



Senate Committee on Natural Resources & Energy
Vermont State House
115 State Street
Montpelier, VT 05633

January 29, 2018

RE: Follow up Testimony on S. 285; An Act Relating to Universal Recycling Requirements

Dear Chairman Bray, and Honorable Members of the Senate Committee on Natural Resources and Energy,

The purpose of this letter is to provide the Committee with factual information regarding the landfill gas collection system operations at the landfill located in Coventry, Vermont.

On January 24, 2018, the Solid Waste Program Manager for the Agency of Natural Resources (Agency), testified before the Committee on S. 285. During the testimony, the Agency stated that landfill gas is not captured until the landfill has either a plastic temporary cap or a final cap in place. The Agency also stated that it could be six months to a year and a half before a temporary cap or final cap is in place. We wish to clarify these points.

A subsidiary of Casella, New England Waste Services of Vermont, Inc. (NEWSVT), owns and operates the landfill located in Coventry, VT. The footprint of waste placement at the landfill consists of 73.8 acres. Of the 73.8 acres, 40.1 acres has no plastic temporary cap or final cap and does have active landfill gas collection. Active landfill gas collection can occur in uncapped areas of the facility. Only 4.3 acres of area at the site referred to as the "active working area" does not have gas collection, and it will be installed when that area is no longer accepting waste. Attached is a site plan of NEWSVT entitled "Existing Gas Collection Systems Plan" for your reference. The area in blue depicts the active working area. NEWSVT will begin expanding the active gas collection system into the blue shaded area this year.

Also relayed to your Committee was some potentially misleading information relative to greenhouse gas emissions from the landfill. Some of the testimony provided might lead you to believe that all the gas from the landfill is being emitted in to the atmosphere, and is significantly contributing to greenhouse gas emissions. The table below provides specifics related to gas emission at the facility:

Landfill Coverage Type	Acres	Landfill Gas Capture Efficiency
Daily Cover (6" soil)	4.3	60%
Intermediate Cover (12" soil)	40.1	75%
Plastic Cover	29.4	95%

While Casella acknowledges that the gas collection system at NEWSVT operates at around 80% collection efficiency, there are also fugitive emissions released from anaerobic digesters and composting operations located around the state. The DSM Environmental study prepared for the State of Delaware Solid Waste Authority dated September 2017, entitled "Analysis of Organics Diversion Alternatives" states:

"..while there are soil productivity reasons for diverting food waste from landfills, the GHG emission impacts associated with capturing the energy inherent in the food waste through a dedicated anaerobic digester, compared to landfilling the same organic materials with capture of the majority of methane generated by the landfill are relatively minor, based on the emission factors and assumptions applied within the WARM model. They are also relatively minor for composting."

To further clarify, the installation of the active gas collection system does not occur only when a temporary plastic cap or final cap has been installed. Casella invests approximately \$300,000 annually on active gas collection infrastructure and system upgrades for both landfill gas emission control and to provide a steady stream of gas to the renewable energy production plant at the site.

Casella acknowledges that there are other types of waste (sludge, wood waste, etc.) received at the landfill that contribute to the production of landfill gas. We also recognize that a state-wide ban on food waste will be difficult for the Agency to enforce, and it is highly likely that food scraps will continue to be disposed of at the landfill. Casella also agrees that source reduction and food donations are the most sustainable approach to diverting food scraps from disposal and should be encouraged through continued outreach and education. However, implementing a state-wide ban accompanied with a mandatory food waste collection program represents both economic challenges and detrimental environmental impacts not consistent with our views of fostering an environmentally responsible state. Furthermore, encouraging additional investments and infrastructure in order to manage a waste stream that is currently being utilized to produce renewable energy for Vermonters 24 hours a day, 7 days a week, where significant investments have already been made, is not a wise sustainable approach.

Thank you for allowing Casella the opportunity to submit additional testimony in an effort to provide clarification on the operational procedures at NEWSVT related to the collection of landfill gas.

Sincerely,

A handwritten signature in black ink that reads "Kim Crosby". The signature is written in a cursive, flowing style.

Kim Crosby - Environmental Compliance Manager