exemption pursuant to Rule 62-210.300(3)(b), F.A.C. Based on the information provided, TECO could request an exemption by sending a letter to the Bureau of Air Regulation that describes the activity, defines the reasonable precautions to prevent fugitive dust emissions, predicts the duration of the project, estimates emissions, and states that the activity is exempt from permitting pursuant to Rule 62-210.300(3)(b), F.A.C. If necessary, additional reasonable precautions could be worked out with the local and District offices. It would be unnecessary to reopen the existing Title V permit to include this activity, if exempt.

2. Big Bend Gasification "Slag": Big Bend Station supplies coal to the Polk Gasification Project. Apparently, the gasification process is not converting all of the carbon and is leaving a residual slag material that has a substantial heat content (3000 to 5000 BTU/lb). This material was being trucked back to the Big Bend Station and being fired in the coal boilers, approximately 210 TPD (dry). It sounded like this had been going on since 1997 until HEPC recently observed the slag material on site. It is very fine, which makes it difficult to control the fugitive emissions. TECO estimates that the fugitive particulate matter emissions are less than 3 TPY for material handling and storage. According to a report jointly published by TECO and DOE, the slag material is nonhazardous and nonleachable and is suitable for use as abrasives, roof material, industrial filler, concrete aggregate, or road base material. This report also mentions that the Polk site has the ability to store at least 2 1/2 years of accumulated material with a contingency to store an additional 2 1/2 years of material, if necessary. HEPC issued a Warning Letter requesting Big Bend to stop firing the slag material until the activity was reviewed and proper authorization obtained. TECO has been hauling away the slag to a landfill, which costs about \$12,000 per day. HEPC and the District office believe that firing the material at Big Bend is a change in the method of operation and requires an air construction permit and a revision to the Title V permit.

Comments: From the information provided, we also believe that firing the slag material was a change in the method of operation. Proper authorization should be requested through the permitting process. It will be necessary to compare the past actual emissions before the change to "future" actual emissions after the change in order to determine whether PSD significant emissions increase occurred. This analysis is complicated by several items: "future" actual operational data exists (and should be used); the primary purpose is to get rid of the slag material with a secondary purpose of providing heat input as a fuel; the slag material would replace a certain equivalent amount of coal; and TECO is a utility steam-electric generating facility that is allowed to predict future actual emissions increases related only to the change, exclusive of other causes such as increased demand for electricity. If the change in the method of operation resulted in PSD significant emissions increases, then a PSD permit is required from the New Source Review Section. If the change did not trigger PSD, then a minor source air construction permit is required. The minor source air construction permit could be processed independently from, or simultaneously with, the Title V revision depending on TECO's request. Currently, minor source air construction permits for utilities holding Title V permits are being processed by the Title V section. However, we request that the application be sent to the Bureau of Air Regulation so that we may expedite the request based on current work load. In the mean time, storage of the slag material on site at Big Bend could be adequately addressed in any settlement with HEPC.

Let me know if you have any questions.

Thanks!

Jeff Koerner  
New Source Review Section