



State of Ohio Environmental Protection Agency

**STREET ADDRESS:**

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

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

**MAILING ADDRESS:**

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

October 31, 2002

**CERTIFIED MAIL**

Penn-Ohio Coal Co.  
d/b/a/ Kimble Sanitary Landfill  
3596 State Route 39, NW  
Dover, Ohio 44622

Re: Director's Final Findings & Orders

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

cc: Sharon Gbur, CO, DSIWM  
Steve Rine, **SEDO**, DSIWM  
Jim Vinch, Legal, DSIWM  
Tuscarawas County Health Dept.

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

OHIO E.P.A.  
OCT 31 2002  
ENTERED DIRECTOR'S JOURNAL

Date Issued: OCT 31 2002  
Date Effective: OCT 31 2002

**BEFORE THE  
OHIO ENVIRONMENTAL PROTECTION AGENCY**

In the Matter **OF:**

Penn-Ohio Coal Co.,  
d/b/a Kimble Sanitary Landfill  
3596 State Route 39, NW  
Dover, Ohio 44622

Director's Final Findings  
and Orders

Respondent

**PREAMBLE**

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

**I. JURISDICTION**

These Director's Final Findings and Orders ("Orders") are hereby issued to Penn-Ohio Coal Co., an Ohio corporation, doing business as Kimble Sanitary Landfill ("Respondent") pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under Sections 3734.13 and 3745.01 of the Ohio Revised Code ("ORC").

**II. PARTIES**

These Orders shall apply to and be binding upon the Respondent, and its successors in interest liable under Ohio law. No changes in ownership of the Respondent, or of the Facility (as hereinafter defined) owned by the Respondent will in any way alter the Respondent's responsibilities under these Orders. The Respondent's obligations under these Orders may be altered only by the written approval of the Director of Ohio EPA.

I certify this to be a true and accurate copy of the  
official document as filed in the records of the Ohio  
Environmental Protection Agency.  
By: Zona L. Clement Date: 10/31/02

### **III. DEFINITIONS**

Unless otherwise stated, all terms used in these Orders shall have the same meaning as used in ORC Chapter 3734 and the regulations promulgated thereunder.

### **IV. FINDINGS OF FACT**

The Director has determined the following findings of fact:

1. Respondent is the owner and operator of the Kimble Sanitary Landfill (the Facility) located at 3596 State Route 39, NW, Dover, Tuscarawas County, Ohio.
2. On or about January 28, 1994, Ohio EPA issued to Respondent a Permit to Install for the Facility through Director's Final Findings & Orders.
3. As a condition to the January 28, 1994 PTI, Respondent submitted its Ground Water Detection Monitoring Plan (GWDMP) to Ohio EPA-SEDO in February 1994. Respondent began ground water monitoring under the GWDMP in March 1994.
4. On May 13, 1994, Respondent submitted an alternate source demonstration seeking Agency authorization to utilize an intra well statistical approach. The alternate source demonstration asserted that elevated levels of iron, manganese, total dissolved solids (TDS), chloride and sulfate were due to natural variations and historic use of the site, including: surface mining in formations containing pyrite, storage and application of brine for dust control, and impacts from oil and gas well exploration.
5. On July 11, 1995, Ohio EPA commented on several deficiencies within Respondent's March 1994 and September 1994 groundwater quality data and cited respondent for violations of OAC Rule 3745-27-10(D)(5)(a)(ii) for failure to collect and analyze a minimum of four independent samples from each monitoring well during the initial 180 days after implementing the groundwater detection and monitoring program.
6. On July 14, 1995, Ohio EPA commented on several deficiencies within Respondept's GWDMP and recommended the installation of two additional wells to better determine the ground water flow characteristics. Ohio EPA noted that ground water flow may be radial (rather than upgradient to downgradient) and recommended the installation of two additional wells to aid in the determination of ground water flow. Ohio EPA also recommended that Kimble revise the description of the groundwater flow system beneath the landfill and address the establishment

- of background water quality using sampling wells that are not hydraulically upgradient.
7. On July 26, 1995, Respondent disagreed with OEPA's recommendation for additional ground water monitoring wells, noting that the existing wells were sufficient to determine ground water quality and flow.
  8. On November 2, 1995, Respondent met with Ohio EPA in an attempt to resolve the disagreement regarding the need for additional ground water monitoring wells.
  9. On November 27, 1995, Ohio EPA commented on several deficiencies within Respondent's revised GWDMP and recommended the installation of one additional well to better determine groundwater flow characteristics and establishment of background ground water quality through the use of non-upgradient groundwater monitoring location data.
  10. On December 4, 1995, Ohio EPA commented on Respondent's August 1995 groundwater quality sampling results and cited Respondent for continued violations of OAC Rule 3745-27-10(D)(5)(a)(ii).
  11. On April 10, 1996, Ohio EPA commented on deficiencies within Respondent's Supplemental Hydrogeologic Workplan and acknowledged Respondent's agreement to install the recommended additional well (BP-27) and did not object to its use for the evaluation of background ground water quality as part of the GWDMP.
  12. In April 1996, Respondent completed the collection of background water quality data for wells developed in the Homewood formation. Sampling in accordance with OAC Rule 3745-27-10(D)(5)(a)(ii) should have been completed by September 1994 but was not completed until April 1996. The background monitoring data indicated high concentrations of chloride, specific conductance and total dissolved solids. In addition, the data indicated that secondary Minimum Contaminant Levels for parameters such sodium, sulfate and pH were routinely exceeded.
  13. On August 12, 1996, Respondent installed well BP-27.
  14. On October 15, 1996, Respondent, accompanied by personnel from Ohio EPA-SEDO, conducted its semiannual sampling event for the second half of 1996 and sampled BP-27.
  15. On April 25, 1997, Respondent advised Ohio EPA that it was collecting the required number of background samples for BP-27 and will chose an appropriate statistical method for all wells in its network after the completion of the Spring 1998 sampling event. Statistical analysis in accordance with OAC Rule 3745-27-10(D)(S)(b)(iii)

should have begun with the first semiannual sampling event of 1995 but was not submitted until October 1998.

16. Ohio Administrative Code (OAC) Rule 3745-27-10(C)(6) requires an owner or operator of a sanitary landfill to select an appropriate statistical method to analyze groundwater data within 90 days after collecting the background data. An appropriate statistical method must comply with the performance standards of OAC Rule 3745-27-10(C)(7) and be protective of human health and the environment.
17. On July 25, 1997, Respondent submitted to Ohio EPA its semi-annual groundwater monitoring analytical results of the first half of 1997. These results were reviewed by Ohio EPA, Division of Drinking and Ground Water, and on September 29, 1997, Ohio EPA sent correspondence to Respondent advising that the analytical results were found not to be in compliance with OAC Rule 3745-27-10(C)(6) because Respondent did not specify an appropriate statistical method to evaluate ground water data. Furthermore, the correspondence indicated that Respondent failed to statistically analyze the ground water data for the parameters listed in Appendix I to OAC Rule 3745-27-10 in violation of OAC Rule 3745-27-10(D)(5)(b)(iii).
18. On September 29, 1997, Ohio EPA Division of Solid and Infectious Waste Management sent a notice of violation ("NOV") to Respondent for failing to submit an appropriate statistical method in violation of OAC Rule 3745-27-10(C)(6), for failing to conduct a semiannual sampling event as required by OAC Rule 3745-27-10(D)(5)(b)(ii) and for failing to statistically analyze the results from groundwater monitoring wells as required by OAC Rule 3745-27-10(D)(5)(b)(iii).
19. On or about December 8, 1997, Respondent submitted correspondence to Ohio EPA indicating that Respondent, based on its collection of 9 data sets, intended to select the parametric analysis of variance ("ANOVA") statistical method to analyze ground water data.
20. Ohio EPA reviewed the Respondent's proposed statistical method and determined that the use of the ANOVA method requires 12 analytical data sets. Respondent was required to already have an appropriate statistical method in place following the second semiannual sampling event of 1998 and it did not have sufficient data to implement the ANOVA method. On January 22, 1998, Ohio EPA sent an NOV to Respondent stating that the ANOVA method was an inappropriate statistical method to analyze ground water data at the Facility and that Respondent was in violation of OAC Rule 3745-27-10(D)(5)(b)(iii).
21. On June 22, 1998, Ohio EPA issued another NOV to Respondent indicating that Respondent continued to violate OAC Rule 3745-27-10(D)(5)(b)(iii) for failing to select an appropriate statistical method and statistically monitor ground water data.

22. In November of 1998, Respondent submitted to Ohio EPA its 1998 Revised Statistical Analysis Plan for Groundwater Quality Data wherein Respondent proposed to use the Mann-Kendall Trend Test as the statistical method to analyze ground water data. Trend tests, such as Mann-Kendall, do not detect quantitative sudden releases from landfills, but only estimate trends in parameter concentrations.
23. On March 8, 1999, Ohio EPA sent an NOV to Respondent citing violations of OAC Rules 3745-27-10(C) and 3745-27-10(C)(7)(a) and indicated that the Mann-Kendall method is not an appropriate statistical method for the distribution of chemical parameters at the Kimble landfill.
24. In April 1999, Respondent revised and resubmitted its Statistical Analysis Plan using a Prediction Limit statistical test (an intra-well test), which had not been previously approved by the Agency. Based upon the results of this test, Respondent asserted that there had been no release of leachate from the Facility.
25. On August 2, 2000 Respondent and its consultants met with representatives of Ohio EPA to discuss the appropriate statistical approach for evaluating ground water at the Facility. At that meeting Ohio EPA advised Respondent that, based upon current information, an intra-well statistical method would not be acceptable for the analysis of its ground water data because Respondent had been unable to demonstrate to the Agency's satisfaction, that background ground water quality was not impacted by the Facility.
26. On August 15, 2000, and again on January 4, 2001, Ohio EPA sent NOV's to Respondent for failing to submit an appropriate statistical method in violation of OAC Rule 3745-27-10(C)(6), for failing to conduct a semiannual sampling event as required by OAC Rule 3745-27-10(D)(5)(b)(ii) and for failing to statistically analyze the results from groundwater monitoring wells as required by OAC Rule 3745-27-10(D)(5)(b)(iii).
27. On September 29, 2000, Respondent requested additional time to evaluate its ground water data and the hydrogeology of the Facility site in order to provide the information required by Ohio EPA to approve the use of intra-well statistical analysis.
28. On October 4, 2000, Respondent and Ohio EPA met at the Facility to observe outcropping of the Homewood formation.
29. On October 9, 2000, Respondent provided Ohio EPA with an update on its supplemental hydrogeological investigation of the Facility and the results of its failed attempt to perform an inter-well statistical analysis using BP-27, UMW1A and UMW2A as upgradient wells. Respondent reiterated its request for additional time to complete its hydrogeological study.

30. On November 6, 2000, and November 16, 2000, the Tuscarawas County Health Department sent NOV's to Respondent citing violations of OAC Rule 3745-27-10(A)(1)(a)(iii) for failing to provide Ohio EPA with an appropriate statistical analysis and for failing to comply with its authorizing documents pursuant to OAC Rule 3745-27-19(C).
31. On November 17, 2000, Respondent provided Ohio EPA with an additional progress report and advised Ohio EPA regarding the additional wells it was installing to supplement its understanding of ground water flow at the site.
32. On January 4, 2001, Ohio EPA declined to grant Respondent's request for additional time to complete its reassessment of the hydrogeology of the Facility site and advised Respondent to select an appropriate statistical method and re-analyze its ground water monitoring data because this work should have been completed in 1995. Ohio EPA also cited Respondent for continuing violations of OAC Rules 3745-27-10(A)(1)(a)(iii), 3745-27-10(C)(6) and 3745-27-10(D)(5)(b)(iii).
33. On February 21, 2001, Respondent advised Ohio EPA that it was nearing completion of its re-evaluation of the hydrogeology of the Hornewood formation. Respondent also advised Ohio EPA that Dr. Robert Gibbons, a consultant who has been utilized by USEPA on the statistical analysis of ground water, was assisting in the selection of an appropriate statistical analysis method for the Facility. Respondent requested a 30 day extension of time for the submission of the ground water sampling results for the second half of 2000 in order for Dr. Gibbons to complete his review of the data.
34. On March 6, 2001, Ohio EPA declined to grant the February 21, 2001 request for extension of time because this work should have been completed in 1995. Ohio EPA again cited Respondent for continuing violations of OAC Rules 3745-27-10(A)(1)(a)(iii), 3745-27-10(C)(6) and 3745-27-10(D)(5)(b)(iii).
35. On April 30, 2001, Respondent submitted its supplemental hydrogeological study to Ohio EPA. As part of the report, KSL utilized a Shewart-CUMSUM control chart, an intra-well statistical method not previously approved by the Agency to analyze the ground water data at the Facility and asserted that there had been no statistically significant increase for any well or constituent in 1999 or 2000.
36. On June 6, 2001, Ohio EPA issued a NOV to Respondent citing continuing violations of OAC Rules 3745-27-10(A)(1)(a)(iii), 3745-27-10(C)(6), 3745-27-10(D)(5)(b)(iii) and 3745-27-10(D).
37. On July 18, 2001, Respondent met with Ohio EPA to discuss the April 30, 2001 supplemental hydrogeological study and was advised that it must still use an inter-well statistical analysis method until KSL can successfully demonstrate that background ground water quality was not impacted by the Facility.

38. On or about November 16, 2001, at the request of Ohio EPA, Respondent submitted additional data to Ohio EPA in an attempt to demonstrate that elevated levels of sodium and chloride in the groundwater at the Facility were not the result of leachate from landfill operations, but instead were caused by brine which was generated by oil and gas exploration and which was applied to the property as a dust suppressant during mining activities.
39. On August 2 and 14, 2001, and February 7, 2002, Ohio EPA again cited Respondent for continuing violations of OAC Rules 3745-27-10(A)(1)(a)(iii), 3745-27-10(C)(6), 3745-27-10(D)(5)(b)(iii) and 3745-27-10(B).
40. Ohio EPA independently analyzed the additional data submitted by Respondent using a preferred mixing curve analytical method as recommended by various outside experts and concluded that the elevated sodium and chloride concentrations at the Facility were likely caused by brine, and that there were likely sources of brine other than the landfill. Therefore, Ohio EPA was able to determine that the use of a statistical method based on an intra-well monitoring approach was appropriate for the following parameters that are associated with brine: sodium, chloride, ammonia and COD.
41. On March 26, 2002, Respondent submitted to Ohio EPA an inter-well Statistical Analysis of Ground Water Monitoring Data for the Second Half of 2001.
42. On May 1, 2002, Respondent submitted a Rerun of Inter-well Statistical Data, which modified the results of the analysis submitted on March 26, 2002.
43. On May 6, 2002, Ohio EPA, in an Inter-Office Communication (IOC), acknowledged that Respondent's March 26, 2002 submittal, as modified by the May 1, 2002 submittal, provided sufficient justification for the use of intra-well statistical analysis for all parameters monitored in its GWDMP.
44. On September 12, 2002, Respondent submitted to Ohio EPA an addendum to its Ground Water Monitoring Program Plan to provide for intrawell statistical analysis for analyzing ground water quality data from the Homewood wells on the old portion of the landfill. On October 2, 2002, Ohio EPA determined that the addendum to the GWMPP complied with the requirements of OAC 3745-27-10 and approved the plan.
45. All of the findings necessary for the issuance of these Orders pursuant to ORC Sections 3734.13 and 3745.01 have been made and are outlined above. Nothing in the findings shall be considered to be an admission by Respondent of any matter of law or fact.

## **V. ORDERS**

The Respondent shall achieve compliance with ORC Chapter 3734 and the regulations promulgated thereunder according to the following compliance schedule:

1. Upon the effective date of these Orders, Respondent shall maintain compliance with the terms and conditions of these Orders, any applicable authorizing documents issued to the Respondent and/or the Facility and all applicable state and federal laws and regulations.
2. Within 30 days after the effective date of these Orders, shall begin submitting data to Ohio EPA using the approved intra-well statistical method in accordance with OAC Rules 3745-27-10(C) and 3745-27-10(D).
3. Within 30 days after the effective date of these Orders, the Respondent shall pay Ohio EPA the amount of \$12,000.00 in settlement of Ohio EPA's claims for civil penalties which may be assessed pursuant to ORC Chapter 3734 and which will be deposited into the hazardous waste cleanup fund created under ORC Section 3734.28. Payment shall be made by tendering a certified check in the stated amount to Ohio EPA, Office of Fiscal Administration, P . O Box 1049, Columbus, Ohio 43216-1049, made payable to "Treasurer, State of Ohio," and by submitting a copy of the check to Jim Vinch, Legal, Ohio EPA.

## **VI. TERMINATION**

The Respondent's obligations under these Orders shall terminate when the Respondent 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 the Respondent and shall be signed by a responsible official of the Respondent. The certification shall make the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete."

For purposes of these Orders, a responsible official is a corporate officer who is in charge of a principal business function of the Respondent.

### **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 the Respondent's Facility.

### **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 the Respondent's operation of its Facility. 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  
Southeast District Office  
Division of Solid and Infectious Waste Management  
Attn: Unit Supervisor, DSIWM  
2195 Front Street  
Logan, OH 43138

and

Tuscarawas County Health Department  
Attn: Director of Environmental Health  
897 East Iron Avenue, P.O. Box 443  
Dover, OH 44622-1601

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 penalties against the Respondent for noncompliance with these Orders.

Nothing contained herein shall be construed to prevent Ohio EPA from exercising its lawful authority to require the Respondent to perform additional activities pursuant to ORC Chapter 3734 or any other applicable law in the future. Nothing herein shall restrict the right of the Respondent to raise any administrative, legal or equitable claim or defense with respect to such further actions which Ohio EPA may seek to require of the Respondent. 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. 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.

## **XII. 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, the Respondent agrees that these Orders are lawful and reasonable, that the items and time frames provided for compliance herein are reasonable and that the Respondent agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for the Respondent's liability for the violations cited herein,

The Respondent hereby waives the right to appeal the issuance, terms and service of these Orders, and the Respondent 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 the Respondent agree that in the event that these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, the Respondent retains the right to intervene and participate in such appeal. In such an event, the Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated, or modified.

IT IS SO ORDERED AND AGREED:

**Penn-Ohio Coal Co.**  
**d/b/a/ Kimble Sanitary Landfill**

By: *Karl B. Kimble*

10-15-02  
Date

Title: President

**Ohio Environmental Protection Agency**

*Christopher*  
Christopher