

NorthEast Action Group

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October 5, 2005

Mr. Glenn Shankle, Executive Director
c/o Chief Clerk Office, MC 105
Texas Commission on
Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: MSW Permit 249 C - Permit Modification for Revision of the Gas
Management Plan for the WMT Austin Community Landfill (ACL)

Dear Mr. Shankle:

Following review of the little data available, we have serious concerns regarding the high methane gas concentrations recorded near heavily populated areas including a large flea market, a convenience store with gas pumps, and many other structures in close vicinity. The many H₂S odor complaints reported at the convenience store and in other parts of the site for several years now may be indicative of gases moving above ground. This gas exceedence problem has been a common occurrence at the ACL for years. The problems of a very old, poorly constructed, and poorly operated landfill are not being addressed by this patch modification. This site needs a comprehensive evaluation rather than more applications for expansion being filed.

The elevated gas concentrations exceeding explosive levels recorded in Gas Monitoring Probe P10 were very close to a large municipality water storage tank and next to a City of Austin utility line easement. A few years ago, exceedences of methane gas concentrations above explosive levels were also recorded in P9, a gas probe west of P10 and along the same utility line easement. This could indicate that methane migration is occurring at the ACL. There is no gas probe installed in the large expanse of the site between P9 and P10, a highly controversial pre-Subtitle D (1970s) landfill area commonly referred to as "Phase 1". P10 is also located nearby the old wet-weather area and downgradient from a primary area of concern at the ACL, the industrial waste unit with its 21,000 drums of industrial waste and bulk liquids buried in unlined pits underneath a mountain of garbage.

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Besides household and commercial wastes, millions of gallons of Class I liquid and semi-solid industrial wastes containing solvents and many other volatile chemicals were disposed in this immediate area well into the late 1970s with minimal closure requirements. Both the old wet-weather and Phase 1 areas lack engineered landfill caps and are covered with comparatively thin layers of native soil. The clay soils underlying all of these pre-Subtitle D areas are desiccated by their exposure to the various toxic industrial wastes that were disposed in that area some 30 years ago. Was an analysis of the concentrations of chemical solvents in the gas levels produced at P10 performed?

P10 is also located adjacent to another closed landfill site and along a creek drainage area indicating the presence of alluvial soils. Landfill gases from the above described disposal areas may preferentially move towards and along the utility lines surrounding the ACL site. Because these gases can migrate up to several hundred feet from the dump site, it could result in explosive levels of methane and concentrations of solvents above accepted concentration levels in nearby homes or buildings. Therefore, on-site and nearby structures should be evaluated further for potential infiltration of landfill gases.

Since methane produced within the landfill site will move from areas of higher pressure at depth within the landfill to areas of lower pressure near the surface at the periphery of the landfill or beyond, preferentially migrating along permeable paths of the least resistance, horizontal movement of landfill gases within the utility corridors, alluvial soils, and the desiccated clays underlying the ACL site, is practically unlimited. Does data characterizing landfill gas pressures within former disposal areas exist? Pressures at the perimeter of the landfill appear to be low.

The operator excavated a large area near the collection trench in order to determine the source of the gas. However, the source of the gas was never identified. This was definitely not a subtitle D area since very old waste from the 1970s and other unknowns were excavated. Was a modification filed to dispose of this "old" contaminated waste from an unpermitted area? Or did ACL use it as daily cover all over the site? What soils were backfilled into the excavated area? What is the level of the water table in the area? How far from the property line are the gas probes located? So much information is lacking concerning this time-bomb.

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With regard to methane gas production and migration, did ACL characterize the movement of landfill gas and whether such production and migration were influenced by: 1) zones within the landfill where municipal wastes were disposed; 2) soil stratigraphy at the ACL site; 3) depth to the water table; 4) the presence of buried utilities; and 5) proximity to residential and commercial structures to the ACL site?

ACL proposes to mitigate off-site gas migration by constructing a horizontal gas cut-off trench, installing a horizontal gas collection trench, installing one new perimeter gas monitoring probe (P27), and modifying the language and figures in the LFGMP. This plan is not really viable since several conditions exist in this area: 1) waste material from the adjacent closed landfill extends right up to the property line; 2) on-site soils may not support the trench walls causing them to cave readily due to the poor soils in this area of the site; and 3) a convenience store is located within short proximity (less than 200 feet) from this probe and putrid H₂S odors have been documented for years in this location indicating that off-site migration may be occurring.

We would like to request that the agency require ACL to pursue further investigation of this gas problem in order to determine the extent of the public health threat posed by possible off-site migration of these high concentrations of landfill gases and to determine if additional measures are needed to mitigate this potential hazard. ACL needs to develop a remediation plan to reduce or eliminate the potential for methane gas to migrate from the ACL site to adjacent off-site areas with occupied structures.

As part of the proposed modification to the Landfill Gas Management Plan, more landfill gas probes should be installed on the southern perimeter of the ACL site and additional gas monitoring should be conducted at these gas probes. Complete potential exposure pathways should be identified to protect visitors and more specifically children from exposure to landfill gases released to ambient air in the vicinity of the flea market, adverse health effects from inhaling the landfill gases, and the potential for the methane to accumulate in the nearby structures and/or residences and pose an explosion hazard. This plan should include:

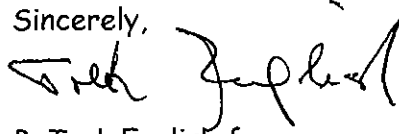
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- 1) a utility survey to identify potential landfill gas migration routes;
- 2) installation of additional gas probes around the landfill perimeter and in the vicinity of locations that have exhibited exceedences of the LEL during the investigation;
- 3) monitoring of these gas probes in four rounds of sampling to be carried out under varying atmospheric conditions at different times of the year;
- 4) use of a PID to identify the presence of additional volatile organic compounds;
- and 5) evaluation of landfill gas data to determine the need for further actions.

Additionally, due to the proximity of gas probes with methane levels in excess of the LEL to occupied structures near the ACL site, indoor air monitoring should be sampled at intervals for methane or organic vapors in neighboring occupied structures. As a further precaution, combustible gas indicators with alarms should be installed in some of these structures.

Finally, this site should be classified as an "indeterminate public health hazard" due to the possibility of exposure to site-related chemicals and the lack of data necessary to more fully characterize the hazards presented by the site.

Sincerely,



B. Trek English for
The NorthEast Action Group

and Joyce Best, NorthEast Action Group/Harris Branch
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cc. Travis County Judge Biscoe and Commissioners
City of Austin Mayor Wynn and Council Members
Representative Mark Strama
Representative Dawnna Dukes
Senator Gonzalo Barrientos