



State of Ohio Environmental Protection Agency

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July 18, 2008

Larry J. Lallo, Executive Director
Barberton Community Development Corporation
542 West Tuscarawas Avenue
Barberton, OH 44203

**RE: Russell Avenue Landfill, City Of Barberton, Summit County
Ohio Administrative Code (OAC) Rule 3745-27-13 Authorization**

Dear Mr. Lallo:

On April 24, 2008, the Ohio Environmental Protection Agency (Ohio EPA) received an April 23, 2008 request titled Rule 13 Authorization in Accordance with OAC 3745-27-13(E), Former Russell Avenue Landfill, Barberton, Summit County, Ohio, April 2008. Revisions to the document dated June 20, 2008 were received on June 20, 2008. The request and revisions were submitted pursuant to Ohio Administrative Code (OAC) Rule 3745-27-13(D)(1) in order to complete borings and construct ground water monitoring wells at the former Russell Avenue Landfill (Facility). The document was submitted by BJAAM Environmental, Inc. (BJAAM) on behalf of the Barberton Community Development Corporation (BCDC). BCDC and the city of Barberton (Barberton) have entered into an agreement to ascertain the environmental status of the site. BCDC has secured authorization from Barberton to conduct a geotechnical and environmental investigation.

The Facility is a closed municipal solid waste landfill located along Russell Avenue, Dan Street, and Haven Street in the city of Barberton (former Coventry Township), Summit County. The parcels on which waste has been identified are currently owned by Barberton, and the facility was last operated by Barberton. The Facility closed in 1970, and was licensed by the Barberton City Health Department from 1969 to 1970. Barberton operated a construction and demolition debris disposal facility on a portion of the Facility from 1970 to 1991, and a Class IV yard waste composting facility on a portion of the Facility from 1996 to 1998.

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

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, BCDC requested authorization to complete a series of borings and construct ground water monitoring wells as part of an environmental investigation. A total of fifteen (15) borings and wells are proposed, to a depth of ten (10) feet, within the landfill. An additional seven (7) ground water monitoring wells will be developed. Wells within the limits of waste placement will terminate below the limits of waste placement, and will be double-cased through the waste limits. All borings will be backfilled with a bentonite plug that will exceed the permeability requirements of the final cover system. Additionally, any portions of the final cover system removed or disturbed by the activities will be re-established.

Based upon a review of the request submitted to Ohio EPA on April 24, 2008 and the subsequent revision received June 20, 2008, I have determined, pursuant to OAC Rule 3745-27-13, that the proposed activities will not result in violation of applicable laws or regulations, will not create a nuisance, and will not adversely affect the public safety or health or the environment. Therefore, BCDC 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, BCDC is subject to the following conditions:

CONDITIONS

1. This approval grants BCDC authorization to perform activities at the Facility in accordance with the document titled Rule 13 Authorization in Accordance with OAC 3745-27-13(E), Former Russell Avenue Landfill, Barberton, Summit County, Ohio, April 2008, received April 24, 2008, and the subsequent revision dated and received June 20, 2008. All activities shall be conducted in strict compliance with the plans, specifications, and other 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 (7) days prior to the start of activities associated with this authorization, BCDC shall submit written notification, which specifies the anticipated date of commencement, to Ohio EPA, NEDO and the Barberton City Health Department.
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 runoff 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 the public safety or health or the environment.
6. Any portions of the landfill where the final cover system is removed or damaged by activities conducted pursuant to this approval, excluding penetrations backfilled in accordance with this authorization, shall have the final cover system re-established in accordance with the following specifications:
 - a. Material specifications:
 - 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. At least 95% of the material particles shall pass a three inch screen;
 - iii. At least 70% of the material particles 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 with concurrence from Ohio EPA.
 - b. Construction Specifications:
 - i. The material 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).
 - ii. The material shall be compacted using loose lifts, no greater than eight inches thick prior to compaction.

- iii. 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.
 - a. Sieve and hydrometer testing (ASTM D-422) for particle size gradation; and
 - b. 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 testing shall be submitted to Ohio EPA, NEDO in the form of a soils prequalification report 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.
 - 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:

- a. For field permeability tests (ASTM D-6391, ASTM D-5093), the required permeability of the cap is 1×10^{-5} cm/sec.
 - b. 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 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, BCDC shall submit copies of sample analysis results, the treatment or disposal method selected, and a letter of acceptance from the treatment or disposal facility to Ohio EPA, NEDO pursuant to OAC Rule 3745-27-13(H)(4).
 10. For the purposes of erosion control during investigation of the landfill, BCDC shall use best management practices and standards as specified in the National Resources Conservation manual titled Rainwater and Land Development prepared by the Ohio Department of Natural Resources, Division of Soil & Water Conservation.
 11. No boring or excavation of waste shall occur unless the bored or excavated waste is replaced within previously existing horizontal and vertical limits of waste placement or is treated or disposed of at a licensed, permitted treatment or disposal facility, in accordance with ORC Chapter 3734 and the regulations promulgated thereunder.
 12. If boring or excavation occurs outside the limits of waste placement at the Facility, BCDC shall not use material consisting of solid or hazardous waste to backfill the bored or excavated areas.

13. BCDC shall take measures to control fugitive dust and other air emissions that may result from activities authorized by this action.
14. Not later than sixty (60) days after completing the activities authorized through this approval, BCDC shall submit to Ohio EPA and the Barberton City Health Department a certification report in accordance with OAC Rule 3745-27-13(H)(10).
15. In accordance with OAC Rule 3745-27-13(M), this authorization shall terminate three years after its effective date if BCDC has not begun the activities authorized herein.
16. The director may revoke this authorization if BCDC violates, or is likely to violate, any applicable law or if the continued implementation of the approved plans may cause a threat to human health or safety or the environment.
17. Nothing in this letter shall be construed to authorize any waiver from any requirements of applicable state solid waste laws or regulations. This authorization shall not be interpreted to release Barberton, BCDC, BJAAM, 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 of Ohio EPA (Director) is final and may be appealed to the Environmental Review Appeals Commission (Commission) pursuant to Ohio Revised Code 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Commission at the following address:

Larry J. Lallo, Executive Director
Barberton Community Development Corporation
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Environmental Review Appeals Commission
309 South Fourth Street
Room 222
Columbus, Ohio 43215

If you have any questions regarding this authorization, please contact John Schmidt of Ohio EPA, NEDO at (330) 963-1175.

Sincerely,

Chris Korleski
Director, Ohio EPA

CK/JS/cl

cc: Lynn Sowers, DSIWM-NEDO
Scott Hester, DSIWM-CO
Kelvin Rogers, DSW-NEDO
Zachary Pierce, BJAAM Environmental, Inc.
Michael Musel, Barberton City Health Department
Mayor Bob Genet, City of Barberton