

APPENDIX B

Odor Control Plan

SPSA proactively works to minimize odor associated with the operation of the Regional Landfill. Specific activities to reduce odor include:

- Covering incoming waste on a frequent basis
- Using odor neutralizing system when odor is detected and/or when the wind direction is toward surrounding residential areas
- Operating a gas collection system in Cell VI to flare or beneficially reuse methane gas
- Initiating the Odor Response Plan detailed in EMS SOP 1.33 when odor complaints are received.

I. Frequent Covering of Wastes

Virginia’s Solid Waste Management Regulations require that waste disposed of at a sanitary landfill be covered at the end of each operating day or at more frequent intervals as necessary to control disease vectors, fires, odors, blowing litter and scavenging. Because the Regional Landfill can operate on a 24-hour basis, per day with no official end to the operating day, SPSA has established a schedule for covering wastes to minimize odors. At minimum, daily cover will be applied during the evening shift. If the landfill is not operating on a 24 hour schedule, the landfill will cover waste at the end of the final operating shift each day. The Landfill and Environmental Superintendent or his designee will ensure there is sufficient cover material stockpiled on the working face before leaving each day. Upon his arrival the next day, he will verify that the working face was sufficiently covered. In addition, SPSA will continue its practice of covering highly putrescible wastes upon arrival. A trench will be dug to deposit the waste and cover material will be immediately applied.

II. Odor Neutralizing System

The Landfill and Environmental Superintendent or his designee will activate Odor Neutralizing System when odor is detected by landfill staff or the public beyond the property line or when the wind direction is toward surrounding residential areas as described in EMS SOP 1.33. The Landfill and Environmental Superintendent or his designee will monitor wind direction on a daily basis.

III. Gas Collection System

The existing gas collection system in Cell V has been expanded into Cell VI. There are four vaults in Cell VI. Vertical gas extraction wells were installed in Cell VI in general accordance with the Facility’s Landfill Gas Collection and Control System Design Plan as referenced in the Landfill Gas Management Plan. These wells are a part of the permanent collection system. Methane gas is continually withdrawn from all landfill cells and either burned by the existing flare or beneficially reused.

IV. Odor Response Plan

SPSA has a detailed Odor Response Plan to address odor complaints concerning any of its waste handling facilities. This plan is detailed in the attached EMS SOP 1.33. SPSA personnel have been trained on this procedure.

V. Odor Source ID at the SPSA Regional Landfill**A. Leachate Ponds**

Odor may be noted during the warmer months associated with the leachate ponds. Staff will confirm that all systems are operational. Leachate conditions will be noted, mainly color. Deodorizer product may be added to the pond if an odor is determined to be coming from the leachate ponds.

B. Gas Collection System

If a positive vacuum condition exists at gas collection wells, a well may emit landfill gas (LFG). LFG may contain various compounds which could produce a malodor. If it is noted that a well does have a positive vacuum condition, the SPSA LFG Contractor will be notified and the well will be adjusted to a negative vacuum condition. The well field is inspected and adjusted on a weekly basis.

C. Leachate Collection Vaults

The leachate collection vaults may have odor associated with the collection of LFG and leachate. If odor is noted at a leachate collection vault, the vault will be checked for leaks and scheduled for repair. While conducting maintenance on pumps in the vaults, if a pump has to be pulled, the flange will be reset and tightened during the repair period.

D. Working Face

Based on the current Virginia Solid Waste Management Regulations, landfill staff currently are covering at better than the daily cover requirement. This condition will continue during periods which may produce increases in malodor, such as periods of heavy rain. In addition, cover material will be staged at the working face later in the day for ease of cover operations at close of business. All trash will be covered by the end of the day.