



## State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM  
BUREAU OF LANDFILL & HAZARDOUS WASTE PERMITTING

P.O. BOX 414 401E. STATE STREET  
TRENTON, NJ 08625-0414

TELEPHONE 609-984-6985 TELECOPIER 609-633-939

HTTP://WWW.STATE.NJ.US/DEP/DSHW3

CHRIS CHRISTIE  
*Governor*

KIM GUADAGNO  
*Lt. Governor*

BOB MARTIN  
*Commissioner*

JUN 23 2010

Daniel Burke, Township Engineer  
Township of Jackson  
Jackson Township Administration Building  
95 West Veterans Highway  
Jackson, New Jersey 08527

RE: Quarterly Gas Monitoring Report  
Jackson Township Landfill  
Ocean County, New Jersey  
Program Interest No. 132541

Dear Mr. Burke:

The Bureau of Landfill and Hazardous Waste Permitting (Bureau) conducted a site visit on Thursday June 17, 2010 to the Jackson Township Sanitary Landfill. The purpose of the site visit was to determine the status of the ongoing elevated levels of gas at the landfill. We want to thank you for your time and effort in accompanying my staff and I on our visit to the landfill and surrounding neighborhoods.

The Bureau is also in receipt of the quarterly landfill gas surveys dated March 10, 2009, February 10, 2010, and April 23, 2010. All three surveys indicate extremely high concentrations of combustible gas (methane) along the boundary of the Jackson Township Landfill and off site on adjacent properties.

The gas monitoring results dated March 10, 2009 showed the presence of combustible gas (100% of LEL) in monitoring wells numbered 8, 10, 12, 13, 15, 17, and 19 and survey point 11(a). Also, the gas monitoring results dated February 10, 2010 showed levels of combustible gas (100% of LEL) in monitoring wells numbered 12 and 13, survey points 8(a) and 15(a), and Flare (F-2). Gas monitoring results dated April 23, 2010 also showed a presence of combustible gas (100% of LEL) in monitoring wells numbered 8, 10, 12, 13, 15, 16, 17, 18, and 19, survey point 8(a) and Flare (F-2).

Based on gas monitoring conducted to date at this site, it is evident that some methane gas is migrating off-site towards the residential properties. This is despite the fact that a partial LFG collection system was constructed onsite on September 30, 2008. In correspondence during the last several years the Bureau requested that you take additional action to mitigate this problem. Considering that more than adequate time and opportunity has been allowed by this office for the

**received**  
JUN 23 2010

last several years the Bureau requested that you take additional action to mitigate this problem. Considering that more than adequate time and opportunity has been allowed by this office for the Township to take the necessary action, the Department now requires the following actions be taken to include, but not limited to, the following:

1. Monitoring of the landfill gas shall start on a monthly basis; reports of such monitoring are to be submitted within 30 days of collection of field data.

For all future gas monitoring events, please delineate the extent of combustible gas for each monitoring well where a concentration of any positive reading of the LEL is measured. To begin delineation, 3 additional points shall be monitored at a distance of 25 feet from the well. Two points, one on either side of the well, shall be located along a line approximately parallel to the limits of the landfill. Moving away from the landfill, the third point and the initial well shall form a line perpendicular to the limits of the landfill. If any combustible gas is found at any of these locations, 3 additional points, 25 feet apart and parallel to each other and perpendicular to the landfill, shall be monitored. This monitoring shall continue at 25-foot intervals, until all outer points indicate no combustible landfill gas is present. When no combustible gas is detected, go another 100 feet out and retest at that point for combustible gas.

The Bureau of Landfill and Hazardous Waste Permitting and the Bureau of Solid Waste Compliance and Enforcement shall be notified prior to testing at (609) 984-6985 and (609) 292-6305, respectively. The results shall be submitted within fifteen (15) days from the date of testing. If combustible gas above 25% of the LEL is found during the sampling event, you should immediately notify the Department at 877-WARNDEP and notify the Bureau of Landfill and Hazardous Waste Permitting at (609) 984-6985.

Please be advised that in accordance with N.J.A.C. 7:26-2A.7(f)3, when gas is detected at or in excess of 25 percent of LEL in any off-site area of human use or occupancy, a corrective action plan shall be immediately prepared and submitted to the Department for approval and implemented upon its approval. As such, Jackson Township shall prepare a corrective action plan, which fully addresses this problem, and submit it to the Department within thirty (30) days of the date of this letter.

The Bureau is kindly reminding Jackson Township that monitoring shall occur in the afternoon of days when atmospheric barometric pressure is falling and not rising. Barometric pressure is typically lower in the afternoon than in the morning hours. To verify that the barometric pressure is falling for at least 12 hours prior to testing, barometric pressures shall be reported in two-hour intervals over a period of twelve hours prior to sampling. A reading taken at 24 hours before the monitoring event shall also be reported.

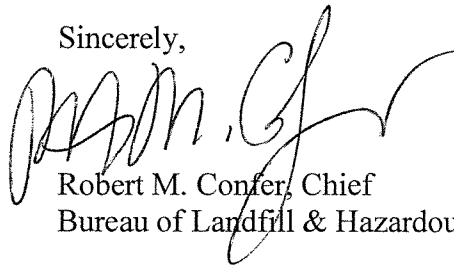
2. Jackson Township shall take immediate action to safeguard the adjacent properties by installing a gas mitigation trench near any property boundary where an inhabited structure is located within 1,000 feet of the landfill.

3. Immediately install methane monitors and alarms in all off-site buildings for human use or occupancy within 1,000 feet of the respective landfill boundary.
4. Jackson Township shall submit a site boundary map that shows all lot number(s), block number(s), addresses and names of owners all properties within 1,000 feet of the landfill boundary. Please note on map which structures are currently inhabited. We request this be submitted with the next monthly gas monitoring report.

By copy of this letter, we are asking the Department's Bureau of Solid Waste Compliance and Enforcement to take the appropriate immediate action in this regard.

If you have any questions regarding this matter, please contact Saara Ali of my staff at (609) 633-9593 or by e-mail at [saara.ali@dep.state.nj.us](mailto:saara.ali@dep.state.nj.us)

Sincerely,



Robert M. Confer, Chief  
Bureau of Landfill & Hazardous Waste Permitting

CC: Rai Belonzi, BSWCE  
Pat Ferraro, BSWCE  
Michael Gerchman, BLHWP  
Bryan Heller  
French & Parrello Associates, P.A., Consulting Engineers  
1800 Route 34, suite 101  
Wall, NJ 07719  
Ocean County Department of Health  
Ernest J. Kuhlwein, JR, Director of SW Management  
129 Hooper Ave  
P.O. Box 2191  
Toms River, NJ 08754

LG10-7452  
LG10-7773  
LG09-6098  
LG10-7590

DOC: gas monitoring report