

FILED  
ATHENS COUNTY, OHIO  
'94 AUG 31 PM 2 34

IN THE COURT OF COMMON PLEAS  
ATHENS COUNTY, OHIO

STATE OF OHIO, ex rel.,  
LEE FISHER  
ATTORNEY GENERAL OF OHIO,

Plaintiff,

v.

BOARD OF COUNTY  
COMMISSIONERS OF ATHENS  
COUNTY,

Defendant.

CASE NO. 94 CI 000154

CHRISTIE MITCHELL  
CLERK OF COMMON  
PLEAS COURT

JUDGE *Ward*

CONSENT ORDER

The Plaintiff, State of Ohio, ex rel. Lee Fisher, Attorney General of Ohio ("State" or "Plaintiff"), having filed the Complaint in this action against the Board of County Commissioners of Athens County (hereinafter "Defendant") to enforce Ohio's solid waste laws and rules concerning the landfill owned by Athens County and located on State Route 691 (hereinafter referred to as the "691 Landfill" or the "Facility"), and Plaintiff and Defendant having consented to entry of this order;

THEREFORE, without trial of any issue of law or of fact, and upon the consent of the parties hereto, it is hereby ORDERED, ADJUDGED, ENJOINED and DECREED as follows:

**I. PERSONS BOUND**

1. The provisions of this Consent Order shall apply to and be binding upon the Defendant to this action, its agents, officers, employees, assigns, successors in interest, and any person acting in active concern, privity or participation with the Defendant or the County who receives actual notice of this Consent Order whether by personal service or otherwise. Defendant shall provide a copy of this Consent Order to each consultant, contractor or subcontractor

employed to perform work referenced herein or to handle, store, treat and/or dispose of wastes generated by their activities at the Facility.

## II. JURISDICTION AND VENUE

2. The Court has jurisdiction over the parties. This court has jurisdiction over the subject matter of this case pursuant to R.C. Chapters 3734 and rules promulgated thereunder. Venue is proper in this court. The Complaint states a claim upon which relief can be granted.

## III. SATISFACTION OF LAWSUIT

3. Except as otherwise provided in this Consent Order, compliance with the terms of this Consent Order shall constitute full satisfaction of any civil liability of Defendants to Plaintiff for all claims alleged in the Complaint.

4. Nothing in this Consent Order, including the imposition of stipulated civil penalties for violations of this Consent Order, shall limit the authority of the State of Ohio to:

- A. Seek any legal or equitable relief for claims or conditions not alleged in the Complaint, including violations that occur after the filing of the Complaint;
- B. Seek any legal or equitable relief for claims or conditions alleged in the Complaint which occur or exist after the entry of this Consent Order;
- C. Enforce this Consent Order through a contempt action or otherwise for violations of this Consent Order;
- D. Bring any legal or equitable action against Defendant or against any person, to the extent allowed by law, under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), as amended, 42 U.S.C. § 9601, et seq., Ohio Revised Code ("R.C.") Chapter 3734, and/or R.C. Chapter 6111 to: (1) recover natural

resource damages, and/or (2) to enjoin the performance of, and/or recover response costs for, any removal, remedial or corrective activities at the Facility.

E. Take any action authorized by law against any person, including Defendant, to eliminate or mitigate conditions at the Facility which may present an imminent threat to the public health or welfare, or the environment.

#### **IV. GENERAL INJUNCTIVE RELIEF**

5. Except as expressly provided in Section V of this Order, Defendant is hereby permanently enjoined and ordered to comply with R.C. Chapters 3734, and rules promulgated thereunder, with regard to the operation, closure and post-closure monitoring and maintenance of the Facility.

#### **V. COMPLIANCE SCHEDULE**

6. The Defendant is hereby ordered and enjoined to achieve compliance with ORC Chapter 3734 and regulations promulgated under that Chapter, including achieving compliance with the closure provisions of OAC 3745-27-11(M) by August 1, 1996, in accordance with the following schedule:

A. By June 1, 1995, Defendant shall delineate all areas of waste placement at the Facility, this shall include a survey of current Facility topography and placement of grade stakes, as needed.

B. By June 1, 1995, Defendant shall submit new or existing analytic data demonstrating the soils to be utilized in final cap construction will at 95% compaction have a permeability no greater than  $1 \times 10^{-5}$  centimeters per second. The soil material for the cap

shall be stock-piled in 3000 cubic yard increments to facilitate inspections and shall have the particle size distribution specified in Paragraph 6. D. i.

C. By September 1, 1995, Defendant shall:

i. Install appropriate erosion and sediment controls prior to the removal of vegetation and top soil. These controls shall include, but are not limited to, surface water control measures to collect surface water from for all disturbed areas at the site or Facility, a sedimentation pond which shall be located at the Southeast corner of the site, and the implementation of best management practices, i.e. silt traps and silt fences, for other portions of the site. The installation of these controls shall be completed before the activities in Paragraph 6. C.( ii) and (iii) are begun.

ii. Remove all vegetation and properly grade, and otherwise prepare the Facility for the installation of the cap. This preparation shall include an on ground survey and placement of grade stakes for installation of the cap system.

iii. Properly grade all final slopes of the Facility to no less than one (1) percent and no greater than twenty-five (25) percent to achieve compliance with OAC Rule 3745-2710(C)(3) as effective July 29, 1976. The Defendant shall grade the Facility and provide drainage structures as necessary to direct surface water off the site and not allow ponding of water within the limits of solid waste placement and to achieve compliance with OAC Rule 3745-27-10(C)(4) as effective July 29, 1976.

D. By November 1, 1995, Defendant shall begin installing the cap at the Facility in accordance with the June 9, 1993, Guidance Document "Standards for Construction of a 1976 Cap System" attached hereto and incorporated by reference herein as Attachment I. The cap shall be constructed in accordance with the following specifications:

- i. Soils used to construct the cap system shall have the following minimum particle size distribution:
  - a. 100% of the material must pass a 10" screen with no more than two particles from a 50 cubic foot sample retained on a 6" screen.
  - b. 95% of the material must pass a 3" sieve.
  - c. 70% of the material must pass the #10 sieve.
  - d. The material that passes the #10 sieve must be classified using the USDA classification chart and be a soil type listed in OAC Rule 3745-27-09(F)(4), as effective July 29, 1976.
- ii. Soils used to construct the cap system shall be tested for the following parameters at intervals of every 3000 cubic yards of soil used:
  - a. For particle size using gradation sieve and hydrometer testing (ASTM D-422).
  - b. For moisture/density relationship using either the Standard Proctor (ASTM D-698) or Modified Proctor (ASTM D-1557) methods.
- iii. Soils used to construct the cap system shall have a permeability of no greater than  $1 \times 10^{-5}$  centimeters per second at 95 percent compaction. Permeability shall be verified during and after construction in accordance with the June 9, 1993, Guidance Document "Standards for Construction of a 1976 Cap System" (Attachment I).
- iv. The cap system shall cover all waste materials deposited at the Facility with at least two feet of well-compacted cover material that meets the requirements set forth in OAC Rules 3745-27-09(F) and 3745-27-10(C)(1) as effective July 29, 1976.
- v. At the time of installation, the cap system shall be installed in loose lifts not to exceed 8 inches in thickness to facilitate uniform compaction. The lifts

shall be well compacted by using at least 6 passes of a sheep's foot compactor at least 20 tons in weight.

E. By June 1, 1996, the Defendant shall complete the following activities at the Facility.

i. The Defendant shall achieve compliance with OAC Rule 3745-27-10(C)(2), as effective July 29, 1976, including the seeding of the site with grasses or other vegetation as many times as is required to form a dense vegetative cover;

ii. The Defendant shall achieve compliance with OAC Rule 3745-27-10(C)(7), as effective July 29, 1976, including the posting of signs at all entrances to the Facility stating in the letters not less than three inches high that the Facility is permanently closed;

iii. The Defendant shall achieve compliance with OAC Rule 3745-27-10(C)(9), as effective July 29, 1976, including the blocking of all entrances and access roads with locked gates, fencing, or other sturdy obstacles to prevent unauthorized access to the Facility;

iv. The Defendant shall achieve compliance with OAC Rule 3745-27-10(H) as effective July 29, 1976 and OAC Rule 3745-27-11(O) as effective June 1, 1994, including either containing leachate and properly treating it on-site or collecting leachate, by means of a leachate collection system that collects leachate from all seeps and extends around the perimeter of the solid waste limits, and properly transporting the collected leachate off-site for proper treatment.

F. By August 1, 1996, the Defendant shall achieve compliance with OAC Rule 3745-27-10(C)(8) as effective July 29, 1976, including the submittal of a plat of the site to the Athens City-County Board of Health, Athens County Recorder, and the Director of Ohio EPA, which shall accurately locate and describe the completed Facility, and include

information relating to the area, depth, volume, and nature of wastes disposed in the Facility.

G. Within sixty (60) days after closure activities are completed, Defendant shall achieve compliance with OAC Rule 3745-27-10, as effective July 29, 1976, including the submittal of a certification in accordance with OAC 3745-27-11(J), as effective June 1, 1994, and quality assurance/quality control report, prepared by a registered professional engineer, verifying that the closure activities specified in Paragraph 6 have been completed in accordance with OAC 3745- 27-11(M).

H. By April 1, 1996, the Defendant shall submit an explosive gas monitoring plan with a schedule of implementation that meets the requirements in OAC Rule 3745-27-12 as that rule was effective June 12, 1989, unless the Defendant can demonstrate that a residence or other occupied structure is not located within one thousand (1000) feet horizontal distance from emplaced solid wastes. The Defendant shall implement the explosive gas monitoring plan within ninety (90) days after receipt of written approval from Ohio EPA in accordance with the schedule of implementation as approved.

I. By April 1, 1996, the Defendant shall submit a Ground Water Monitoring Program for the Facility in accordance with OAC Rule 3745-27-10, as effective June 1, 1994. This program shall include a schedule of implementation that meets the requirements of that rule. The Defendant shall implement the approved Ground Water Monitoring Program within ninety (90) days after receipt of written approval from Ohio EPA in accordance with schedules of compliance as approved.

J. In the event Ohio EPA notifies the Defendant that the Groundwater Monitoring Program, the plat, the certification, the quality assurance/quality control report, or the gas monitoring plan are unsatisfactory in whole or in part, within thirty (30) days after receipt of such notification, the Defendant shall amend each unsatisfactory submission and submit to Ohio EPA a revised document or documents that fully corrects all

deficiencies. At its option, Ohio EPA may further modify the revised document or documents prior to approval, and/or impose conditions upon the approval. The Defendant shall implement revised and/or modified document or documents as approved by Ohio EPA in accordance with Paragraph 6.

K. Beginning thirty (30) days after the entry of this Order, the Defendant shall submit quarterly status reports to Ohio EPA, due on the 15th day of the month in which it is due, which shall describe the closure activities completed during the previous quarter. The Defendant shall continue submitting status reports until the activities outlined in Paragraph 6 are completed.

7. Upon completion of proper closure of the Facility as required by Paragraph 6 of these Orders, The Defendant shall, in accordance with OAC Rule 3745-27-14, as effective June 1, 1994, conduct post-closure monitoring at the Facility for thirty years, or less if the Director of Environmental Protection approves such lesser period of time by the issuance of a Director's order expressly granting an exemption under Section 3734.02(G) ORC.

**VI. COMPLIANCE WITH APPLICABLE LAWS:**  
**PERMITS AND APPROVALS**

8. All activities undertaken by Defendant pursuant to this Consent Order shall be undertaken in accordance with the requirements of all applicable federal, state and local laws, rules and regulations, and permits. For work both on and off the Facility, Defendant shall obtain all permits or approvals necessary under applicable federal, state or local laws and shall submit timely applications and requests for any such permit and approvals. Defendant shall include, in all contracts or subcontracts entered into for work required under this Consent Order, provisions stating that such contractors or subcontractors, including their agents and employees, shall perform all activities required by such contracts or subcontracts in compliance with all applicable laws and



rules. This Consent Order is not a permit issued pursuant to any federal or state or local law or rule.

## VII. STIPULATED PENALTIES

9. In the event that Defendant violates any of the requirements of this Consent Order Defendant shall immediately and automatically be liable for and shall pay stipulated penalties according to the following schedule. For each day of each violation or failure to meet a requirement, up to thirty (30) days -Fifty Dollars (\$ 50.00) per day. For each day of each violation or failure to meet a requirement, from thirty-one (31) to sixty (60) days -One Hundred Dollars (\$100.00) per day. For each day of each violation or failure to meet a requirement, from sixty-one (61) to ninety (90) days -One Hundred- Fifty Dollars (\$150.00) per day. For each day of each violation or failure to meet a requirement, over ninety (90) days -Two Hundred Dollars (\$200.00) per day. Any stipulated penalty required to be paid pursuant to this article of this Consent Order shall be paid by certified check made payable to the order of "Treasurer, State of Ohio," which check shall be delivered by mail, or otherwise, to Matt Sanders or his successor at the Ohio Attorney General's Office, Environmental Enforcement Section, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215-3428, within thirty (30) days of the violation or failure to meet the requirement of this Consent Order.

## IX. INSPECTIONS

10. Defendant is ordered to allow representatives of the Ohio EPA to enter upon the Facility at all times to inspect, investigate, take samples and pictures and examine or copy records in order to determine compliance with the terms of this Consent Order and R.C. Chapters 3734 and 6111 and rules promulgated thereunder. Nothing in the Order shall limit the rights of the Ohio

EPA or U.S. EPA to conduct inspections or investigations pursuant to statute or regulations.

**XI. NOTICE AND SUBMITTAL OF DOCUMENTS**

11. Any notice or submission the Ohio EPA as required by this Consent Order unless otherwise indicated shall be delivered to:


- A. Ohio Environmental Protection Agency  
Division of Solid and Infectious Waste Management  
Southeast District Office  
2195 Front Street  
Logan, Ohio 43138  
Attn: Unit Supervisor, DSIWM
  
- B. Ohio Environmental Protection Agency  
Division of Solid and Infectious Waste Management  
1800 WaterMark Drive  
P. O. Box 163669  
Columbus, Ohio 43216-3669  
Attn: Enforcement Coordinator, DSIWM
  
- C. Athens City-County Health Department  
278 Union Street  
Athens, Ohio 45701  
Attn: Solid Waste Coordinator

unless otherwise specified in these Orders, or to such persons and addresses as may be otherwise specified in writing by the Ohio EPA.

**XII. COURT COSTS**

14. Defendant is hereby ordered to pay the costs of this action.

8/31/94  
Date

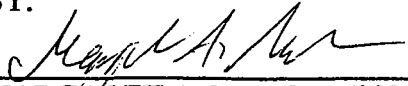
  
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JUDGE

APPROVED:

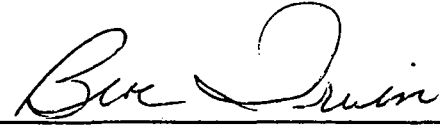
LEE FISHER  
ATTORNEY GENERAL OF OHIO

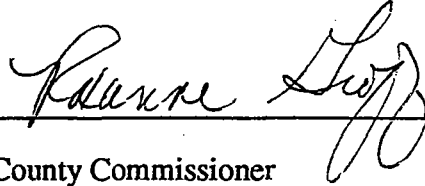
BOARD OF COUNTY COMMISSIONERS  
OF ATHENS COUNTY


BY:


  
MARGARET A. MALONE(0021770)  
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Assistant Attorneys General  
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Attorney for Plaintiff

BY:

  
County Commissioner

  
County Commissioner

  
BIRDIE PEDERSEN( 0046763 )  
Assistant Athens County Prosecuting Attorney  
Athens County Court House  
Athen , Ohio 45701  
Attorney for Defendant

  
County Commissioner

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State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.  
Columbus, Ohio 43266-0149  
(614) 644-3020  
FAX (614) 644-2329

George V. Voinovich  
Governor

Donald R. Schregardus  
Director

INTEROFFICE COMMUNICATION

TO: Distribution  
FROM: Barry *Budicka*, Chief, DSIWM  
DATE: June 9, 1993  
SUBJECT: Standards for Current Construction of a 1976 Cap System

General Background:

It is DSIWM's position that facilities which have failed 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 3745-27-10 (or a modified version), as that rule was effective July 29, 1976 (1976 cap). Material specifications and construction and testing criteria for a 1976 cap are not nearly as detailed as those set forth in the 1990 best available technology (BAT) regulations [OAC 3745-27-11(G)].

A guidance document titled "Measurable Criteria for Questionable Pre-1990 Landfill Caps", dated April 13, 1993, establishes criteria to be used in testing a previously installed 1976 cap for compliance with applicable standards. However, the April 13, 1993 document does not address material, construction, and testing specifications for installation of a 1976 cap (or modified version) today. This document supplements the April 13, 1993 guidance to establish these installation criteria.

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 rules. Therefore, the same material specifications established in the April 13, 1993 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 fractions) must be classified using the USDA textural classification chart, and be a soil type listed in OAC 3745-27-09(F)(4), as effective July 29, 1976, or an acceptable alternative soil type as allowed by that rule.

NOTE: The testing frequency established in the April 13, 1993 guidance for an existing cap (i.e., one test pit per acre) corresponds to one "sampling" for every approximately 3000 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 3000 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 3000 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 we 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 BAT 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 April 13, 1993 guidance, it would not be reasonable to expect the 1976 cap, with its dual purpose role, to have permeability criteria equivalent to the recompact soil barrier layer in the 1990 BAT cap. 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  $1 \times 10^{-5}$  cm/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  $1 \times 10^{-7}$  cm/sec. Most 1976 caps were likely much more permeable than  $1 \times 10^{-7}$  cm/sec. For these reasons, Ohio EPA will adopt  $1 \times 10^{-5}$  cm/sec as the maximum allowable field permeability for newly-constructed 1976 caps. This permeability criteria should not be applied to the testing of existing, but questionable, 1976 caps. Their compliance with the 1976 regulations should be judged solely on the testing protocol and criteria outlined in the April 13, 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 3000 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 densiometer (ASTM D-2922), sand cone (ASTM D-1556), and rubber balloon (ASTM D-2167). The nuclear densiometer 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 (Boutwell 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 (Boutwell, SDRI), the required permeability of the cap is  $1 \times 10^{-5}$  cm/sec.
- For laboratory permeability tests (Shelby tubes, soil blocks), the required permeability of the cap is  $1 \times 10^{-6}$  cm/sec.

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

BB/SH/clk

Distribution:

All DSIWM Engineers  
All DSIWM Management

cc: Nancy Moore, DSIWM (for inclusion in guidance book)