

MEMORANDUM

DATE: February 9, 2010

TO: Board of County Commissioners

FROM: Jose E. Larrañaga, Commercial Development Case Manager

VIA: Jack Kolkmeier, Land Use Administrator
Shelley Cobau, Building and Development Services Manager
Wayne Dalton, Building and Development Services Supervisor

FILE REF.: BCC CASE # VAR/MIS 10-5020 Caja Del Rio Landfill Variance and Information Regarding the Gas Collection System.

ISSUE:

The Santa Fe Solid Waste Management Agency, Applicant, is requesting a variance of Article III, Section 2.3.6 of the Land Development Code to allow a thirty foot (30') stack structure required as part of a Federally Mandated System for methane mitigation at the Caja Del Rio Landfill.

The subject property is located at 149 Wildlife Way, via County Road 62, within Section 22 & 27, Township 17 North, Range 8 East, Santa Fe County, (Commission District 2).

SUMMARY:

The Caja Del Rio Landfill site is owned and overseen by the Santa Fe Solid Waste Management Agency (SWMA), a governmental agency with a Board of Directors made up of County Commissioners and City Councilors. The Caja Del Rio Landfill became operational in 1997 and is subject to Federal New Source Performance Standard (NSPS) Rule (Exhibit "H"). Pursuant to NSPS requirements (on the current calculated land fill emissions) the landfill is subject to installing a gas collection and control system. The Federal requirements mandate the gas collection and control system is operational by April of 2010 (Exhibit "A"). The methane gas (a powerful greenhouse gas) is generated by the natural degradation of waste within the landfill. The system to be installed will collect and destroy some ninety nine (99%) percent of the methane gas.

A combustion device is required to destroy the methane gas collected by the system. The combustion devices considered at this site included an open flare, an enclosed flare or a generator

that runs on the landfill gas which would create electricity to be used on site. SWMA commissioned a landfill gas to energy study to determine if the installation of an engine plant for power generation was feasible. The study determined that the landfill did not generate enough methane gas to operate and justify the cost of such a plant. SWMA determined that an enclosed flare was the most cost efficient combustion device for the elimination of the methane gas collected on the landfill site.

The proposed flare will be enclosed by what is referred to as a “stack” (Exhibits “F”). The stack height is specifically designed around the burner configuration and the anticipated landfill gas heat output for proper combustion. The stack covers the burners (flare) and ensures that the flame is not visible by the surrounding area (Exhibit “G”).

SWMA submitted construction plans (Exhibit “E”) for the system to be installed at the landfill site to the Building and Development Services Department. During plan review, Staff discovered the proposed stack exceeded the maximum height permitted in the Land Development Code. The proposed height of the stack is thirty feet (30’) therefore the Applicant is requesting a variance of Article III, Section 2.3.6 of the Land Development Code.

Article III, 2.3.6b. States: The height of any dwelling or residential accessory structure shall not exceed twenty-four feet (24’). The vertical depth of fill materials from the natural grade, with or without retaining walls, shall be considered as a component of the building or structure; this depth shall be included in the determination of building height (Exhibit “I”).

Article II, Section 3 States: Where in the case of proposed development, it can be shown that strict compliance with the requirements of the Code would result in extraordinary hardship to the Applicant because of unusual topography or other such non-self-inflicted conditions or that these conditions would result in inhibiting the achievement of the purposes of the Code, an applicant may file a written request for a variance (Exhibit “J”).

REQUIRED ACTION:

The BCC should review the attached material and consider the recommendation of staff, take action to approve, deny, approve with conditions or table for further analysis of this request.

RECOMMENDATION:

Staff has reviewed this application and has found the following facts to support this submittal: the requested height is the minimum height necessary for the proposed gas collection and control system to function properly; the stack height is specifically designed around the burner configuration and the anticipated landfill gas heat output for proper combustion; the height of the stack ensures that the flame would not be visible by the surrounding area and will not impact neighboring properties; the gas collection and control system, as designed, will allow the landfill to meet Federal requirements.

Staff’s review of the Applicant’s request has established findings that literal enforcement of Article III, Section 2.3.6b would be contrary to the public interest and the purpose of the Land Development Code. Strict compliance with the requirements of the Code could create a hazard and jeopardize the

health and safety of the county and its inhabitants. The Federal mandate associated with the site is a non-self-inflicted condition. Granting a variance to allow the height of the stack for the purpose of a gas collection and control system would be considered a minimal easing of the code and would result in achieving the purposes of the Code. Staff recommends **approval** of the Applicant's request for a variance of Article III, Section 2.3.6b to allow a thirty foot (30') structure needed to mitigate the methane gas within the landfill site.

ATTACHMENTS:

- Exhibit "A" – Letter of Intent
- Exhibit "B" – Vicinity Map
- Exhibit "C" – Aerial of Site
- Exhibit "D"- Narrative of Construction
- Exhibit "E" – Construction Drawings
- Exhibit "F" – Photo of stack
- Exhibit "G" – Drawing of stack
- Exhibit "H" - Federal Regulations (60.33c)
- Exhibit "I" – Article III, Section 2.3.6b
- Exhibit "J" – Article II, Section 3
- Exhibit "K" – Anatomy of a Landfill