



State of Ohio Environmental Protection Agency

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John Mok, Director
Department of Port Control
Cleveland Hopkins International Airport
P.O. Box 81009
Cleveland, OH 44181-0009

**Re: Cleveland Hopkins Airport - Grayton Road Landfill, Cuyahoga County
Ohio Administrative Code (OAC) Rule 3745-27-13 Authorization**

Dear Mr. Mok:

On January 30, 2006, the Ohio Environmental Protection Agency (Ohio EPA), Division of Solid and Infectious Waste Management (DSIWM), Northeast District Office (NEDO) received a request titled *Rule 13 Authorization Application, Construction Activities, Runway 6R-24L Uncoupling, Cleveland Hopkins International Airport, Cleveland, Ohio, January 2006*, pursuant to Ohio Administrative Code (OAC) Rule 3745-27-13, to engage in filling, grading, excavating, building, drilling, or mining activities at the closed Grayton Road Landfill (Facility). Revisions to the document, dated March 31, 2006, were received on April 7, 2006. The documents were submitted by URS Corporation (URS) on behalf of the Cleveland Department of Port Control (CDPC).

OAC Rule 3745-27-13 requires authorization from the Director of Ohio EPA (Director) before engaging in filling, grading, excavating, building, drilling, or mining on land where a solid waste facility was operated. Specifically, CDPC proposes to complete a 3,200-foot extension to Runway 6R-24L and a 3,800-foot extension to Taxiway L at the Cleveland Hopkins International Airport (Airport). A portion of the proposed activities will occur over the Facility. Final grading and capping of the Facility will be completed under this authorization.

Based upon a review of the request and subsequent revisions, I have determined, pursuant to OAC Rule 3745-27-13, that the proposed activities will not result in a violation of applicable laws or regulations, will not create a nuisance, and are unlikely to adversely affect public safety or health or the environment. Therefore, CDPC is hereby authorized to perform the activities outlined in this letter in accordance with the submitted and approved plans, specifications, and information.

As part of this authorization, CDPC is subject to the following conditions:

Conditions

Bob Taft, Governor
Jennette Bradley, Lieutenant Governor
Joseph P. Koncelik, Director

1. This approval grants CDPC authorization to perform activities at the Facility in accordance with the document titled *Rule 13 Authorization Application, Construction Activities, Runway 6R-24L Uncoupling, Cleveland Hopkins International Airport, Cleveland, Ohio, January 2006*, received on January 30, 2006, and the revisions dated March 31, 2006, received on April 7, 2006, only. All activities shall be conducted in strict accordance with the plans, specifications, and information submitted as part of this request. There may be no deviation from the approved plans without prior written authorization from Ohio EPA. Any future activities at the Facility may require additional Ohio EPA approval.
2. Not later than seven days prior to the start of activities associated with this authorization, CDPC shall submit written notification, which specifies the anticipated date of work commencement, to Ohio EPA, NEDO, DSIWM and the Cleveland Department of Public Health.
3. All on-site activities shall be accomplished in compliance with all applicable state and federal laws and regulations pertaining to environmental protection, including, but not limited to, the control of air pollution, leachate, surface water run-on and runoff, and protection of ground water.
4. All on-site activities shall be performed in a manner that prevents migration of leachate, explosive gas, or toxic gas from the Facility.
5. All activities undertaken shall not create a nuisance and shall not adversely affect public safety or health or the environment.
6. Any portions of the Facility where the cap system is disturbed or removed by activities authorized by this approval shall have the final cap system re-established in accordance with the following specifications:
 - a. Material specifications: The following material specifications shall apply to the material intended for use in cap construction. A representative sample of the material shall be evaluated at a frequency not less than once for every 3,000 cubic yards.
 - i. 100% of the material particles shall pass a 10-inch screen, with no more than two particles from a 50 cubic foot sample retained on a six-inch screen.
 - ii. 95% of the material particles, by weight, shall pass a three-inch screen.
 - iii. 70% of the material particles, by weight, shall pass the Number 10 sieve.

- iv. The material that passes the Number 10 sieve (sand, silt, and clay fractions) shall be classified using the USDA textural classification chart as loam, sandy loam, silty loam, clay loam, silty clay, or sandy clay, or an acceptable alternative soil type.
- b. Construction Specifications:
 - i. Compaction criteria:
 - (1) The materials shall be compacted to at least 95% of the maximum Standard Proctor Density (ASTM D-698) or 90% of the maximum Modified Proctor Density (ASTM D-1557).
 - (2) The material shall be compacted using loose lifts, no greater than eight inches thick prior to compaction.
 - ii. The cap shall have a permeability determined by field permeability methods of no greater than 1×10^{-5} cm/sec or a permeability determined by laboratory permeability methods of no greater than 1×10^{-6} cm/sec, as determined by the acceptable testing methods outlined in Condition 6(c)(iii).
- c. Testing Specifications:
 - i. The suitability of the soils shall be determined prior to their intended use in cap construction. The following tests shall be performed on representative soil samples at least once for every 3,000 cubic yards of material intended for use.
 - (1) Sieve and hydrometer testing (ASTM D-422) for particle size gradation.
 - (2) Moisture/density relationship using either Standard Proctor (ASTM D-698) or Modified Proctor (ASTM D-1557) method.

Prior to testing, the samples shall be screened to remove any particles larger than three inches. Written results of this testing shall be submitted to Ohio EPA, NEDO not later than seven days prior to its intended use in cap construction.
 - ii. During construction of the cap, compaction shall be monitored to ensure that the proper specifications are met. This can be accomplished by a number of methods, including nuclear densimeter (ASTM D-2922), sand cone (ASTM

D-1556), and rubber balloon (ASTM D-2167). The nuclear densimeter test, if used, shall be performed at least five times per acre per lift. The sand cone or rubber balloon methods shall be performed at least three times per acre per lift. The sampling rate for other methods shall be determined on an individual basis with concurrence from Ohio EPA.

- iii. Upon completion of construction, the permeability of the cap shall be determined through either field permeability testing (ASTM D-6391: Boutwell two-stage permeameter, ASTM D-5093: SDRI) or through laboratory testing of cap samples brought to the lab for analysis (ASTM D-5084: Shelby tubes, soil blocks). The permeability requirements for each type of permeability determination are as follows:
 - (1) For field permeability tests (ASTM D-6391, ASTM D-5093), the required permeability of the cap is 1×10^{-5} cm/sec.
 - (2) For laboratory permeability tests (ASTM D-5084: Shelby tubes, soil blocks), the required permeability of the cap is 1×10^{-6} cm/sec.
 - iv. Any penetrations into the cap layer resulting from either compaction or permeability testing shall be repaired using bentonite or a bentonite/soil mixture.
7. All solid and/or hazardous waste to be removed from the Facility shall be containerized and securely stored until these materials are properly characterized and disposed in accordance with Ohio Revised Code (ORC) Chapter 3734 and the regulations promulgated thereunder.
 8. All liquids, semi-solids, industrial wastes, and other wastes regulated by ORC Chapter 6111 that are removed during intrusive activities shall be containerized and securely stored until these materials are properly characterized and disposed in accordance with ORC Chapter 6111 and regulations promulgated thereunder.
 9. Prior to any removal of waste or contaminated soil from the property, CDPC shall submit copies of sample analysis results, the treatment or disposal method selected, and a copy of a letter of acceptance from the treatment or disposal facility to Ohio EPA, NEDO, pursuant to OAC Rule 3745-27-13(H)(4).
 10. No excavation of waste shall occur unless the excavated waste is replaced within previously existing horizontal and vertical limits of waste placement or is treated or disposed of at a licensed and permitted treatment or disposal facility. Waste shall not be placed at any elevation lower than existing waste elevations at any given location.
 11. If excavation occurs outside the limits of waste placement at the Facility, CDPC shall not use material consisting of solid or hazardous waste to backfill the excavated areas.

12. For the purpose of erosion control during all phases of construction and investigation at the Facility, CDPC shall use best management practices and standards as specified in CDPC's approved Permit OHR110058 and the associated Storm Water Pollution Prevention Plan, as well as the Ohio Department of Natural Resources manual titled *Rainwater and Land Development*. CDPC shall continue to comply with all special terms and conditions of the April 20, 2001, Consent Order regarding storm water management.
13. Not later than 60 days after completing the activities authorized through this approval, CDPC shall submit to Ohio EPA a certification report in accordance with OAC Rule 3745-27-13(H)(10).
14. CDPC shall take measures to minimize the potential for increased subsurface infiltration of surface water due to disturbance of the Facility and other authorized activities.
15. CDPC shall take measures to control fugitive dust and other air emissions due to disturbance of the Facility and other authorized activities.
16. In accordance with OAC Rule 3745-27-13(M), this authorization shall terminate three years after its effective date if CDPC has not begun the activities authorized herein.
17. The Director may revoke this authorization if CDPC violates, or is likely to violate, any applicable law or if the continued implementation of the approved plans causes a threat to human health or safety or the environment.
18. Nothing in this letter shall be construed to authorize any waiver from any requirements of any applicable federal or state laws or regulations. This authorization shall not be interpreted to release CDPC 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 to the environment.

End of Conditions

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission (Commission) pursuant to ORC Section 3745.04. The appeal must be 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 after filing with the Commission. An appeal may be filed with the Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street
Room 222
Columbus, Ohio 43215

John Mok, Director
Cleveland Department of Port Control
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If you have any questions concerning this authorization, please contact John Schmidt of Ohio EPA's NEDO at (330) 963-1175.

Sincerely,

Joseph P. Koncelik
Director

JPK/JMS/cl

cc: Scott Hester, DSIWM-CO w/attachment
Lynn Sowers, DSIWM-NEDO w/attachment
Dennis Lee, DSW-NEDO
Annie Snyder, Cleveland Dept. of Public Health w/attachment
Heidi Pruess, Cleveland Department of Port Control
Tom Kovacic, URS Corporation