

TO: Russ Blackburn, City Manager
VIA: Steven J. Dush, Planning and Development Services Director
FROM: John Hendrix, Environmental Coordinator
DATE: February 24, 2014
SUBJECT: Gainesville Renewable Energy Center – Petition for Modification (MOD A)
To Site Certification (PA 09-55)

The petition for Modification (Mod A) to the Conditions of Certification (PA 09-55) for the Gainesville Renewable Energy Center (GREC), issued December 15, 2010, has been reviewed by a team of stakeholder regulators through my coordination, with emphasis on assessment of technical environmental considerations. The regulatory stakeholder team participating in the review consisted of John Stanton, Assistant General Manager, Energy Supply, Gainesville Regional Utilities (GRU); John Mousa, Pollution Prevention Manager, and Gus Olmos, Water Resources Manager, with Alachua County Environmental Protection Department (ACEPD); John Hendrix, Environmental Coordinator, City of Gainesville; and by phone interview and email, Robert Bull, Professional Engineer II and Cindy Mulkey, Program Administrator, Siting Coordination Office, and Richard Tedder, Administrator, Solid Waste Section, Florida Department of Environmental Regulation (FDEP) Tallahassee; and Thomas Davis, Principal Engineer, Environmental Consulting & Technology, Inc. (ECT), agent for GREC.

The petition was initiated by letter dated February 4, 2014, from Cindy Mulkey, FDEP Siting Coordination Office, to James Gordon, GREC LLC, informing Mr. Gordon of FDEP's intention to modify Sections B.I.C. and B.I.D. of the certification conditions, based on the Department's repeal of Chapter 62-702, Florida Administrative Code, in 2012, and on the Legislature's adoption of Section 403.7047, Florida Statutes, in 2013, which encourages the beneficial use of ash generated by electrical power plants. The letter concludes that the certification conditions which reference the requirement that GREC comply with the provisions of Chapter 62-702 are no longer applicable due to the repeal, and that Sections B.I.C. and B.I.D. unnecessarily restrict GREC's ability to reuse ash, contrary to state policy, even though the cited new statute (Section 403.7047) does not directly apply to GREC. The letter encourages GREC, LLC, to provide relevant information relating to the modification of these conditions.

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A response to FDEP was provided by letter dated February 6, 2014, from Thomas Davis, ECT, consultant/agent for GREC. The ECT letter supported the intent and conclusions of the FDEP letter, and expanded on the Florida Legislature's rationale for the reuse and recycling of fossil fuel ash, with the similar conclusion that the policies of the new statute would be equally applicable to the reuse and recycling of biomass ash. The response included GREC's proposed revisions to the language of Certification Conditions, Sections B.I.C. and B.I.D. An example of a potential beneficial use of GREC's ash in cement manufacturing was mentioned in the response, although GREC emphasized that it is not proposing or seeking approval of any specific beneficial use.

Subsequently, FDEP reviewed and made revisions to the GREC proposal and Robert Bull with FDEP Site Certification forwarded the petition to stakeholders by email on February 18, with clarifications on February 19 and February 20. The correspondence solicited comments and requests for additional information, with a completeness review expiration of March 4, 2014. A Notice of Intent is expected to be issued shortly thereafter which would incorporate current revisions accepted by the Department, and a further comment opportunity will be extended to stakeholders and the general public through the notice.

The subject City-coordinated technical review was initiated on February 18, through communication by John Hendrix with John Stanton. On February 19, John Hendrix communicated by email and by phone with Cindy Mulkey, Robert Bull, and Richard Tedder, FDEP Tallahassee. A meeting with Mr. Stanton, John Mousa, and Gus Olmos was held on February 19, and the detail of the proposed modification language was examined. Communication with Thomas Davis was initiated by John Hendrix by phone on February 20, and further email communication correspondence was conducted with the same FDEP representatives to conclude the coordination.

Based on the information provided by the Florida Department of Environmental Protection, it is the consensus opinion of the regulatory stakeholder review team that the proposed petition language does not pose substantial change to the existing certification conditions of the Gainesville Renewable Energy Center. The petition simply adds the option for other regulated beneficial uses of wood ash resulting from clean wood fuel energy generation. No change is proposed which would relax the management requirement for quality control of the incoming fuel stream, or in the

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testing of ash to monitor regulated waste characteristic prior to use. The proposed change that acceptable biomass fuel *will not include any form of treated, painted, or coated wood or construction or demolition debris* is a specification that strengthens the requirement for clean wood fuel, a key requirement that is not new to the certification, but which is reinforced by this language. A further specification for clean wood fuel might also appropriately include wood which is free of glue, filler, tar, asphalt, or other wood preservatives, which are other descriptors listed in a FDEP policy memorandum dated April 4, 2002, related to management of ash. The review team recommends inclusion of the phrase *however, bottom ash shall not be used as a soil supplement* in the proposed FDEP draft (Condition B.I.D.5.), to further clarify the protections relating to existing allowable ash use in land application, as well as for other beneficial uses, as proposed. In summary, the petition is a state-initiated request for condition modifications, for the purpose of updating rule references in the GREC certification conditions, and is part of a broad implementation of state legislative policy encouraging beneficial use of ash from power plant facilities.

Enclosure

cc: John Stanton, Assistant General Manager, Energy Supply, Gainesville Regional Utilities

John Mousa, Pollution Prevention Manager, Alachua County Environmental Protection Department (ACEPD)

Gus Olmos, Water Resources Manager, ACEPD

Richard Tedder, Environmental Administrator, Solid Waste Section, Florida Department of Environmental Regulation (FDEP)

Thomas Davis, Principal Engineer, Environmental Consulting & Technology, Inc.

Cindy Mulkey, Program Administrator, Siting Coordination Office, FDEP

Robert Bull, Professional Engineer II, Siting Coordination Office, FDEP

Revisions recommended by City of Gainesville's regulatory stakeholder review committee in red.

C. Solid Waste General

1. All solid waste generated from the site during operation including: bottom-ash from the boiler; solids/sludges from the water (process and waste) treatment facilities; used oil/sludges collected from the oil/water separator; spent lubricating oils; used oil filters; and related used petroleum products shall be collected in vendor provided or other suitable containers and transported offsite for disposal or reuse at a facility that is permitted to receive such materials in a permitted landfill. ~~Transportation Management~~ and disposal of solid wastes shall be in accordance with applicable provisions of Chapters 62-701 and ~~62-702~~, F.A.C., and Chapter 403, F.S., and any specific requirements of the permitted landfill or facility receiving the waste.

2. The Licensee shall submit to the Department a best management practices plan for handling, transporting, and disposing of solid waste prior to commercial operation of the certified facility.

[Rule 62-4.030, F.A.C.]

D. Fly Ash

1. Fly ash and bottom ash generated from the BFB boiler shall be transported and temporarily stored on site in accordance with the design specifications provided in the GREC Application.

2. Fly ash that may be used as a soil supplement shall undergo an initial test according to the Toxicity Characteristic Leaching Procedure (or an alternate plan proposed by the Licensee and approved by the Department) prior to land application to assure the ash is not a characteristic hazardous waste.

[Rule 62-4.030, F.A.C.]

3. The results of the initial sampling shall be submitted to the Department for review within at least 30 days, prior to land application of any fly ash. If elevated levels of contaminants are discovered, the Department may require additional sampling.

[Rule 62-4.030, F.A.C.]

4. According to the Application, the biomass fuel will be derived primarily from forest residue and urban wood waste which is free of glue, filler, tar, asphalt or other wood preservatives, and will not include any form of treated, painted, or coated wood or construction and demolition debris. If there is a material change in the fuel or fuel supply, the Department shall be notified and additional sampling of fly ash may be required before it is used as a soil supplement.

[Rule 62-4.030, F.A.C.]

5. Fly ash and bottom ash from clean woody biomass fuel may be recycled or reused for any beneficial purpose, subject to the requirements in Chapter 403, F.S., and applicable rules of the Department, **however, bottom ash shall not be used as a soil supplement.**

6. ~~5.~~ Fly ash and bottom ash ~~that is not used as a soil supplement~~ shall be transported offsite in covered trucks and disposed of in a permitted landfill, unless the fly ash and/or bottom ash will be recycled or beneficially reused. Transportation, ~~and~~ disposal and/or reuse of fly ash and bottom ash shall be in accordance with applicable provisions of Chapter 62-701 ~~and 702~~, F.A.C., Chapter 403, F.S., and any specific requirements of the permitted landfill or other facility receiving the waste.

7. ~~6.~~ Reasonable precautions pursuant to F.A.C. Rule 62-296.320(4)(c) shall be taken to control fugitive particulate at the site when loading/unloading and transporting fly ash and bottom ash.