

GREC Biomass Plant - Inspection September 12, 2013
Report to the County Manager Regarding Noise
by Richard E. Wolf, Assistant Director – Growth Management
September 16, 2013

INTRODUCTION

Beginning in the latter part of August complaints were received by the county from citizens located in the Turkey Creek subdivision within the incorporated City of Alachua stating that noise was being generated by the GREC Facility that was disturbing their neighborhood. This was reported in the regular morning County Commission Meeting of August 27, 2013, by Commissioner Lee Pinkoson who requested the County Manager schedule this topic to be discussed at an upcoming policy meeting.

In addition there were media articles covering this issue included in the August 29, 2013 Gainesville Sun, "GREC sparks noise complaints", September 4, 2013 WCBJ-TV20, "Turkey Creek Residents Express Concern Over Biomass Noise", and September 6, 2013 Alligator, "Biomass plant vicinity generates noise complaints".

This report is in response to a request by the Board of County Commissioners to provide information regarding citizen complaints about noise alleged to have come from the GREC Biomass Power Generation Plant located in the City of Gainesville adjacent to the GRU Deerhaven Power Plant on US Highway 441. In the County Manager Staff meeting of September 4, 2013, Rick Wolf, Assistant Director of the Growth Management Department was identified as the point of contact for concerns about noise from the new Biomass Facility.

JURISDICTION AND NOISE REGULATIONS

The location of the GREC Biomass Power Plant is within close proximity to three different local government jurisdictions including the City of Gainesville, the City of Alachua, and unincorporated Alachua County. The GREC Plant location is at 11201 NW US Highway 441 on Tax Parcel 05884-001-005 and the property is owned by the City of Gainesville. This property falls within the corporate limits of the City of Gainesville. The closest residential property, located to the west and southwest of the facility across US Highway 441, which includes the Turkey Creek subdivision, is within the corporate limits of the City of Alachua. Directly to the west of the GREC Facility is the Alachua County "Hague" Public Works Complex which is in unincorporated Alachua County.

In general it can be stated that nuisance noise regulations have been the responsibility of local governments as the Federal Environmental Protection Agency has passed this task on to the States, and the State of Florida has designated this authority to local governments. The primary exception to this is the enforcement of workplace noise regulations under federal OSHA standards.

Since the GREC Facility falls within the municipal boundaries of the City of Gainesville, the applicable noise standard for this operation is the City of Gainesville Noise Ordinance found in Chapter 15 of the City of Gainesville Municipal Code.

The Alachua County Noise Ordinance found in Chapter 110 of the Alachua County Code provides the territorial jurisdiction in Section 110.12 which essentially states that the ordinance applies to noises in the unincorporated area of the county only, except that if a noise is generated in a municipality and emanates into the unincorporated area of the county in violation of the County Code then the County Sheriff's Office shall have jurisdiction.

There was no documentation of a noise ordinance for the City of Alachua found in a search of the City of Alachua Code of Ordinances on Municode.

Noise Standards in the City of Gainesville Noise Ordinance should be the primary noise regulations applied since the GREC Facility is with the City of Gainesville municipal boundaries. There is no residential property in close proximity to the GREC Plant within the unincorporated area of Alachua County so enforcement of the county noise ordinance is not applicable. Alachua County would not have jurisdiction under the county ordinance to enforce noise regulations within the City of Alachua or within the City of Gainesville corporate boundaries.

INSPECTION

On September 12, 2013 from approximately 11:30AM to 1:30PM, Alachua County Staff members met with GREC Plant representatives and took an inspection tour of the facility while in operation. Staff included Chris Bird - Environmental Protection Director, Michael Fay – Acting Public Works Director, Mark Sexton – Communications Coordinator, Gus Olmos – EPD Hazardous Materials, and Rick Wolf – Growth Management Assistant Director. Representatives for GREC included: Karin Hyler, GREC Project Administrator, Russell Abel – GREC Plant Manager, Robert Donahoe, Environmental Management Inc., and others representing the plant owner and contractor. Karin Hyler provided a brief history of the project as it entered the operational testing phase prior to full operation. She advised that the first noise complaint received by GREC was on August 21, 2013. They are currently doing extensive testing and tweaking of operational procedures to commission the plant. This has included startups and changes in certain activities which will not be the norm during full operation.

As a result of the noise complaints they have hired a local environmental engineering firm - ECT, Inc. to work with their environmental consultant to provide a detailed noise analysis. The consultants completed an ambient background level assessment on August 26, 2013, while the plant was not in operation which include noise level readings at the property line, 200 feet beyond the property line and in the Turkey Creek subdivision in the vicinity of the noise complainants. On the evening of August 29, 2013, noise level measurements were taken at the same locations while the plant was in operation. According to Robert Donahoe, preliminary indications are that the noise levels were in compliance with the City of Gainesville's noise regulations, however further analysis and a detail assessment will be completed. Additional noise monitoring was scheduled for the evening of September 13th but had to be postponed because the plant was brought off-line that afternoon in order to make plant performance

adjustments which will take approximately five days. Ms. Hyler has advised that they are keeping a log of all noise complaints and documenting the date and times. She further advised that one such incident reported was alleged at a time when the plant was not operating. Robert Donahoe advised that they are looking at other possible noise source issues and are working to reduce them. An example is the Deaerator Vents, a system used to remove oxygen in the feed water. During testing they lowered the air pressure (psi) on this system which significantly lowered noise levels without impacting operations.

As part of the Site Certification Application GREC completed a Noise Modeling Analysis to assess the impacts of noise. The noise modeling was done with acceptable procedures and protocols using state-of-the-art noise prediction software. The noise model provided identification of potential major noise sources and their projected noise levels and stationed receivers to determine compliance with the City of Gainesville Noise requirements. This analysis concluded that the "GREC operations will not have any significant impact on the nearest residential development to the GREC Site" and that all predicted noise levels are well below the applicable City of Gainesville maximum allowed noise levels for day and night.

PRELIMINARY FINDINGS

It was apparent from the inspection on September 12, 2013, that there are several sources of noise occurring at the GREC Biomass Facility of different frequencies, duration and loudness. This is to be expected from an industrial operation of this type. Testing and startup operations may provide different noise levels than anticipated from normal ongoing operations. Noise sources detected at the facility included the truck /fuel unloading operation, the conveyor systems and reclaimer, the dust collectors, the deaerator vents, the boiler, and the water cooling towers. The primary noises observed on a continuing basis during the inspection was the high pitched "squeaking" generated from the reclaimer and conveyor belts, and a low pitched constant "humming" believed to be from a combination of sources. The noise was similar to a fan, water flowing or an engine running and would require detailed analysis to separate. While the noise directly around the facility was at a level making it difficult to conduct normal conversation, it was not extremely loud or uncomfortable. Based on preliminary noise levels readings taken by the consultant on August 29, 2013 it appears that the noise levels generated by this facility are within acceptable standards of the City of Gainesville Noise Ordinance. However this is one snapshot in time and more monitoring and analysis needs to be done.

There are several influencing factors to be considered when determining the impacts to the adjacent properties and particularly the residential property to the west and southwest known as Turkey Creek. These include weather conditions, ambient background noise levels, other noise sources, sound reflection, etc. It should be noted that although noise levels may be audible (physically detectable) within the Turkey Creek residential area during certain periods, this does not mean that they would be in violation of the City of Gainesville or Alachua County Noise Ordinance (by exceeding specified decibel levels). The important thing to note is that the GREC Facility is at this time cooperative and wanting to resolve any and all significant noise impacts to the nearest residential development and surrounding property owners and are working at this time to isolate noise sources and initiate corrective action. There are abatement and attenuation procedures that can be accomplished to further resolve this issue.

RECOMMENDATIONS

1. Develop strong communication channels between nearby community residents and the project manager of the biomass facility to ensure that any and all noise complaints are quickly and expediently reported, analyzed, and resolved.

GREC Project Administrator Karin Hyler, in meeting with County Staff has demonstrated a willingness to communicate with the surrounding neighbors and to resolve the noise issues. Ms. Hyler has logged and followed up on all complaints received to-date and has responded to citizens in the Turkey Creek neighborhood advising them of actions currently being taken to resolve the issues. A letter from Al Morales GREC Managing Director has also gone out to complainants summarizing things they are doing in response to the noise complaints. During this startup period and testing prior to normal operations there are several activities that may not be the noise levels anticipated during normal operations. Communications can help determine the problem areas and get them rectified. Efforts are underway to mitigate operational noise. **Contact Karin Hyler at (386)315-8017** or email at khyler@amrenewables.com

County staff has also recommended to GREC and specifically to Robert Donahoe that current noise tests being undertaken should include a post prediction modeling analysis comparing the noise source data projected in the model or anticipated to that of actual operations during testing. This could help isolate any unanticipated noise levels or levels not within manufacturing specifications for various noise sources.

2. Report all Noise Complaints to the City of Gainesville Police Department since it is the City of Gainesville that has legal jurisdiction over this matter.

The City of Gainesville Police Department website in their FAQ page provides information on **“What should I do about a noise complaint?”**

Contact the Gainesville Police Department at (352) 955-1818 and give the call taker the location where the noise is coming from and what type of noise it is. An officer will respond to determine if the noise violates current noise ordinance provision. If a violation is verified, the offender may be warned or cited, depending on how many times the site is visited and a violation observed within the time frame specified by City Ordinance. The complainant does not need to agree to have the officer contact him/her during the investigation of the noise complaint. By promptly reporting noise complaints to the City of Gainesville Police Department, dates and times are documented which can be compared to GREC Biomass Plant operations to further isolate and correct any noise issues.

These two points of contact should be utilized for noise complaints related to the GREC Biomass Plant based on jurisdiction, and ability to provide corrective action.