



State of Ohio Environmental Protection Agency

**Northwest District Office**

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

September 6, 2007

Mr. Dave Vossmer  
Browning-Ferris Industries of Ohio, Inc.  
530 North Camp Road  
Port Clinton, Ohio 43452

**Re: Ottawa County Landfill, Ottawa County  
Ohio Administrative Code (OAC) Rule 3745-27-10(D)(2) and  
OAC Rule 3745-27-10(D)(3) Approvals**

Dear Mr. Vossmer:

On May 26, 2006, the Ohio Environmental Protection Agency (Ohio EPA), Division of Solid and Infectious Waste Management (DSIWM), Northwest District Office (NWDO), received a document titled "Ground Water Detection Monitoring Alternate Parameter List Request," dated May 25, 2006, for the Ottawa County Landfill (Facility) located in Ottawa County. Subsequent revisions and additional information were received through May 24, 2007. These documents were submitted by CEC, Inc. on behalf of Browning-Ferris Industries of Ohio, Inc. (BFIO), pursuant to OAC Rule 3745-27-10(D)(2) and OAC Rule 3745-27-10(D)(3), and requested deletion and replacement of specific OAC Rule 3745-27-10 Appendix I ground water monitoring constituents which are required for the ground water detection monitoring program at the Facility.

Pursuant to OAC Rule 3745-27-10(D)(2), the owner or operator of a sanitary landfill facility may propose to delete any of the OAC Rule 3745-27-10 Appendix I monitoring parameters to be used to meet the requirements of the ground water detection monitoring program, pursuant to OAC Rule 3745-27-10(D)(5) – (8). The director may approve the alternative list of monitoring parameters if the removed parameters are not reasonably expected to be in or derived from the waste contained or deposited in the sanitary landfill facility.

Additionally, pursuant to OAC Rule 3745-27-10(D)(3), the owner or operator of a sanitary landfill facility may propose that an alternative list of inorganic indicator parameters be used to meet the requirements of the ground water detection monitoring program, pursuant to OAC Rule 3745-27-10(D)(5), in lieu of some or all of the inorganic parameters listed in Appendix I of OAC Rule 3745-27-10. The director shall approve the alternative inorganic indicator parameters if the alternative list will provide a reliable indication of inorganic releases from the sanitary landfill facility to the ground water.

The submittals stated that the following four metals constituents have not been detected in leachate and requested the director's approval of an alternate parameter list which deletes these parameters:

- Beryllium (4)
- Selenium (11)
- Silver (12)
- Thallium (13)

Ohio EPA has reviewed the applicable information pursuant to OAC Rule 3745-27-10(D)(2), and concurs with this conclusion.

In addition, the submittals requested that the director approve replacement of the following six parameters with alkalinity:

- Antimony (1)
- Cadmium (5)
- Cobalt (7)
- Copper (8)
- Lead (9)
- Vanadium (14)

The submittals stated that alkalinity provides a much better indication of a release of leachate to ground water than these constituents because it is regularly detected at significantly higher concentrations in leachate than in upgradient ground water, whereas the concentrations of the parameters requested for replacement are similar in leachate and upgradient ground water. Ohio EPA has reviewed the applicable information pursuant to OAC Rule 3745-27-10(D)(3), and concurs with this conclusion. In addition, BFIO stated in the submittals that they would continue to sample and analyze the replaced parameters annually, but omit statistical evaluation.

Therefore, pursuant to OAC Rule 3745-27-10(D)(2) and OAC Rule 3745-27-10(D)(3), I hereby approve use of an alternate parameter list as detailed above at the Facility. As part of this

approval, the owner or operator shall comply with the following conditions:

**CONDITIONS**

1. The owner or operator shall sample and analyze annually the parameters replaced with alkalinity: antimony, cadmium, cobalt, copper, lead, and vanadium. See Table 1, below, for the required schedule for ground water sample analysis and statistical evaluation for detection monitoring at the Facility.

Table 1

Constituent	Uppermost Aquifer System			Significant Zone of Saturation		
	Semi-annual Monitoring Parameters	Annual Monitoring Parameters	Statistical Parameters	Semi-annual Monitoring Parameters	Annual Monitoring Parameters	Statistical Parameters
(1) Antimony		X			X	
(2) Arsenic	X	X	X		X	
(3) Barium	X	X	X		X	
(4) Beryllium						
(5) Cadmium		X			X	
(6) Chromium	X	X	X		X	
(7) Cobalt		X			X	
(8) Copper		X			X	
(9) Lead		X			X	
(10) Nickel	X	X	X		X	
(11) Selenium						
(12) Silver						
(13) Thallium						
(14) Vanadium		X			X	
(15) Zinc	X	X	X		X	
(16-62) VOCs*	X	X	X	X <sup>(18, 25, 33, 61)</sup>	X	X <sup>(18, 25, 33, 61)</sup>
63 Ammonia	X	X	X	X	X	X
64 Chloride	X	X	X	X	X	X
65 Sodium	X	X	X	X	X	X

66	Potassium	X	X	X	X	X	X
67	Temperature	X	X		X	X	
68	pH	X	X		X	X	
69	Spec. Cond.	X	X		X	X	
70	Total Diss. Solids		X			X	
71	Total alkalinity	X	X	X		X	
72	Nitrate-nitrite		X			X	
73	Sulfate		X			X	
74	Magnesium		X			X	
75	Calcium		X			X	
76	Turbidity		X			X	
77	Iron		X			X	
78	Manganese		X			X	

\*OAC Rules 3745-27-10(D)(5)(b)(i) and (ii) require that wells screened in a significant zone of saturation be sampled and statistically analyzed only for the following VOC constituents: benzene(18), chloroethane (25), 1,1-dichloroethane (33), and toluene (61).

2. At least annually, the owner or operator shall use leachate sample data collected to satisfy OAC Rule 3745-27-19(M)(5) to evaluate the alternate parameter list to determine if the alternate monitoring list continues to be adequate to identify potential releases from the Facility into the ground water. The owner or operator shall submit a summary of this evaluation to Ohio EPA with the annual operational report required by OAC Rule 3745-27-19(M). If the evaluation concludes that the alternate monitoring list is inadequate, the owner or operator shall return to use of the unaltered OAC Rule 3745-27-10 Appendix I parameter list or request and obtain approval for a revised alternate list accordingly.
3. If Ohio EPA determines that the alternate monitoring list is inadequate for identifying potential releases from the landfill into ground water, the owner or operator shall reinstate some, or all, of the replaced and deleted parameters upon receiving written notification from Ohio EPA.

**END OF CONDITIONS**

This approval shall not be construed to release the owner or operator from the obligation to comply with the requirements of any other ground water monitoring program being conducted at the Facility.

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You are hereby notified that this action of the Director of Ohio EPA (Director) is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

If you have any questions concerning this letter, please contact Kimberly Burnham of Ohio EPA, NWDO at (419) 373-3049.

Sincerely,

Shannon Nabors, Chief  
Northwest District Office  
for Chris Korleski, Director

PC: Danielle Axson, Allied Waste  
Eric M. Van Heyde, Civil & Environmental Consultants, Inc.  
Joe Montello, BFI/Allied Waste Industries  
Ken Brock, DDAGW NWDO  
Scott Hester, DSWIM CO  
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