



FAY, SPOFFORD & THORNDIKE, LLC
5 BURLINGTON WOODS - BURLINGTON, MASSACHUSETTS 01803

Memorandum

To: Mr. Wayne Davies, Chairman
Hopkinton Board of Appeals

From: William C. Beyer, LSP

Date: April 27, 2004

RE: Long Term Monitoring & Hazardous Materials Management Plan
Materials Recovery and Recycling Facility

As requested, FST has completed a review of the Long-Term Monitoring Plan and responses to FST's comments of February 24, 2004 concerning the Hazardous Materials Management Plan. Submitted materials provided for this review included the following:

- Long-Term Monitoring Plan, dated March 15, 2004; written response letter dated April 6, 2004 to the Board of Appeals comments of March 17, 2004; Proposed Site Conditions Plan, revised April 2, 2004, each as prepared by Brown and Caldwell
- Technical Memorandum as prepared by Earth Tech, dated March 24, 2004 regarding the Long-Term Monitoring Plan.

Long-Term Monitoring Plan

FST notes the proposed long term monitoring plan states that it applies only to the old Westborough landfill and the old Westborough burn dump. We question if this plan excludes the existing landfill located in Hopkinton and recommend this issue be addressed by the applicant with the Board of Appeals.

In general, FST is in agreement with Earth Tech's Memorandum and would like to emphasize the following issues:

- The five "down gradient" monitoring wells are of questionable value. They were constructed in test pits that encountered solid waste, so are not completely down gradient. The method of construction is sub standard, making suspect the quality of samples from the wells. They should be replaced with properly constructed monitoring wells placed outside the zone of waste.
- They are all east of the landfill yet groundwater has been reported to flow north. Groundwater flow direction should be confirmed to ensure wells are placed down gradient.

- The aquifer thickness should be determined and bedrock evaluated as noted by Earth Tech
- Expanded sampling of the wetlands is recommended.
- Sampling should occur quarterly for one year and then be evaluated to determine if annual sampling is appropriate.

In summary, although a table of data for wells in the area of the existing Hopkinton landfill was presented, there is no further discussion of any monitoring for this landfill. FST cannot comment on the monitoring of the existing Hopkinton landfill, on the quality and reliability of the existing monitoring wells or on their adequacy to provide data for analysis of ground water characteristics.

Hazardous Materials Management Plan

As stated in the response letter of April 6, 2004 the applicant has agreed to meet with the Hopkinton Fire Marshall upon final design of the facility to finalize details of the Hazardous Materials Management Plan Department.

Groundwater Flow Studies

FST comments of February 14, 2004 remain unaddressed. As previously stated, FST can not provide an opinion upon the quality and reliability of the existing fourteen monitoring wells and whether they are adequate to make both quantitative and qualitative analysis of ground water flow.

Closed Landfill Cap

As stated in the response letter of April 6, 2004 the applicant has provided a proposed site condition plan identifying the proposed final grades and parking lot layout for the post closure use and further states that a independent review of the post closure plan will be performed by the DEP. We recommend status of this review by the DEP be discussed with the Board of Appeals.

The response letter also included a Landfill Cap Detail identifying the components of the revised cap and thickness of the various cap layers. The detail includes a 6 inch layer of clean common fill to establish the subgrade over the top of the landfill. Proposed material may be comprised of processed concrete rubble which has been approved by DEP as an acceptable material. We do note however the total thickness of the cap layer to be placed over the existing topsoil/grade is approximately 45 inches. Review of the proposed final grades as shown on the site plan do not reflect this condition. We recommend final grading within the landfill area be reviewed by the applicant.

Fueling Island

As previously stated by FST, the diesel tank is proposed to be in a below grade vault. Proposed tank installation will have to meet appropriate State regulations for spill and overfill protection, secondary containment and leak detection