

the use of a mesh pad scrubber, post-compression cooling, and gas reheating downstream of the filter. According to several previous U.S. Environmental Protection Agency (EPA) determinations, a landfill gas processing operation that includes filtration to ten microns or less, dewatering, and compression constitutes treatment in accordance with provisions in 40 CFR §60.752(b)(2)(iii)(C). Since the gas processing operation at the Springhill Regional Landfill include all of the necessary steps cited in EPA's previous determinations, it qualifies as a treatment system for Subpart WWW purposes, and the treated gas leaving the system will no longer be subject to control requirements under the rule.

If you have any questions about the determination provided in this letter, please contact Mr. David McNeal of the EPA Region 4 staff at (404) 562-9102.

Sincerely,



Beverly H. Banister

Director

Air, Pesticides and Toxics

Management Division

Enclosure – Waste Management determination request



WASTE MANAGEMENT

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January 31, 2005

Ms. Beverly Spragg, Chief
United States Environmental Protection Agency – Region 4
Air Pesticides, and Toxics Management Division - Air Enforcement Branch
Atlanta Federal Center, 61 Forsyth Street
Atlanta, GA 30303

RE: Waste Management of Leon County, Inc.
Springhill Regional Landfill
Campbellton, Jackson County, Florida

SUBJECT: NSPS Applicability Determination – Treatment System
Permit No. 0630045-004-AV

Dear Ms. Spragg:

The Springhill Regional Landfill, operated by Waste Management of Leon County, Inc. (Waste Management) is subject to the New Source Performance Standards for Municipal Solid Waste Landfills (40 CFR 60 Subpart WWW). Collected landfill gas will be sent to an energy recovery plant, where the gas will be combusted in reciprocating internal combustion engines (IC engines) for beneficial use.

Waste Management is requesting an NSPS applicability determination on whether the processes that will occur at the landfill gas recovery plant prior to combustion of the gas in the IC engines will meet the requirements for a “treatment system” in 40 CFR 60.752(b)(2)(iii)(C). Should USEPA concur with this determination, the engines planned to combust the treated gas would not be subject to the control requirements of 40 CFR 60.752(b)(2)(iii)(B).

There have been several recent applicability determinations of a similar nature posted on the EPA’s CAA Applicability Index web page, due to the EPA’s proposed definition for “treatment system” contained in a May 23, 2002 Federal Register Notice of proposed rulemaking. [See 67 FR 36480]. Specifically, the EPA has proposed to add a definition for treatment system to the Landfill NSPS as follows:

“Treatment system means a system that filters, de-waters and compresses landfill gas.”

In the preamble to the proposed regulations, the EPA includes the following statements about the proposed definition of “treatment system”:

“At a minimum, the system must filter landfill gas using a dry filter or similar device (e.g., impaction, interception or diffusion device). The filter should reduce particulate matter in the gas stream. This will prolong the life of the combustion device and decrease the buildup of material on combustion device internals, which will support good combustion. Good combustion is essential to ensuring the proper destruction of NMOC. In addition, the system must de-water landfill gas using chillers or other dehydration equipment. The de-watering equipment should reduce moisture

content of the gas, which will maintain low water content in the gas and will prevent degradation of combustion efficiencies. Finally, the system must compress landfill gas using gas blowers or similar devices. Compression should further reduce the moisture content of the gas and raise gas pressure to the level required by the end use combustion device.”

Waste Management believes that the treatment of the landfill gas in the plant prior to its combustion in the engines does indeed meet the EPA’s proposed definition of “treatment system”. The attached process flow diagram includes a complete layout and description of the gas recovery plant from the time the raw gas enters from the landfill, until its combustion in the engines. As indicated in the diagram and accompanying process description, the recovery plant does contain filtration, dewatering and compression equipment as described in the proposed NSPS rulemaking.

We would appreciate your expedited review and response to this applicability determination request. It is our understanding that if a gas recovery plant is indeed determined to meet the “treatment system” definition, the combustion devices burning the treated landfill gas would not be subject to either the NSPS or NESHAP requirements. The collection and treatment systems (and any flares burning untreated landfill gas) would still be required to have a Startup, Shutdown, Malfunction plan (SSM plan).

Please contact me at (850) 263-5950 if you have any questions regarding this applicability determination request.

Sincerely,
Waste Management of Leon County, Inc.



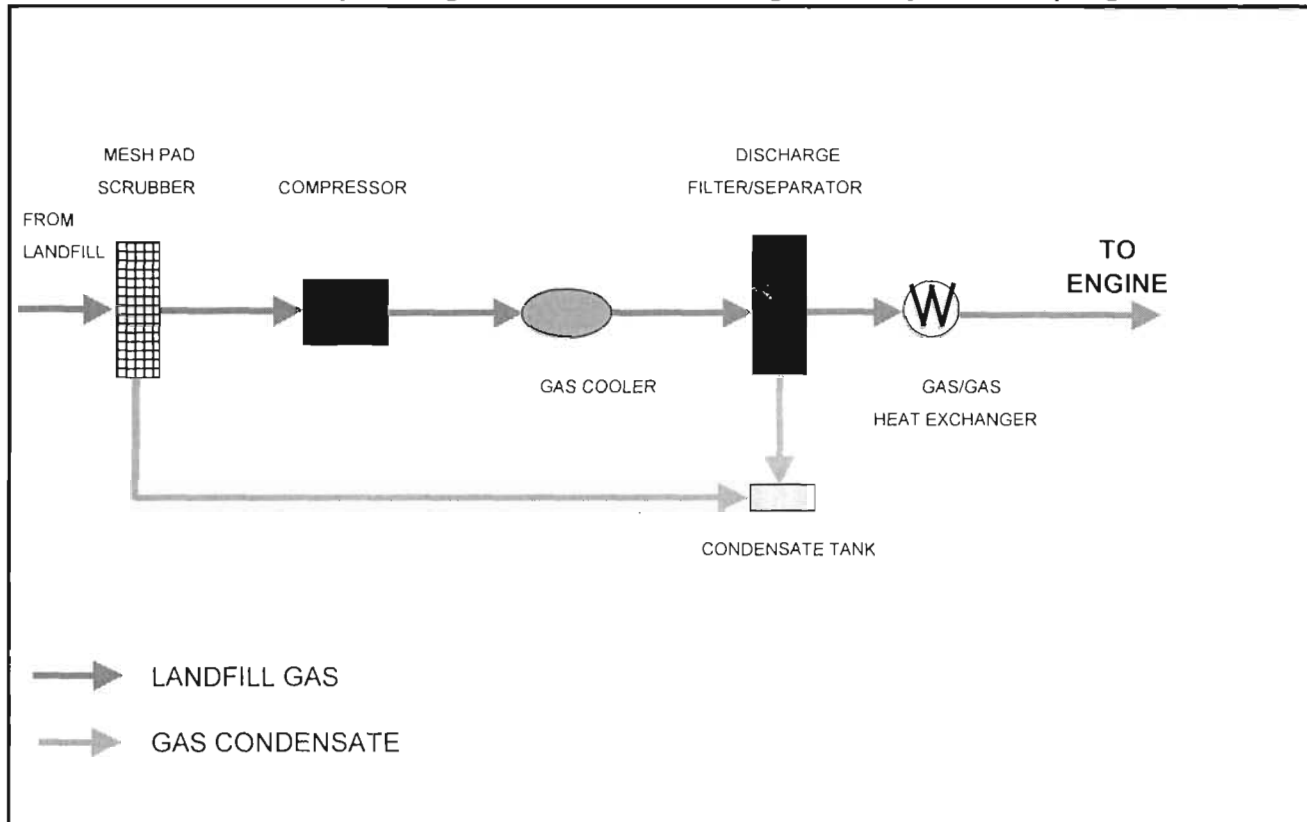
Achaya Kelapanda
District Manager

Enclosure: As Noted



FUEL GAS COMPRESSOR FLOW DIAGRAM

Reciprocating Internal Combustion Engine Facility - Future Springhill Plant



PROCESS DESCRIPTION

Landfill gas (LFG) will enter the fuel gas compressor through the Mesh Pad Scrubber where liquids will be knocked out of the gas stream.

The LFG will then be compressed up to the working pressure required by the engines (approximately 6 psig). During compression, the temperature of the gas will be raised to above the dew point.

After the gas has been compressed, it will be cooled in an air-exchange cooler, in order to reduce the amount of water vapor present.

Next, particulates will be knocked out by the discharge filter/ separator. The filter size will be a maximum of 10 microns. Liquids will be removed at this point and sent to a condensate storage tank.

After liquids and other impurities have been removed, the LFG will pass through a Gas/Gas Heat Exchanger. The gas will be reheated in the exchanger to approximately 20 °F above its dew point in order to prevent condensation of liquids in the piping or engine fuel system.