



State of Ohio Environmental Protection Agency

STREET/ADDRESS.

Lazarus Government Center
122 S Front Street
Columbus, OH 43215-1099

TELE (614) 644-3020 FAX: (614) 644-2329

OHIO, E.P.A.

MAILING ADDRESS

P.O. Box 1049
Columbus, OH 43216-1049

DEC - 4 2002

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ENTERED DIRECTOR'S JOURNAL

Mr. Don Glauner
Service Director
City of Westlake
27216 Hilliard Boulevard
Westlake, Ohio 44145

**Re: Westlake Landfill, Cuyahoga County
Explosive Gas Monitoring Plan**

Dear Mr. Glauner:

On April 3, 1989, the Ohio Environmental Protection Agency (Ohio EPA) received the Explosive Gas Monitoring Plan, comprised of the *Explosive Gas Monitoring System Design, Westlake Landfill, Westlake, Ohio, dated March 31, 1989*, and *Explosive Gas Monitoring, Sampling, and Reporting Procedures, Westlake Landfill, Westlake, Cuyahoga County, Ohio, dated March 31, 1989* (Plan). The plan was prepared by SCS Engineers, on behalf of the City of Westlake.

The Plan was submitted pursuant to Ohio Administrative Code (OAC) Rule 3745-27-12, effective June 12, 1989. This rule requires the owner or operator of a closed landfill to submit an explosive gas monitoring plan to the director for approval.

Ohio EPA has reviewed the plan and found it to be in compliance with OAC Rule 3745-27-12, as effective June 12, 1989. Therefore, Ohio EPA approves the Explosive Gas Monitoring Plan for the closed Westlake Landfill with the following conditions:

Conditions

1. Pursuant to OAC Rule 3745-27-12(A)(6), the explosive gas threshold limit for each permanent and temporary monitor is either:
 - a. 100 percent of the lower explosive limit at the facility boundary, or
 - b. 25 percent of the lower explosive limit in structures within the facility boundary.
2. The owner or operator of the Warner Hill Landfill, upon the detection of explosive gas which equals or exceeds the explosive gas threshold limit in condition No. 1, shall:

I certify this to be a true and accurate copy of the original document as filed with the State of Ohio Environmental Protection Agency.

Bob Taft, Governor
Maureen O'Connor, Lieutenant Governor
Christopher Jones, Director

Zona L. Clemente, 12/4/02

- a. Take all necessary steps to ensure protection of human health and the environment,
 - b. Immediately notify Ohio EPA Northeast District Office and the Cuyahoga County Board of Health,
 - c. Within 60 days of detection, submit to the director a copy of the remediation plan and implement the remediation plan.
3. Pursuant to OAC Rule 3745-27-12(N), the City of Westlake shall, within 270 days from the date of this approval, submit four complete, revised copies of the explosive gas monitoring plan and shall implement the plan upon approval. Revisions to the plan shall include, but are not limited to, the following:
- a. Detailed site location topographic map in accordance with OAC Rule 3745-27-12(D)(2)(b), revised, at a minimum, to include:
 - i. The current landfill site property boundaries, pursuant to OAC Rule 3745-27-12(D)(2)(b)(i);
 - ii. All current on-site and off-site structures and occupied structures within 1,000 feet of the limits of waste placement, pursuant to OAC Rule 3745-27-12(D)(2)(b)(iv);
 - iii. All manmade potential explosive gas migration pathways within 1,000 feet of the limits of waste placement, including, but not limited to: roads, railroads, underground utilities, mines, field drainage tiles, storm and sanitary sewers, water lines, electric cables, and pipelines, pursuant to OAC Rule 3745-27-12(D)(2)(b)(v); and
 - iv. All other potential sources of explosive gas within 1,000 feet of the limits of waste placement, pursuant to OAC Rule 3745-27-12(D)(2)(b)(vi). Such sources shall include, but not be limited to: oil and gas wells, underground storage tanks, historical solid waste and construction/demolition debris disposal sites, and any swamps.
 - b. Discussion of the historical operations of the landfill and identification of all regulatory authorizations granted to this site, pursuant to OAC Rule 3745-27-12(D)(3)(c). Authorizations shall include, but not be limited to, findings and orders issued by Ohio EPA or the Cuyahoga County Board of Health; plan approvals through Ohio EPA, Ohio Department of Health, or the City of Westlake; authorizations granted pursuant to OAC Rule 3745-27-13; and any air emission or water discharge permits issued by Ohio EPA.

- c. Description of any existing explosive gas monitoring system and an evaluation of its effectiveness, pursuant to OAC Rule 3745-27-12(D)(3)(g).
- d. Schedule for inspection of the passive vent trench, located along the north perimeter, to ensure that clogging has not occurred.
- e. Review and summary of historical records pertaining to explosive gas investigations, inspections, or complaints, pursuant to OAC Rule 3745-27-12(D)(4)(a).
- f. Permanent monitor construction methods, materials, installation procedures, quality assurance, and security measures, pursuant to OAC Rule 3745-27-12(D)(5)(c). The plan shall include details on the methods of construction, materials used, installation procedures, quality assurance and quality control, and security measures employed for existing monitoring and extraction system components installed prior to 1996, as well as proposed permanent monitors.
- g. Detailed site location topographic map in accordance with OAC Rule 3745-27-12(F)(2)(b), revised, at a minimum, to include:
 - i. Proposed monitoring probe locations, depths, and identification designations, pursuant to OAC Rule 3745-27-12(E).
 - ii. Proposed temporary or permanent monitor locations between the limits of waste placement and all occupied structures within 1,000 feet of the limits of waste placement, pursuant to OAC Rule 3745-27-12(E)(1). Additional explosive gas monitoring probes must be placed along the north perimeter between the landfill and the houses.
 - iii. Proposed permanent monitor locations between the limits of waste placement and all occupied structures within 200 feet of the limits of waste placement, pursuant to OAC Rule 3745-27-12(E)(2). Explosive gas monitoring probes must be placed between the landfill and the southwest buildings, and between the landfill and the west building. If permanent monitors cannot be located, the City of Westlake shall install explosive gas alarms in each occupied structure upon consent of each owner.
- h. Procedure for abandonment of monitoring wells, pursuant to OAC Rule 3745-27-12(F)(6). The procedure must be updated to conform with abandonment procedures in the State of Ohio Technical Guidance for

Sealing Unused Wells, dated 1996, by the State Coordinating Committee on Ground Water. The City of Westlake shall make their best effort to remove well casings during well abandonments.

- i. Appendices of the plan shall be revised to include the following:
 - i. Revised equipment manuals, if equipment used in monitoring has been replaced.
 - ii. A revised reporting form that includes the following parameters: percent combustible gas by volume, gas pressure in the probe, water level in the probe, ambient barometric pressure, ambient air temperature, observed weather conditions, and relative humidity.
4. Within 90 days of a notice of deficiency of the revised plan submitted pursuant to Condition No. 3 above, the City of Westlake shall submit all revisions of the explosive gas monitoring plan requested by Ohio EPA.
5. The following parameters shall be monitored at all explosive gas monitoring probe locations: percent combustible gas by volume, gas pressure in the probe, water level in the probe, ambient barometric pressure, ambient air temperature, observed weather conditions, and relative humidity.
6. Explosive gas monitoring results shall be submitted to Ohio EPA, Northeast District Office and Cuyahoga County Board of Health on forms prescribed by the director within 15 days of the date of sampling.
7. Any changes or modifications to the explosive gas monitoring plan will require prior approval from Ohio EPA. This condition supersedes Section 7, page 7-1, of *Explosive Gas Monitoring, Sampling, and Reporting Procedures, Westlake Landfill, Westlake, Ohio*.
8. Nothing in this letter shall be construed to authorize any waiver from the requirements of any applicable state solid waste laws or regulations. Furthermore, this authorization shall not be interpreted to release the City of Westlake or others from responsibility under ORC Chapters 3704, 3714, 3734, or 6111; under the Federal Clean Water Act, the Resource Conservation and Recovery Act, the Toxic Substances Control Act, or the Comprehensive Environmental Response, Compensation, and Liability Act; or from other applicable requirements for remedying conditions resulting from any release of contaminants from the facility to the environment.

Westlake Landfill, Cuyahoga County
Explosive Gas Monitoring Plan
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You are hereby notified that this action of the Director of Environmental Protection is final and may be appealed to the Environmental Review Appeals Commission (Commission) pursuant to ORC Section 3745.04. The appeal must be made in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Commission within 30 days after notice of the director's action. A copy of the appeal must be served on the director within three days of filing with the Commission. An appeal may be filed with the Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions concerning this authorization, please contact Dave Dysle of Ohio EPA's Northeast District Office at (330) 963-1286.

Sincerely,



Christopher Jones
Director

CJ/DD/cl

cc: Lynn Sowers, DSIWM-NEDO
Judy Bowman, DSIWM-NEDO
Scott Hester, DSIWM-CO
Vince Caraffi, Cuyahoga County Board of Health
File: