



State of Ohio Environmental Protection Agency

STREET ADDRESS:

zarus Government Center
.22 S. Front Street
Columbus, Ohio 43215

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RECEIVED

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

MAY 20 2002

OHIO EPA
DIV. OF SOLID & INFECTIOUS WASTE MGMT.

May 14, 2002

Re: Director's Final Findings & Orders

CERTIFIED MAIL

Center Township Trustees
300 South Jefferson Street
Lisbon, Ohio 44432

Dear Sir:

Transmitted herewith are Final Findings & Orders of the Director concerning the matter indicated.

Sincerely,

Kimberly L. Reese
Systems Management Unit
Division of Solid & Infectious Waste Management

Enclosure: Director's Final Findings and Orders
Guidance Document
Financial Assurance Trust

cc: Bruce McCoy, CO, DSIWM ✓
Jerry Weber, NEDO, DSIWM
John Schmidt, NEDO, DSIWM
Columbiana County Health Department

Bob Taft, Governor
Maureen OConnor, Lieutenant Governor
Christopher Jones, Director

OHIO E.P.A.
MAY 14 2002
ENTERED DIRECTOR'S JOURNAL

Date Issued: MAY 14 2002

Date Effective: MAY 14 2002

**BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY**

In the Matter Of:

Center Township Trustees
300 South Jefferson Street
Lisbon, Ohio 44432

Director's Final Findings
And Orders

PREAMBLE

It is hereby agreed by and among the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders (Orders) are hereby issued to the Center Township Trustees (Center Township) pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency (Ohio EPA) under Ohio Revised Code (ORC) Sections **3734.13** and **3745.01**.

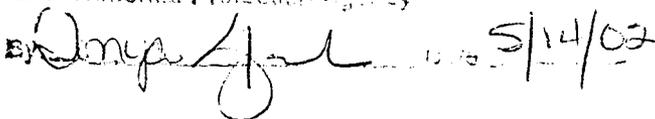
II. PARTIES

These Orders shall apply to and be binding upon Center Township and its assigns and successors in interest. No changes in ownership relating to the sanitary landfill facility will in anyway alter Center Township's responsibilities under these Orders. Center Township's obligations under these Orders may be altered only by the written approval of the Director of Ohio EPA.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as used in ORC Chapter **3734** and the Ohio Administrative Code (OAC) rules adopted thereunder.

I certify this to be a true and accurate copy of the
official record of the final findings and orders of the Ohio
Environmental Protection Agency

 5/14/02

IV. FINDINGS OF FACT

The Director has determined the following findings of fact:

1. Center Township is the "owner" and "operator," as those terms are defined in OAC Rule 3745-27-01(B), of the Center Township Landfill (Landfill), located off of Bittner Road in Lisbon, Section 22, Center Township, Columbiana County, Ohio. The Landfill encompasses approximately 8.65 acres of land.
2. The Landfill is a "sanitary landfill facility" and a "solid waste disposal facility" as those terms are defined in OAC Rule 3745-27-01(C).
3. Center Township ceased acceptance of solid waste at the Landfill on December 31, 1988.
4. By letter dated January 31, 1989, Center Township notified Ohio EPA that it had ceased operating the Landfill and indicated its intent to close the Landfill.
5. Pursuant to OAC Rule 3745-27-10(C), as effective on July 29, 1976, Center Township was to have completed proper closure of the Landfill within sixty (60) days after December 31, 1988. Among other things, OAC Rule 3745-27-10(C), as effective on July 29, 1976, required the following:
 - a. All waste deposited in the sanitary landfill facility shall be covered with at least two (2) feet of well compacted cover material that meets the requirements set forth in Regulation 3745-27-09(F); and
 - b. The site shall be seeded with grasses or other vegetation as will grow to form a dense vegetative cover, which seeding shall be done as many times as necessary to ensure compliance with this requirement; and
 - c. All land surfaces shall be graded to slopes of no less than one (1) percent and no greater than twenty-five (25) percent; and
 - d. All land shall be graded and drainage facilities shall be provided so as to direct surface water off the site, and not allow the ponding of water; and
 - e. Ventilation structures shall be installed and maintained as necessary to control gas migration; and
 - f. The site shall be baited for rodents, and treated for other vectors if necessary; and

- g. A plat of the site shall be filed with the Board of Health having jurisdiction, the County Recorder of the county in which the sanitary landfill facility is located, and the Director, which shall accurately describe the completed site and include information relating to the area, depth, volume, and nature of the waste materials deposited in the sanitary landfill; and
 - h. **All** entrances and access roads shall be blocked by locked gates, fencing, or other sturdy obstacles to prevent unauthorized access.
6. Pursuant to OAC Rule 3745-27-12, effective November 17, 1988 (emergency rule), Center Township was required to submit an explosive gas monitoring plan to the Director for approval, by no later than February 1, 1989.
7. The Columbiana County Board of Health conducted inspections of the Landfill on the following dates: May 31, 1989, November 14, 1989, February 8, 1990, March 12, 1990, April 7, 1995, October 29, 1995, March 18, 1996, June 24, 1996, July 10, 1996, November 7, 1996, May 9, 1997, July 16, 1997, May 18, 1998, June 11, 1998, July 14, 1998, November 4, 1998, December 31, 1998, March 9, 1999, June 10, 1999, and July 29, 1999.

Following the above inspections, the Columbiana County Board of Health notified Center Township that it failed to comply with the applicable closure requirements for the Landfill by letters dated March 28, 1989, June 5, 1989, December 14, 1989, March 1, 1990, May 18, 1995, November 3, 1995, March 21, 1996, June 25, 1996, July 11, 1996, November 8, 1996, May 14, 1997, July 23, 1997, December 12, 1997, March 25, 1998, June 12, 1998, July 31, 1998, November 6, 1998, January 6, 1999, March 10, 1999, June 15, 1999, and August 4, 1999.
8. On July 15, 1992, Ohio EPA received a final closure/post-closure care plan ("closure plan") for the Landfill from Center Township.
9. By letter dated September 14, 1992, Ohio EPA sent a Notice of Deficiency to Center Township regarding its July 1992 closure plan submittal.
10. On April 8, 1993, Ohio EPA received a revised closure plan for the Landfill from Center Township.
11. By letter dated November 23, 1993, Ohio EPA notified Center Township that, with one exception regarding deficiencies in the explosive gas monitoring plan, the

deficiencies noted in Ohio EPA's September 14, 1992 letter had been addressed. Ohio EPA requested that Center Township implement the closure plan for the Landfill and correct the deficiencies in the explosive gas monitoring plan.

12. On June 1, 1994, the current OAC rules regarding sanitary landfill operation and closure became effective and applied to landfills for which final closure was not completed by that date. The new requirements include but are not limited to:
 - a. Landfill closure as specified in OAC Rule 3745-27-1 and
 - b. Ground water monitoring as specified in OAC Rule 3745-27-10; and
 - c. Financial assurance for closure and post closure care as specified in OAC-Rules 3745-27-15, 3745-27-16, and 3745-27-17; and
 - d. Post-closure care as specified in OAC Rule 3745-27-14; and
 - e. Explosive gas monitoring as specified in OAC Rule 3745-27-12.

13. By letters dated February 1, 1999, and February 16, 1999, Ohio EPA notified Center Township that it was in violation of the solid waste landfill closure requirements specified in OAC Rule 3745-27-11, since it has failed to properly close the Landfill. The closure violations include the failure to comply with the following rules:
 - a. **OAC Rule 3745-27-11(G)(4): Final Cap System** - A cap system has not been constructed in accordance with paragraph (N) of this rule.
 - b. **OAC Rule 3745-27-11(H)(2): Grading** - The surface of the Landfill has not been properly graded to prevent ponding of water across the site. No drainage facilities have been provided to direct surface water off of the Landfill.
 - c. **OAC Rule 3745-27-11(H)(3): Ground Water Monitoring System** - A ground water monitoring system currently does not exist for the Landfill. A ground water monitoring system must be installed in accordance with OAC Rule 3745-27-10.
 - d. **OAC Rule 3745-27-10: Ground Water Monitoring Program** - A ground water monitoring program has not been initiated at the Landfill.
 - e. **OAC Rule 3745-27-11(H)(5): Notification** - Verification that a plat and

accompanying information has been submitted to the appropriate agencies has not been submitted to the Director.

- f. **OAC Rule 3745-27-1 (H)(6): Signs** - A sign that meets the requirements of this rule is not currently placed at the Landfill.
 - g. **OAC Rule 3745-27-11(I): Final Closure** - Final closure activities have not been completed at the Landfill. The Landfill ceased acceptance of waste on December 31, 1988.
 - h. **OAC Rule 3745-27-11(J): Final Closure Certification** - A final closure certification report for the Landfill has not been submitted to the Director or to the Columbiana County Board of Health.
 - i. **OAC Rule 3745-27-12(A)(3): Explosive Gas Plan** - An explosive gas monitoring plan developed for the Landfill has not been submitted to the Director for approval in accordance with the schedule contained in paragraph (A)(4) of this rule.
 - j. **OAC Rule 3745-27-12(A)(4)(i): Schedule** - An explosive gas monitoring plan developed for the Landfill has not been submitted to the Director for approval in accordance with this rule.
 - k. **OAC Rule 3745-27-16(A)(3)(c): Financial Assurance** - A post-closure care financial assurance instrument for the Landfill has not been submitted to Ohio EPA for review and approval, nor has it been executed by Center Township.
- 14. On April 7, 1999, Ohio EPA received a "final closure" plan for the Landfill from Center Township.
 - 15. By letter dated August 16, 1999, Ohio EPA sent Center Township a Notice of Deficiency regarding its April 1999 closure plan.
 - 16. On May 30, 2000, Ohio EPA met with Center Township representatives to discuss a consensual administrative order to establish a compliance schedule to address the outstanding violations occurring at the Landfill.
 - 17. By letter dated September 20, 2000, Center Township indicated to Ohio EPA that it had a financial inability to pay for the closure of the Landfill and on October 2, 2000, Ohio EPA requested financial records from Center Township in order for Ohio EPA to substantiate the Township's inability to pay claim.

18. On October 16, 2000, Ohio EPA received a proposed explosive gas monitoring plan for the Landfill.
19. In November 2000, Center Township provided Ohio EPA with financial information pertaining to Center Township's ability to pay for the closure of the Landfill. On March 12, 2001, Ohio EPA completed review of this information and determined that Center Township presently has an economic inability to pay for the entire closure of the Landfill.
20. By letter dated January 9, 2001, Ohio EPA notified Center Township of deficiencies in the explosive gas monitoring plan submitted on October 16, 2000.
21. On February 5, 2001, Center Township submitted a revised explosive gas monitoring plan to Ohio EPA.
22. On May 9, 2001, Ohio EPA met with Center Township representatives to discuss the Township's financial wherewithal as it relates to a proposed consensual administrative order to establish a compliance schedule to address the outstanding violations occurring at the Landfill.
23. To date, Center Township has failed to achieve compliance with OAC Rules 3745-27-10, 3745-27-11, 3745-27-12, and 3745-27-16, regarding ground water monitoring, closure of the Landfill, explosive gas monitoring, and financial assurance, respectively.

V. ORDERS

Center Township shall achieve compliance with ORC Chapter 3734 and the OAC rules adopted under that Chapter, and shall achieve compliance with the closure provisions contained in **OAC** Rule 3745-27-11(M), by completing the following activities at the Landfill in accordance with the following schedule:

1. Upon the effective date of these orders and continuing until the obligations of these orders have been satisfied, Center Township shall use its best efforts to secure funding and/or in-kind services in order to complete closure of the Landfill in accordance with OAC Chapter 3745-27 and in an expeditious manner. By December 31st of each year, Center Township shall submit a written report to Ohio EPA documenting the Township's efforts to secure said funding/services and updating for inflation the closure and post-closure care costs.
2. Within fourteen (14) days after the effective date of these Orders, Center Township

shall post signs at all entrances to the Landfill stating in letters not less than three (3) inches high that the Landfill is permanently closed.

3. Within fourteen (14) days after the effective date of these Orders; Center Township shall either contain leachate and properly treat it on-site or collect leachate and transport it off-site for proper treatment.
4. Within thirty (30) days after the effective date of these Orders, Center Township shall establish a trust fund and execute the attached trust agreement for the closure and post-closure care of the Landfill and submit it to Ohio EPA (with original signatures).
5. Within forty-five (45) days after the effective date of these Orders, Center Township shall fund said trust with a minimum of \$1,000.00.
6. Beginning June 30, 2002, and annually thereafter, Center Township shall fund said trust with a minimum of \$1,000.00.
7. Within forty-five (45) days after the effective date of these Orders, Center Township shall block all entrances and access roads with locked gates, fencing, or other sturdy obstacles to prevent unauthorized access to the Landfill.
8. Within one hundred and twenty (120) days after the effective date of these Orders, Center Township shall submit a plat of the Landfill to the Columbiana County Board of Health, Columbiana County Recorder, and Ohio EPA which shall accurately locate and describe the completed site, and include information relating to the area, depth, volume, and nature of wastes disposed in the Landfill.
9. Within one hundred and twenty (120) days after the effective date of these Orders, Center Township shall record a notation on the deed to the Landfill property, or on some other instrument which *is* normally examined during title search, that will in perpetuity notify any potential purchaser of the property that the land has been used as a sanitary landfill facility. The notation shall include information describing the acreage, exact location, depth, volume, and nature of solid waste deposited in the Landfill.
10. Beginning June 30, 2002, and annually thereafter, Center Township shall submit to Ohio EPA the following financial documentation in order for Ohio EPA to make a determination of Center Township's ability to pay for the final closure and post-closure care of the Landfill:

- a. Written ability-to-pay statement that specifically addresses financial reasons why compliance costs cannot be paid; and
 - b. Most recent 5 years audited comprehensive annual financial reports including sewer, water, or landfill fund statements; and
 - c. Current sewer, water, or solid waste rates charged to customers and the effective date of each rate; and
 - d. Number of residential and non-residential customers; and
 - e. Wastewater, drinking water, or solid waste flow by source (Le., percent residential, commercial, industrial, etc).
11. Annually, Ohio EPA will review the financial information submitted by Center Township and will return notice of its annual determination of the township's ability to pay for the closure and post-closure care of the Landfill. Upon receipt of the determination, Center Township shall place, at a minimum, the amount of funding specified by Ohio EPA into the trust agreement identified in order No. 4 above. Ohio EPA expects and the annual determination will require that all funds in excess of those required to be expended by Center Township for basic township services will be placed in said trust.
12. Center Township shall comply with Ohio EPA's annual notices of determination, outlined in Order No. 11 above, to complete final closure and post-closure care of the Landfill pursuant to the time frames established in the annual notices, and in accordance with the following:
- a. Prior to cap construction, evaluate representative samples of soil material intended to be used in the cap construction at a frequency of not less than once for every three thousand (3000) cubic yards of material. At least seven (7) days prior to using the soil material, Center Township shall submit to Ohio EPA analytical data which demonstrates that the soil material to be used for the cap meets the following specifications:
 - i. One hundred (100) percent of the material must pass a ten (10) inch screen with no more than two (2) particles from a fifty (50) cubic foot sample retained on a six (6) inch screen; and
 - ii. Not less than ninety-five (95) percent of the material must pass a three (3)

inch sieve; and

- iii. Not less than seventy (70) percent of the material must pass the # 10 sieve; and
- iv. The material that passes the # 10 sieve must be classified using the United States Department of Agriculture (USDA) textural classification chart and be a soil type listed in OAC Rule 3745-27-09(F)(4), as effective on July 29, 1976, by using sieve and hydrometer testing specified by the American Society for Testing and Materials (ASTM) D-422; and

The soil material used in the construction of the cap shall have the ability to attain a permeability no greater than 1×10^{-7} centimeters per second in laboratory testing (Shelby tubes, soil blocks), and shall be tested at least once for every ten thousand (10,000) cubic yards of material.

- b. Prior to cap construction, evaluate representative samples of soil material intended to be used in the cap construction at a frequency of not less than once for every three thousand (3000) cubic yards of material to determine the optimum moisture content and maximum dry density using either the maximum Standard Proctor Density specified by ASTM D-698, or the maximum Modified Proctor Density specified by ASTM D-1557 analysis. At least seven (7) days prior to using the soil material in cap construction, Center Township shall submit the analytical data to Ohio EPA.
- c. Prepare the Landfill for the construction of the cap by completing the following:
 - i. Install appropriate erosion and sediment controls prior to the removal of vegetation and soil; and
 - ii. Remove all vegetation and properly grade, and otherwise prepare the Landfill for the installation of the cap; and
 - iii. Properly grade all final slopes of the Landfill to no less than five (5) percent and no greater than twenty-five (25) percent. Center Township shall grade the Landfill and provide drainage structures as necessary to direct surface water off the site and not allow ponding of water, as required by OAC Rule 3745-27-10(C)(4), as effective on July 29, 1976.
- d. Begin installing the cap at the Landfill in accordance with the June 9, 1993,

guidance document entitled "Standards for Construction of a 1976 Cap System," which is attached hereto as Attachment A and which is incorporated by reference as if fully rewritten herein. The soil material to be used in the cap shall meet or exceed the specifications listed in Order Nos. 2 and 3, and Attachment A. During cap construction, Center Township shall complete the following activities:

- i. Install the soil in loose lifts not to exceed eight (8) inches in thickness to achieve uniform compaction. The lifts shall be well compacted by using at least six (6) passes of a sheep's foot compactor which is at least twenty (20) tons in weight; and
 - ii. Construct the soil material for the cap to at least ninety-five (95) percent of the maximum Standard Proctor Density specified by ASTM D-698, or ninety (90) percent of the maximum Modified Proctor Density specified by ASTM D-1557, and ensure that the soil material for the cap has a moisture content no less than two (2) percent below the optimum moisture content as established by Order No. 3 above. Compaction density shall be monitored upon completion of each lift utilizing an appropriate soil testing method acceptable to Ohio EPA, such as nuclear densimeter specified by ASTM D-2922, sand cone specified by ASTM D-1556, and rubber balloon specified by ASTM D-2167. The nuclear densimeter test, if used, shall be performed at least five (5) times per acre per lift. The sand cone and rubber balloon methods, if used, shall be performed at least three (3) times per acre per lift. The sampling rate for other methods shall be determined by Ohio EPA; and
 - iii. Verify that each lift of compacted soil has a permeability of no greater than 1x10⁻⁵ centimeters per second at ninety-five (95) percent of the maximum Standard Proctor Density specified by ASTM D-698 or ninety (90) percent of the Modified Proctor Density specified by ASTM D-1557, in accordance with the specifications contained in Attachment A; and
 - iv. Cover all waste materials deposited at the Landfill with at least two (2) feet of well compacted soil material that meets the specifications contained in these Orders and in Attachment A; and
 - v. Place an additional six (6) inches of soil on the cap that will support a dense vegetative cover.
- e. Complete construction of the cap at the Landfill in accordance with these Orders and in accordance with the specifications contained in Attachment A.

- f. Seed the cap with sod forming grasses. The seed mixture for establishing and maintaining vegetation shall consist of fifty (50) percent tall fescue, twenty (20) percent creeping red fescue, ten (10) percent perennial rye, and ten (10) percent Kentucky bluegrass, and ten (10) percent annual rye applied at the rate of one hundred fifty (150) pounds per acre, unless otherwise agreed to in writing by Ohio EPA. Fertilizer shall be applied typically at a minimum of eighty (80) pounds total nitrogen, eighty (80) pounds total potassium, and eighty (80) pounds total phosphorus per acre or as soil tests indicate, unless otherwise agreed to in writing by Ohio EPA. Straw mulch shall be immediately applied at a rate of three (3) tons per acre following seeding.
- g. Establish and maintain a dense vegetative cover over the entire cap. Should the previous seeding efforts fail, Center Township shall repeat the above requirements until a dense vegetative cover is established, to achieve compliance with OAC Rule 3745-27-10(C)(2), as effective on July 29, 1976.
- h. Submit a certification and a quality assurance/quality control report, prepared by a registered professional engineer, certifying that the closure activities specified in Order No. 12 have been completed in accordance with the specifications in these Orders and in Attachment A.
- i. Within fifteen (15) days after receipt of written approval from Ohio EPA, Center Township shall implement the explosive gas monitoring plan in accordance with the schedule of implementation contained therein, or as specified within said approval.
- j. Submit a Ground Water Monitoring Program for the Landfill in accordance with OAC Rule 3745-27-10, as effective on June 1, 1994. Center Township shall implement the approved Ground Water Monitoring Program within fifteen (15) days after receipt of written approval from Ohio EPA in accordance with schedules of compliance contained therein.
- k. Conduct post-closure monitoring at the Landfill in accordance with OAC Rule 3745-27-14 for thirty (30) years, beginning upon Ohio EPA's written concurrence of the certification report as required by Order No. 12(h) of these Orders.
- l. In the event Ohio EPA notifies Center Township that the plat, certification and quality assurance/quality control report, gas monitoring plan, or the Ground Water Monitoring Program, submitted to achieve compliance with these Orders are unsatisfactory in whole or in part, within thirty (30) days after receipt of such notification, Center Township shall amend and submit to Ohio EPA a revised document or documents. Ohio EPA may approve the Ground Water Monitoring

Program and/or the explosive gas monitoring plan with conditions.

- m. Beginning June 30, 2002, and semiannually thereafter (i.e. June 30 and December 31 each year), Center Township shall submit status reports to Ohio EPA, which shall describe the closure activities completed during the previous month. Center Township shall continue submitting status reports until the activities outlined in these Orders are completed.
- n. Following completion of the Landfill cap and submittal of the certification and quality assurance/quality control report as required in Order No. 12(h), Center Township must obtain Ohio EPA's authorization, in accordance with OAC Rule 3745-27-13, prior to filling, grading, excavating, building, drilling, or mining on the Landfill.

VI. TERMINATION AND SATISFACTION

Center Township's obligations under these Orders shall terminate when Center Township certifies in writing and demonstrates to the satisfaction of Ohio EPA, Division of Solid and Infectious Waste Management, that all obligations under these Orders have been performed and Ohio EPA, Division of Solid and Infectious Waste Management, acknowledges, in writing, Ohio EPA's acceptance of this certification and demonstration.

This certification shall be submitted by Center Township and shall be signed by the Center Township Trustees. The certification shall make the following attestation: "We certify that the information contained in or accompanying this certification is true, accurate and complete."

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a signatory to these Orders, for any liability arising out of or relating to the operation of Center Township's Landfill.

VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable federal, state, and local laws and regulations. Nothing in these Orders shall be construed as waiving or compromising in any way the applicability and enforcement of any other statutes or regulations applicable to Center Township's operation of its Landfill. Ohio EPA reserves all rights and privileges except as specified herein.

IX. NOTICE

All documents demonstrating compliance with these Orders and all other documents required under these Orders to be submitted to Ohio EPA shall be addressed to:

Ohio Environmental Protection Agency
Northeast District Office
Division of Solid and Infectious Waste Management
Attn: Supervisor, DSIWM
2110 E. Aurora Rd.
Twinsburg, OH 44087

and

Columbiana County Health District
Attn: Health Commissioner
321 S. Beaver St.
Lisbon, OH 44432-1205

or to such persons and addresses as may hereafter be otherwise specified in writing by Ohio EPA.

X. RESERVATION OF RIGHTS

Nothing contained herein shall be construed to prevent Ohio EPA from seeking legal or equitable relief to enforce the terms of these Orders or from taking other administrative, legal or equitable action as deemed appropriate and necessary, including seeking penalties against Center Township for noncompliance with these Orders.

Nothing contained herein shall be construed to prevent Ohio EPA from exercising its lawful authority to require Center Township to perform additional activities pursuant to ORC Chapters 3734 and 6111 or any other applicable law in the future. Nothing herein shall restrict the right of Center Township to raise any administrative, legal or equitable claim or defense with respect to such further actions which Ohio EPA may seek to require of Center Township. Nothing in these Orders shall be construed to limit the authority of Ohio EPA to seek relief for violations not addressed in these Orders.

XI. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, and in lieu of further enforcement action by Ohio EPA for only those violations addressed in these Orders, Center Township agrees that these Orders are lawful and reasonable, that the

items and time frames provided for compliance herein are reasonable and that Center Township agrees to comply with these Orders.

Center Township hereby waives the right to appeal the issuance, terms and service of these Orders, and Center Township hereby waives any and all rights it may have to seek administrative or judicial review of these Orders either in law or equity.

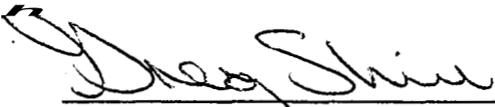
Notwithstanding the preceding, Ohio EPA and Center Township agree that in the event that these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Center Township retains the right to intervene and participate in such appeal. In such an event, Center Township shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated, or modified.

XII. SIGNATORIES

Each undersigned representative of a signatory to these Orders certifies that he or she is fully authorized to enter into the terms and conditions of these Orders and to legally bind such signatory to this document.

IT IS SO AGREED:

Center Township Trustees:



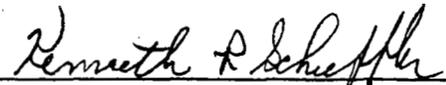
Center Township Trustee

3-13-02
Date



Center Township Trustee

3-13-01
Date



Center Township Trustee

3-13-02
Date

Ohio Environmental Protection Agency:

Christopher Les, Director _____

Ohio Environmental Protection Agency



State of Ohio Environmental Protection Agency

P.O. BOX 163669, 1800 WaterMark Dr.
Columbus, Ohio 43216-3669
(614) 644-3020
FAX (614) 644-2329

ATTACHMENT A

DSIWMGUIDANCE
(614) 644-2621
FAX: (614) 728-5315

George V. Voinovich
Governor

SUBJECT: ~~Standards~~ for Current Construction of a 1976 Cap System

GUIDANCE#: 0123

REFERENCE: OAC 3745-27-090 [Effective 7/29/76]

CROSS REFERENCES: Measurable Criteria for Questionable Pre-1990 Landfill Caps (304/95)

DATE: March 27, 1995
(Supersedes document of same title dated 6/9/93)

TOTAL # OF PAGES: 4

I. Purpose

This purpose of this document is to interpret Ohio Administrative Code (OAC) 3745-27-10 [effective 7/29/76] to establish criteria for material, construction, and testing specifications for the construction of a 1976 cap (or a modified version) today. It is necessary for OEPA to be consistent statewide on specifications we require for the construction of a 1976 cap and also be within the language of the 1976 rules. It would be unreasonable and unlawful for OEPA to establish criteria through this document that could be construed to increase or decrease the standard of the 1976 rules.

II. Applicability:

This document establishes criteria for materials, construction and testing specifications; for the building of a new cap that meets the requirements of the 1976 rules, or the rebuilding of an old cap which failed to meet the 1976 rules.

III. Background:

It is DSIWM's position that facilities which have ~~Met~~ to initiate or complete closure or which closed improperly are liable for compliance with current closure and post-closure regulations. However, settlement negotiations for specific enforcement cases have resulted in orders requiring the owner/operator of a previously, but improperly closed solid waste landfill to complete installation of a final cap system meeting the requirements of OAC Rule 3745-27-10 (or a modified version), as that rule was effective July 29, 1976 (1976 cap).

@ Printed on recycled paper

EPA 1613 (rev. YW)

filename: B:\1976CAP.DOC

Ohio EPA/DSIWM

Material specifications and construction and testing criteria for a 1976 cap are not nearly as detailed as those set forth in the 1990 regulations [OAC 3745-27-11(G)] or the 1994 regulations [OAC 3745-27-08(C)(15) and (C)(16)].

A guidance document titled "Measurable Criteria for Questionable Pre-1990 Landfill Caps," dated March 24, 1995, establishes criteria to be used in testing a previously installed 1976 cap for compliance with applicable standards. However, the March 24, 1995 document does **not** address material, construction, and testing specifications for installation of a 1976 cap (or modified version) today. **This** document supplements the March 24, 1995, guidance to establish these installation criteria.

This guidance document **has** updated the previous format of the previous interoffice communication; **no** other substantial changes have been made.

N. Procedure:

Material Specifications:

The soil material specifications for a 1976 cap are not dependent upon whether the cap is currently being constructed or is already existing and undergoing testing for compliance with the 1976 ~~des~~. Therefore, the same material specifications established in the March 24, 1995 guidance **on** testing a questionable cap will be used to determine the **suitability** of material for construction of a 1976 cap today. These specifications are:

- 100% of the material particles must pass a 10" screen, **with no** more than two (2) particles from a 50 cubic foot sample retained **on** a 6" screen;
- 95% of the material particles must pass a 3" screen;
- 70% **of** the material particles **must** pass the #10 sieve;
- The material that passes the #10 sieve (sand, silt, and clay ~~h t i o n s~~) **must** be **classified using** the **USDA** textural classification chart, and be a **soil** type listed in OAC 3745-27-~~00~~(4), **as** effective July 29, 1976, or **an** acceptable alternative **soil** type **as** allowed by that rule.

NOTE: The testing frequency established in the March 24, 1995, guidance for an **existing** cap (i.e., one **test** pit per acre) corresponds to one "sampling" for every approximately 3,000 cubic yards of material. Therefore, a representative sample of the material intended for use in construction should be evaluated at a frequency not less than once for every 3,000 cubic yards.

Evaluation of the representative samples should include all particle size determinations except those utilizing the 10" and 6" screens. Use of these larger screens is not necessary unless visual observation of the material results in concerns that the 10" and/or 6" particle size criteria will not be met. If screening for 10" and 6" particle sizes is deemed necessary, one representative sample of at least 50 cubic feet should be tested for each 3,000 cubic yards of material intended for use to verify that the large particle size criteria are met.

Construction Specifications

The 1976 rules specify that the final cover layer **must** be well compacted and have low permeability to water, good compactability, and cohesiveness. Although these terms are not quantified in the 1976 rules, with this document DSIWM will establish compaction and permeability criteria for a newly constructed 1976 cap.

Common construction practice, whether for roadways, earthen dams, subgrades, etc., requires that earthen construction materials be well compacted to **minimize** the potential for failure due to settlement, loading, etc. Construction specifications **typically** include the requirement to compact the materials to **at least 95%** of the maximum Standard Proctor Density (ASTM D-698) or **90%** of the maximum Modified Proctor Density (ASTM D-1557). These same compaction criteria are included in **Ohio's 1994 regulations** for the recompacted soil liner and cap barrier layer and will be adopted **as** the compaction standard for construction of a 1976 cap. **To** achieve the required compaction rate, the material should be compacted using loose lifts, **no greater than** 8 inches **thick** prior to compaction.

In order to quantify the term "low permeability to water," it is important to consider the dual purpose of the 1976 cap **as** both a barrier layer to infiltration and to provide nourishment and support for a healthy and dense vegetative cover. **As** noted on Page 3 of the March 24, 1995 guidance, it would not be reasonable to expect the 1976 cap, **with** its dual purpose role, to have permeability criteria equivalent to the recompacted soil barrier layer in the 1994 cap systems. The Subtitle D closure requirements (40 CFR **Part 258.60**), which became effective October 9, 1991, require the installation of **an** "infiltration layer" which **has** permeability **no greater than** 1×10^{-5} cd/sec. When consideration is given to the **lack** of any substantive or detailed construction or testing requirements **in** the 1976 regulations, it is unreasonable to believe **that** many, if any, pre-1990 final covers (1976 caps) obtained field permeabilities in the range of 1×10^{-7} cd/sec. Most 1976 caps were likely much more permeable than 1×10^{-7} cd/sec. For these reasons, **Ohio EPA will** adopt 1×10^{-7} cd/sec **as the maximum** allowable field permeability for newly **constructed** 1976 caps. This permeability criteria should **not** be applied to the testing of existing 1976 caps. **Their** compliance with the 1976 regulations should be judged solely **on** the testing protocol and criteria outlined in the March 24, 1993 guidance document.

Testing Specifications:

The criteria to judge the suitability of soils for use in constructing a 1976 cap are listed in the "Material Specifications" section above. The suitability of the soils should be determined prior to their intended use in cap construction. The following tests should be performed on representative soil samples at least once for every 3,000 cubic yards of material intended for use.

- The sample should be screened to remove any particles larger than 3-inches;
- Sieve and hydrometer testing (ASTM D-422) for particle size gradation;
- Moisture/density relationship using either Standard Proctor (ASTM D-698) or Modified Proctor (ASTM D-1557) method.

Results of this testing should be made available to the local Ohio EPA District Office at least seven days prior to its intended use in cap construction.

During construction of the cap, compaction must 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, should be performed at least five times per acre per lift. The sand cone or rubber balloon methods should be performed at least three times per acre per lift. The sampling rate for other methods must be determined on an individual basis.

Upon completion of construction, the permeability of the cap must be determined. This can be accomplished through either field permeability testing @ outwell two-stage permeameter, (SDRI) or through laboratory testing of cap samples brought to the lab for analysis (Shelby tubes, soil blocks). The permeability requirements for each type of permeability determination are as follows:

- For field permeability tests (Eloutwell, SDRI), the required permeability of the cap is 1×10^{-5} cdsec.
- For laboratory permeability tests (Shelby tubes, soil blocks), the required permeability of the cap is 1×10^{-6} cdsec.

Any penetrations into the cap layer resulting from either compaction or permeability testing should be repaired using bentonite or a bentonite/soil mixture.

V. Point of Contact:

Supervisor, DSIWM Engineering - Policy Unit (614) 728-5373.

DE/dh

TRUST AGREEMENT

The "Agreement," entered into as of _____, 2002, by and between Center Township Trustees (the "Grantor"); Skv Trust, a National Bank (the "Trustee"); and the Ohio Environmental Protection Agency (the "Ohio EPA").

Whereas, the Ohio EPA has established certain rules applicable to the Grantor, requiring that the owner or operator of a solid waste facility provide assurance that funds will be available when needed for final closure and/or post-closure care, and/or corrective measures of the facility,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee,

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the trustee who enters into this Agreement and any successor trustee.

(c) The term "Director" means the director of the Ohio EPA, or his designee.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and/or noncontiguous unit(s) of a sanitary landfill facility and cost estimates identified on the attached **Schedule A**, pertaining to closure and post-closure care including any adjustments from updated cost estimates approved by the Ohio EPA, as well as any outstanding monthly disposal fees owed to the State. Said Facilities specifically include what is commonly known as the Center Township Landfill, a solid waste landfill, located on Bittner Road in Lisbon, Center Township, Columbiana County, Ohio ("Center Township Landfill").

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of the Ohio EPA. The Grantor and the Trustee intend that no third party shall have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in **Schedule B** attached hereto. Such property shall be the Grantor's initial payment into the Fund. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund

will be held by the Trustee, in trust, **as** hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Ohio EPA.

Section 4. Payment for Closure and Post-Closure Care and Corrective Measures. The Director, at his non-reviewable discretion, may allow, or provide for, the disbursement of any proceeds from the trust fund for the payment of any closure, post-closure care or other costs associated with environmental remedial activities or corrective measures at Center Township Landfill. The Trustee will reimburse the Director or other persons as specified by the Director from the Fund for closure, post-closure, and/or corrective measures expenditures in such amounts as the Director will direct, in writing. Upon refund, such funds will no longer constitute part of the Fund as defined herein.

Section 5. Remaining Monies. Any monies remaining in the trust fund after the completion of the thirty year post-closure period shall be disbursed to the Ohio EPA for payment into the hazardous waste clean up fund established pursuant to ORC Section **3734.28**, or any successor fund identified by the Ohio EPA.

Section 6. Payment Comprising the Fund. Payments made to the Trustee for the Fund will consist of cash or securities acceptable to the Trustee.

Section 7. Trustee Management. The Trustee will invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Director may communicate in writing to the Trustee periodically, subject, however, to the provision of this Section. In investing, reinvesting, exchanging, selling and managing the Fund, the Trustee will discharge its duties with respect to the Trust Fund solely in the interest of the Beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims, except that:

(a) Securities or other obligations of the Grantor or any other owner or operator of the facilities or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. Section 80a-2(a), will not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 8. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer periodically any or all of the assets of the Fund to any common, commingled or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. Sections 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 9. Express Powers of Trustee. Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee will be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentally thereof, with a Federal Reserve Bank, but the books and records of the Trustee will at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal of State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 10. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund will be paid from the Fund. All other expenses, proper charges, and disbursements, incurred by the Trustee in connection with the administration of this trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee will be paid from the Fund. Expenses, proper charges, and disbursements include fees for legal services, rendered to the Trustee and the compensation of the Trustee to the extent the Grantor fails to compensate the Trustee pursuant to section 13.

Section 11. Annual Valuation. The Trustee will annually, not later than thirty days prior to the anniversary date of the establishment of the Fund, furnish to the Grantor and to the Director a statement confirming the value of the Trust. Any securities in the Fund will be valued at market value as of no more than sixty days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee not later than ninety days after the statement has been furnished to the Grantor and the Director will constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 12. Advice of counsel. The Trustee may periodically consult with counsel with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee will be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 13. Trustee compensation. The Trustee will be entitled to reasonable compensation from the Fund for the Trustee's services as agreed upon in writing periodically with the Director.

Section 14. Successor Trustee. The Trustee may resign or the Director may replace the Trustee, but such resignation or replacement shall not be effective until the Director has appointed a successor Trustee and this successor accepts the appointment. The successor Trustee will have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor Trustee's acceptance of the appointment, the Trustee will assign, transfer, and pay over to the successor Trustee the funds and properties then constituting the fund. If for any reason the Director cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor Trustee or for instructions. The successor Trustee shall specify the date on which it assumes administration of the Trust in a writing sent to the Grantor, the Director, and the present Trustee by certified mail not later than ten days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this section will be paid as provided in section 10.

Section 15. Instructions to the Trustee. All orders, requests, and instructions by the

Director to the Trustee will be in writing, signed by the Director and the Trustee will act and be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee will have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Director hereunder has occurred. The Trustee will have no duty to act in the absence of such orders, requests and instructions from the Director except as provided for herein.

Section 16. Amendment of Agreement. There shall not be any further modifications or amendments to this Trust Agreement for the trust fund without the Director's written approval. This Agreement may be amended by an instrument in writing executed by the Director and the Trustee, provided that no such amendment may require the Grantor to make additional payments to the Fund or to otherwise make payments in furtherance of the purposes of this Agreement.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this trust will be irrevocable and will continue until terminated at the written agreement of the Trustee and the Director. Upon termination of the Trust, all remaining Trust property, less final Trust administration expenses, will be delivered to the Hazardous Waste Clean Up Fund established pursuant to ORC Section 3734.28, or any successor fund identified by the Ohio EPA.

Section 18. Immunity and Indemnification. The Trustee will not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this trust, or in carrying out any directions by the Director issued in accordance with this agreement. The Trustee will be indemnified and saved harmless from the Trust Fund, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense.

Section 19. Choice of Law. This Agreement will be administered, construed, and enforced according to the laws of the State of Ohio.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement will not affect the interpretation or the legal efficacy of this Agreement.

Section 21. Compliance with Administrative Code. The parties below certify that the wording of this Agreement is identical to the wording specified in paragraph (A) of Rule 3745-27-17 of the Administrative Code, as such rule was constituted on the date first above written, except as modified by an Agreed Order entered on or about _____, in the administrative case captioned as In the Matter of Center Township Trustees.

IN WITNESS WHEREOF, the parties have caused this agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written.

-)

GRANTOR:

Center Township Trustees:

L~*S&S/%&
Center Town i Trustee

3-13-02
Date

[Signature]
Witness

Charley Kiddler
Center Township Trustee

3-13-02
Date

[Signature]
Witness

[Signature]
Center Township frhstee

3713-02
Date

Kirsty L. Foster
Witness

State of Ohio
County of Franklin

On this _____, 2002, before me personally came _____, and _____, to me known, who being by me duly sworn, did depose and say that respectively they are/were the trustee(s) of Center Township, and the entity described in and which executed the above instrument; and that each signed their names thereto.

Notary Public

TRUSTEE at Sky Trust:

Title:

Attest: _____
Witness



SCHEDULE A

Center Township Landfill Lisbon, Ohio

Closure and Post-Closure Care Cost Estimates

The cost of closure is estimated to be \$1,450,000, and the cost of post-closure care is estimated to be \$150,000, subject to revision by the Ohio EPA as conditions warrant.

SCHEDULE B

**Center Township Landfill
Lisbon, Ohio**

Amount of initial deposit is one thousand (\$1,000.00) dollars.

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