Ohio | Environmental Protection Agency
John R. Kasich, **Governor**
Mary Taylor, **Lt. Governor**
Scott J. Nally, **Director**

July 31, 2012

RE: NOTICE OF VIOLATION
1st QUARTER F.Y. 2013
CARROLL COUNTY LANDFILL

CERTIFIED MAIL 7011 0470 0002 3496 1115

Mr. Jeffrey Ohler
Carroll County Commissioner
Carroll County Court House
119 Public Square
Carrollton, Ohio 44615

Dear Commissioners:

On July 5, 2012, I, representing the Ohio Environmental Protection Agency (Ohio EPA), conducted a 1st quarter F.Y. 2013 comprehensive inspection of the Carroll County Landfill, located on Chase Road in Center Township, Carroll County. The purpose of the inspection was to determine compliance with Ohio Administrative Code (OAC) rules and regulations applicable to the Carroll County Landfill, and in particular, closure requirements contained in OAC Chapter 3745-27-11.

I was not accompanied by anyone representing the Carroll County Commissioners during this inspection.

It was documented during this inspection that no closure activities had taken place on the landfill since the previous inspection, conducted April 5 and 24, 2012.

The following violations of OAC 3745-27, effective August 15, 2003, were identified during this inspection:

1. **OAC Rule 3745-27-11(A)(2):** *The owner or operator of a sanitary landfill facility that ceased acceptance of waste prior to June 1, 1994...shall do one of the following, whichever is applicable:*

   (b) *If the director has not approved a "final closure/post-closure plan" for the sanitary landfill facility, the owner or operator shall complete closure activities in accordance with the following requirements until a "final closure/post-closure plan" is approved:*

   (i) *Complete closure activities in accordance with paragraphs (F), (G), (H), (I), and (J) of this rule.*

   The Carroll County Commissioners ceased acceptance of waste at the Carroll County Landfill on April 15, 1993. Closure activities at the Carroll County Landfill had not been completed as of the date of this inspection.

The Carroll County Commissioners are in violation of this rule. The Carroll County Commissioners must submit a final closure/post-closure plan and complete closure of the Carroll County Landfill in accordance with this rule in order to return to compliance with this rule.

(ii) *Comply with rule 3745-27-10 of the Administrative Code.*

The Carroll County Commissioners ceased acceptance of waste at the Carroll County Landfill on April 15, 1993. A ground water monitoring program capable of determining the impact of the facility on the quality of ground water occurring within the uppermost aquifer system and all significant zones of saturation above the uppermost aquifer system underlying the sanitary landfill facility had not been implemented as required by this rule as of the date of this inspection. A proposed sampling and analysis plan was submitted to Ohio EPA on February 3, 1999. This plan was reviewed by Ohio EPA and was determined to be inadequate. A Notice of Deficiency (NOD) letter detailing the review of the plan, dated October 6, 1999 was sent to the Carroll County Commissioners. On December 24, 2003, a Hydrogeologic Site Investigation Report (HSIR) for the Carroll County Landfill was submitted to the Ohio EPA Northeast District Office (NEDO) for review. In a letter dated March 3, 2004, Ohio EPA notified the Carroll County Commissioners of deficiencies which existed in the HSIR. On April 16, 2004, the Carroll County Commissioners responded to the March 3, 2004, deficiency letter stating that further responses would be forthcoming. On December 22, 2005, the Carroll County Commissioners submitted a Ground Water Program Plan and an addendum to the previously submitted HSIR. Ohio EPA has reviewed those submittals, and the results of those reviews were forwarded under separate letterhead. Additional monitoring wells were installed and sampled at the facility during the summer of 2009. A partial review of the results of those tests was forwarded to the commissioners by Ohio EPA under separate letterhead.

The Carroll County Commissioners are in violation of this rule. The Carroll County Commissioners must implement a ground water monitoring program capable of determining the impact of the facility on the quality of ground water occurring within the uppermost aquifer system and all significant zones of saturation above the uppermost aquifer system underlying the sanitary landfill facility in accordance with the requirements of OAC 3745-27-10 in order to return to compliance with this rule.

(iii) *Comply with rule 3745-27-15 of the Administrative Code and rule 3745-27-16 of the Administrative Code.*

The Carroll County Commissioners are in violation of this rule because they have failed to submit and execute a final closure financial assurance instrument in accordance with the requirements of OAC 3745-27-15, and a post-closure care financial assurance instrument in accordance with the requirements of OAC 3745-27-16.

On August 31, 1999, Ohio EPA conducted a review of the financial assurance documentation submitted by the commissioners for the Carroll County Landfill on August 18, 1999. This submittal was dated August 13, 1999. To demonstrate financial assurance for closure and/or post-closure care, the Carroll County Commissioners use the Local Government Financial Test mechanism.

Based on the review of this document, Ohio EPA identified several deficiencies which were detailed in a September 17, 1999 letter addressed to Mr. E. Leroy VanHorne, Carroll County Auditor. In letters dated March 13, 2002, and September 19, 2002, Ohio EPA informed the auditor that the amounts guaranteed for closure and post-closure in the Local Government Financial Test had not been updated for inflation. This financial assurance mechanism must be updated for inflation for the years 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, and 2012 in order to come into compliance with this rule. The Ohio EPA Northeast District Office had not received verification that the Carroll County Commissioners had addressed the above deficiencies and had come into compliance with the financial assurance rules as of the date of this inspection.

The Carroll County Commissioners must correct the deficiencies identified in the September 17, 1999, March 13, 2002, and September 19, 2002 deficiency letters, or submit a final closure financial assurance instrument that satisfies the requirements of OAC 3745-27-15, and a post-closure care financial assurance instrument that satisfies the requirements of OAC 3745-27-16 in order to return to compliance with this rule.

2. **OAC Rule 3745-27-11(B):** *The owner or operator shall prepare a final closure/post-closure plan in accordance with this rule for the sanitary landfill facility, which shall, at a minimum, contain all the items specified in paragraphs (B)(1) to (B)(10) of this rule...*

   (1) *The name and location of the facility and the unit(s) included in the final closure/post-closure plan.*

   (2) *Any variances or exemptions from the requirements of this rule or rule 3745-27-14 of the Administrative Code or any alternative schedule for completing final closure activities.*

(3) *The name, address, and telephone number of the person or office to contact regarding the unit(s) of the sanitary landfill facility during the final closure and post-closure care periods.*

(4) *Schedule of installation of any explosive gas control systems.*

(5) *The following information to be presented in the same manner as outlined in rule 3745-27-06 of the Administrative Code:*

(a) *Plan drawings of the horizontal limits and top elevations of waste and the cap system; and surface water control structures including permanent ditches to control runon and runoff; and sedimentation ponds including the inlet and outlet.*

(b) *Establish a grid system with northings and eastings not more than five hundred feet apart.*

(c) *Detail drawings of the composite cap system including but not limited to the key trench, any cap penetrations, cap drainage structures, and surface water drainage structures.*

(d) *Detail drawings of sedimentation pond and discharge structures and surface water runon and runoff structures.*

(e) *Static and seismic stability analysis.*

(f) *For a sanitary landfill facility subject to paragraph (A)(2)(a) or (A)(2)(b) of this rule, the ground water detection monitoring plan.*

(g) *For a sanitary landfill facility subject to paragraph (A)(2)(a) or (A)(2)(b) of this rule, the financial assurance information in accordance with rules 3745-27-15 and 3745-27-16 of the Administrative Code.*

(6) *Description of availability and suitability of cap material.*

(7) *Quality assurance/quality control plan for cap system construction.*

(8) *For a sanitary landfill facility subject to paragraph (A)(2)(a) or (A)(2)(b) of this rule, the explosive gas monitoring plan.*

(9) *Description of anticipated measures to control erosion.*

(10) *Contingency plans for leachate, fire, differential settling.*

The Carroll County Commissioners are in violation of this rule because a final closure/post-closure plan for the Carroll County Landfill, prepared in accordance with this rule, had not been submitted to Ohio EPA as of the date of this inspection. The Carroll County Commissioners must submit a final closure/post-closure plan, prepared in accordance with this rule, to Ohio EPA in order to return to compliance with this rule.

3. **OAC Rule 3745-27-11(C):** *The owner or operator shall begin final closure activities in accordance with the final closure/post-closure plan and paragraph (F) of this rule no later than seven days after any of the occurrences specified in this paragraph. Approval of the final closure/post-closure plan does not affect the owner's or operator's obligations to begin and complete final closure activities in accordance with paragraphs (G) and (H) of this rule.*

   (1) *It is mandatory to begin closure activities for a sanitary landfill facility upon the occurrence of any of the following:*

      (e) *The sanitary landfill facility otherwise ceases to receive solid waste and there is additional approved capacity remaining in the unit(s) of the sanitary landfill facility.*

   The Carroll County Commissioners ceased acceptance of waste at the Carroll County Landfill on April 15, 1993.

   The Carroll County Commissioners are in violation of this rule because they did not begin final closure activities within seven days of ceasing to accept waste at the Carroll County Landfill, in accordance with OAC 3745-27-11.

4. **OAC Rule 3745-27-11(E):** *The owner or operator shall send notification by certified mail or any other form of mail accompanied by a receipt to the director and to the board of health having jurisdiction, as to the actual date that the unit(s) of the sanitary landfill facility ceased to accept solid waste. Notification shall be sent to the director and the board of health having jurisdiction not later than seven days after the date specified in the notification.*

   The Carroll County Commissioners ceased acceptance of waste at the Carroll County Landfill on April 15, 1993. The Carroll County Commissioners are in violation of this rule because notification of the final date that the Carroll County Landfill accepted waste was not received by the director within seven days of the date specified in the notification.

5. **OAC Rule 3745-27-11(F):** *The owner or operator shall begin final closure activities, for all contiguous unit(s) or for each noncontiguous unit(s) of the*

sanitary landfill facility, not later than seven days after any of the occurrences in paragraph (C) of this rule. Final closure activities for all unit(s) of a sanitary landfill facility shall include, at a minimum, the items specified in paragraphs (G) and (H) of this rule.

The Carroll County Commissioners are in violation of this rule because final closure activities did not begin at the Carroll County Landfill within seven days of ceasing to accept waste on April 15, 1993. Final closure activities in accordance with OAC 3745-27-11 have not been completed as of the date of this inspection.

6. **OAC Rule 3745-27-11(H)(1):** *The owner or operator shall continue to comply with rule 3745-27-19 of the Administrative Code and all monitoring and reporting activities required during the operating life of the unit(s) of the sanitary landfill facility until the closure certification is submitted and the post-closure care period begins.*

   The Carroll County Commissioners are in violation of this rule because they have failed to comply with the requirements of OAC 3745-27-19 since ceasing to accept waste on April 15, 1993.

   The Carroll County Commissioners must comply with the requirements of OAC 3745-27-19 in order to return to compliance with this rule.

7. **OAC Rule 3745-27-11(H)(2):** *The owner or operator shall install the required surface water control structures including permanent ditches to control runon and runoff and sedimentation pond(s), as shown in the final closure/post-closure plan, and as necessary, grade all land surfaces to prevent ponding of water where solid waste has been placed and institute measures to control erosion.*

   The Carroll County Commissioners are in violation of this rule because a final closure/post-closure plan, including surface water structures and engineering controls, for the Carroll County Landfill had not been developed and implemented as of the date of this inspection.

   The Carroll County Commissioners must develop and implement a final closure/post-closure plan, and install the required surface water control structures including permanent ditches to control runon and runoff and sedimentation pond(s), and as necessary, grade all land surfaces to prevent ponding of water where solid waste has been placed and institute measures to control erosion in order to return to compliance with this rule.

8. **OAC Rule 3745-27-11(H)(3):** *The owner or operator shall design and install a ground water monitoring system in accordance with rule 3745-27-10 of the Administrative Code, if a system is not already in place.*

The Carroll County Commissioners are in violation of this rule because a ground water monitoring system that complies with the requirements of Rule 3745-27-10 of the Administrative Code does not exist at the Carroll County Landfill.

The Carroll County Commissioners must design and install a ground water monitoring system that complies with OAC 3745-27-10 in order to return to compliance with this rule.

9. **OAC Rule 3745-27-11(I):** *Final closure activities shall be completed not later than one hundred and eighty days after any of the occurrences in paragraph (C) of this rule, unless an alternate schedule has been approved by the director.*

Director's Findings and Orders dated April 13, 1992, mandated that the Carroll County Landfill was to cease accepting waste, effective April 13, 1993. The Carroll County Landfill did not cease to accept waste, however, until April 15, 1993. Final closure activities should have been completed by October 10, 1993.

The Carroll County Commissioners are in violation of this rule because final closure activities were not completed at the Carroll County Landfill within 180 days after final receipt of waste at the facility. Furthermore, closure activities specified in OAC 3745-27-11 have not been completed as of the date of this inspection. Final closure activities at the Carroll County Landfill must be completed, as specified in OAC 3745-27-11.

10. **OAC Rule 3745-27-11(J):** *Not later than ninety days after the completion of final closure activities for all contiguous unit(s) and for each noncontiguous unit(s), the owner or operator shall submit to the director, and to the board of health having jurisdiction, a written certification report. The final closure certification shall include verification that the unit(s) of the sanitary landfill facility has been closed in accordance with this rule and the "final closure/post-closure plan." The final closure certification shall at a minimum include the following:*

(1) *A list of the construction certification reports for construction of the composite cap system with the date of submittal and a topographic map of the entire sanitary landfill facility showing the areas certified by each report. The map shall also show the horizontal limits of waste placement and the surface water control structures including permanent ditches to control runon and runoff, and the following if present: the sedimentation pond(s) including the inlet and outlet, the outlet of any permanent ground water control structures, and the explosive gas control system.*

(2) *A demonstration that the ground water monitoring system meets the requirements of rule 3745-27-10 of the Administrative Code.*

(3) *A copy of the plat and deed or other instrument which is normally examined during a title search, showing the notation required by paragraph (H)(5) of this rule and bearing the mark of recordation of the office of the county recorder for the county in which the property is located.*

(4) *A demonstration that the sign required by paragraph (H)(6) of this rule has been posted, and that all entrances and access roads have been blocked as required by paragraph (H)(7) of this rule.*

The Carroll County Commissioners are in violation with this rule because final closure activities have not been completed in accordance with the "final closure/post-closure plan" at the Carroll County Landfill as of the date of this inspection. Hence, a written certification report prepared in accordance with this rule has not been submitted to the director within 90 days after the completion of final closure activities.

The Carroll County Commissioners must complete final closure activities for the Carroll County Landfill, and submit to the director a written certification report, prepared in accordance with this rule, which certifies that the landfill was closed in accordance with this rule and the "final closure/post-closure plan" in order to return to compliance with this rule.

11. **OAC Rule 3745-27-19 (A):** *The owner or operator of a sanitary landfill facility shall comply with the requirements and operational criteria specified in this rule until all closure certifications required by paragraph (J) of rule 3745-27-11 of the Administrative Code are submitted and the post-closure care period begins.*

The Carroll County Commissioners are in violation of this rule because they are not complying with the requirements and operational criteria specified by this rule.

The Carroll County Commissioners must comply with all applicable requirements of OAC 3745-27-19 until all closure certifications are submitted and the post-closure care period begins in order to return to compliance with this rule.

12. **OAC Rule 3745-27-19(B)(6):** *The owner or operator shall comply with all of the following:*

(a) *The applicable design, construction and testing specifications in rule 3745-27-08 of the Administrative Code.*

(c) *The ground water monitoring, assessment, and corrective measures requirements of rule 3745-27-10 of the Administrative Code.*

(d) *The closure requirements of rule 3745-27-11 of the Administrative Code.*

(f) *The final closure, post-closure care, and corrective measures financial assurance requirements of rules 3745-27-15, 3745-27-16, and 3745-27-18 of the Administrative Code.*

The Carroll County Commissioners are in violation of this rule. The Carroll County Commissioners must comply with all of the applicable requirements of this rule.

13. **OAC Rule 3745-27-19(E)(2)(a):** *The owner or operator shall construct and maintain all-weather access roads within the facility boundary in such a manner as to withstand the anticipated degree of use...with a minimum of erosion and dust generation.*

The Carroll County Commissioners are in violation of this rule. The access road which extends from the gate of the facility to the uppermost portion of the landfill has slowly but continuously become degraded due to erosion, silting, and other factors. Severe erosion has also developed on portions of the access road. Much of the road no longer exists on the upper portion of the landfill. The road is overgrown by vegetation, ponded water exists in the wheel ruts during rainy periods, and the road is now essentially impassable in wet weather.

The Carroll County Commissioners must construct all-weather access roads which comply with this rule within the facility boundary of the Carroll County Landfill in order to return to compliance with this rule.

14. **OAC Rule 3745-27-19(E)(9):** *The owner or operator shall employ all reasonable measures to collect, properly contain, and dispose of scattered litter, including the use of portable wind screens where necessary and frequent policing of the area.*

The Carroll County Commissioners are in violation of this rule. Waste was observed along both sides of the access road of the Carroll County Landfill during this inspection. Exposed waste, resulting from the washing away of cover, and erosion, also exists in other areas of the landfill. Waste continues to become exposed in various areas of the landfill as cover soils continue to be washed and eroded away from the surface of the landfill. In addition, a number of scrap tires were observed at various locations around the landfill.

Approximately five bags of garbage were observed open dumped inside the gate at the facility entrance. One small pile of construction and demolition debris was observed open dumped outside the gate.The Carroll County Commissioners

must remove, or otherwise eliminate all scattered litter, scrap tires, and exposed waste at the landfill in order to return to compliance with this rule.

15. **OAC Rule 3745-27-19 (G)(1):** *To minimize infiltration, the owner or operator shall apply intermediate cover to all filled areas of a sanitary landfill facility where additional solid waste is not to be deposited for at least thirty days. The director may approve the use of some alternative time period, if the owner or operator can demonstrate to the satisfaction of the director that, by use of the alternate time period, infiltration will not be increased.*

    The Carroll County Commissioners are in violation with this rule. Sufficient intermediate cover appears to exist in many areas of the landfill that were covered and re-graded in 1997; however, areas that did not receive cover at that time are not in compliance with this rule. In addition, waste has become exposed in various areas of the landfill due to weathering and erosion of the cover that was placed on the landfill in 1997.

    The Carroll County Commissioners must apply intermediate cover to all filled areas of the landfill in order to return to compliance with this rule.

16. **OAC Rule 3745-27-19 (G)(2):** *Intermediate cover material shall be nonputrescible and have low permeability to water, good compactability, cohesiveness, and relatively uniform texture, and shall not contain large objects in such quantities as may interfere with its application and intended purpose. A soil layer, a minimum of twelve inches thick, consisting of well-compacted loam, silt loam, clay loam, silty clay loam, silty clay, or combination thereof, shall be used. The owner or operator may use other materials and/or thicknesses for intermediate cover if the owner or operator can demonstrate to the satisfaction of the director that the proposed intermediate cover material and/or thickness provides comparable and adequate protection.*

    The Carroll County Commissioners are not in compliance with this rule. While much of the landfill received soil cover measuring in excess of twelve inches thick in 1997, a minimum of twelve inches of intermediate cover does not exist over the entire landfill. Many areas did not receive cover at that time and are not in compliance with this rule. In addition, waste has become exposed in various areas of the landfill due to weathering and erosion of the cover that was placed on the landfill in 1997.

    The Carroll County Commissioners must apply intermediate cover to all filled areas of the landfill in order to return to compliance with this rule.

17. **OAC Rule 3745-27-19(G)(4):** *The owner or operator shall perform measures to protect the intermediate cover from erosion.*

The Carroll County Commissioners are in violation of this rule. A dense vegetative cover does not exist in all areas of the landfill. In fact, vegetation in many areas was too high to allow for conducting an effective inspection.

Tall vegetation is present in many areas of the landfill. *It cannot be recommended more strongly that vegetated portions of the landfill be mowed at least once per year.* Tall vegetation will impede the growth of ground-level vegetation on the landfill. Mowing the landfill will help to encourage the growth of the existing ground-level vegetation at this facility.

The Carroll County Commissioners must take all necessary measures to protect the intermediate cover from erosion at this landfill in order to comply with this rule.

18. **OAC Rule 3745-27-19(H):** *Within seven days of reaching the approved final elevations of waste placement in a phase or an alternate schedule approved by the director, the owner or operator shall begin constructing the final cap system by doing either of the following:*

    (1) *By constructing a cap system over the entire phase in accordance with rule 3745-27-08 of the Administrative Code as specified in rule 3745-27-11 of the Administrative Code.*

    The Carroll County Commissioners are in violation of this rule. Upon being ordered to close, a cap system complying with the requirements of OAC 3745-27-08 was not constructed. A cap system complying with the requirements of this rule had not been constructed as of the date of this inspection.

    The Carroll County Commissioners must comply with this rule by constructing a cap which complies with OAC Rule 3745-27-08 over all areas of waste placement at the Carroll County Landfill.

19. **OAC Rule 3745-27-19 (J)(1):** *The owner or operator shall ensure that surface water at a sanitary landfill facility is diverted from areas where solid waste is being, or has been, deposited. The owner or operator shall ensure that a sanitary landfill facility designed, constructed, maintained, and provided with surface water control structures that control runon and runoff of surface water. These surface water control structures shall ensure minimal erosion and infiltration of water through the cover material and cap system. These surface water control structures shall be designed in accordance with rule 3745-27-08 of the Administrative Code.*

    The Carroll County Commissioners are in violation of this rule. Erosional channels of varying severity on the sideslopes of the Carroll County Landfill are

present and continue to develop. These channels are developing on all sides of the landfill. Erosional channels range from several inches to over four feet in depth. Waste has become exposed, and leachate is emerging from these channels. In addition, several patches of cattails have grown on the northern and western sideslopes of the facility. These areas also have exhibited evidence of moderate to severe leachate outbreaks, and landfill gas was detected escaping through the cover in these areas on previous inspections. Severe leachate outbreaks have also developed on the east facing sideslope of the landfill, located west of the lower portion of the access road. Surface water control structures must be constructed and maintained to control these conditions.

The Carroll County Commissioners must design, construct, maintain, and provide surface water control structures in accordance with OAC Rule 3745-27-08 that control runon and runoff of surface water to ensure minimal erosion and infiltration of water through the cover material and cap system in order to return to compliance with this rule.

20. **OAC Rule 3745-27-19 (J)(3):** *If ponding or erosion occurs on areas of the sanitary landfill facility where solid waste is being, or has been, deposited, the owner or operator shall undertake actions as necessary to correct the conditions causing the ponding or erosion.*

The Carroll County Commissioners are in violation of this rule. Work was conducted in 1997 to correct these conditions, however, sideslope erosion still exists, and continues to develop in many areas. Several areas located along the access road have developed into more serious problems. One erosion channel, which has existed for an extended period of time, continues to deepen due to surface water runoff. It is now several feet deep, and leachate is entering the surface water as a result. A second erosion channel in this area has also developed, and has similar characteristics. A third erosional channel is approximately four feet deep, and waste has become exposed. Leachate is being generated as a result. Several additional erosion channels have also begun to develop in this area. In addition, several patches of cattails have grown on the western sideslope of the facility. These areas also have exhibited moderate to severe leachate outbreaks. During this inspection, many areas where ponding has previously been observed on the landfill could not be inspected due to the high vegetation.

The Carroll County Commissioners must undertake actions as necessary to correct conditions causing ponding and erosion at this landfill in order to return to compliance with this rule.

21. **OAC Rule 3745-27-19 (K)(1):** *If a leachate outbreak(s) occurs at the sanitary landfill facility, the owner or operator shall repair the outbreak(s) and do the following:*

(a) *Contain and properly manage the leachate at the sanitary landfill facility.*

The Carroll County Commissioners are in violation of this rule. A growing number of leachate outbreaks have been developing on the landfill. Leachate outbreaks are becoming more numerous as the presence of erosion and ponded water continue to increase in severity. One significant leachate outbreak is located midway up the slope above monitoring wells MW-7S and MW-7D. Leachate outbreaks located upgradient from the access road near the entrance to the facility were also observed to be worsening. Leachate outbreaks now exist or are developing on all sides of the landfill. Measures were taken to help prevent the generation of leachate at this site in 1997. Leachate is currently being collected in ponds that were constructed to prevent leachate from flowing unimpeded off the landfill. These ponds have been observed to be overflowing during past inspections. This condition may trigger the site into the requirement to apply for permits from the Ohio EPA Division of Surface Water (DSW). DSW-NEDO has been made aware of this condition.

The Carroll County Commissioners must immediately contain and properly manage leachate in accordance with this rule at the Carroll County Landfill.

(c) *Take action to minimize, control, or eliminate the conditions which contribute to the production of leachate.*

The Carroll County Commissioners are in violation of this rule. The Carroll County Commissioners have previously taken steps to minimize, control, and eliminate conditions contributing to the production of leachate at the Carroll County Landfill. Grading, contouring, and covering of the landfill was conducted in 1997 to correct this condition, however, erosional channels of varying severity exist, continue to develop, and appear to be aiding the leachate generation at this facility. In addition, the absence of an impermeable cap, as well as the generation of landfill gases may be contributing to this condition. Leachate outbreaks continue to worsen as erosion and ponded water continue to aid their increasing severity. Leachate outbreaks now exist or are developing on all sides of the landfill.

22. **OAC Rule 3745-27-10(A)(1):** *...the owner or operator of a sanitary landfill facility shall implement a ground water monitoring program capable of determining the impact of the facility on the quality of ground water occurring within the uppermost aquifer system and all significant zones of saturation above the uppermost aquifer system underlying the sanitary landfill facility.*

The Carroll County Commissioners are in violation of this rule. The Carroll County Commissioners ceased acceptance of waste at the Carroll County Landfill on April 15, 1993. A ground water monitoring program capable of determining the impact of the facility on the quality of ground water occurring within the uppermost aquifer system and all significant zones of saturation above the uppermost aquifer system underlying the sanitary landfill facility had not been implemented as required by this rule as of the date of this inspection. A proposed sampling and analysis plan was submitted to Ohio EPA on February 3, 1999. This plan was reviewed by Ohio EPA and was determined to be inadequate. A Notice of Deficiency (NOD) letter detailing the review of the plan, dated October 6, 1999 was sent to the Carroll County Commissioners. On December 24, 2003, a Hydrogeologic Site Investigation Report (HSIR) for the Carroll County Landfill was submitted to the Ohio EPA Northeast District Office (NEDO) for review. In a letter dated March 3, 2004, Ohio EPA notified the Carroll County Commissioners of deficiencies which existed in the HSIR. On April 16, 2004, the Carroll County Commissioners responded to the March 3, 2004, deficiency letter stating that further responses would be forthcoming. On December 22, 2005, the Carroll County Commissioners submitted a Ground Water Program Plan and an addendum to the previously submitted HSIR. Ohio EPA has reviewed those submittals, and the results of those reviews were forwarded under separate letterhead. Additional monitoring wells were installed and sampled at the facility during the summer of 2009. A partial review of the results of those tests was forwarded to the commissioners by Ohio EPA under separate letterhead.

The Carroll County Commissioners must implement a ground water monitoring program capable of determining the impact of the facility on the quality of ground water occurring within the uppermost aquifer system and all significant zones of saturation above the uppermost aquifer system underlying the sanitary landfill facility in accordance with the requirements of OAC 3745-27-10 in order to return to compliance with this rule.

23. **OAC Rule 3745-27-15(A)(2):** *For sanitary landfill facilities subject to paragraph (A) of rule 3745-27-11, 3745-29-11, or 3745-30-09 of the Administrative Code, as applicable, the owner or operator shall submit to Ohio EPA a final closure financial assurance instrument in accordance with this rule.*

The Carroll County Commissioners are in violation of this rule. The Carroll County Commissioners have failed to submit and execute a final closure financial assurance instrument in accordance with the requirements of OAC 3745-27-15.

On August 31, 1999, Ohio EPA conducted a review of the financial assurance documentation submitted by the commissioners for the Carroll County Landfill on August 18, 1999. This submittal was dated August 13, 1999. To demonstrate

financial assurance for closure and/or post-closure care, the Carroll County Commissioners use the Local Government Financial Test mechanism. Based on the review of this document, Ohio EPA identified several deficiencies which were detailed in a September 17, 1999 letter addressed to Mr. E. Leroy VanHorne, Carroll County Auditor. In letters dated March 13, 2002, and September 19, 2002, Ohio EPA informed the auditor that the amounts guaranteed for closure and post-closure in the Local Government Financial Test had not been updated for inflation. This financial assurance mechanism must be updated for inflation for the years 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, and 2012 in order to come into compliance with this rule. The Ohio EPA Northeast District Office had not received verification that the Carroll County Commissioners had addressed the above deficiencies and had come into compliance with the financial assurance rules as of the date of this inspection.

The Carroll County Commissioners must correct the deficiencies identified in the September 17, 1999, March 13, 2002, and September 19, 2002 deficiency letters, or submit a final closure financial assurance instrument that satisfies the requirements of OAC 3745-27-15 in order to return to compliance with this rule.

24. **OAC Rule 3745-27-16(A)(2):** *For sanitary landfill facilities subject to paragraph (A) of rule 3745-27-11, 3745-29-11, or 3745-30-09 of the Administrative Code, as applicable, the owner or operator shall submit to Ohio EPA a post-closure care financial assurance instrument in accordance with this rule.*

The Carroll County Commissioners are in violation of this rule. The Carroll County Commissioners have failed to submit and execute a post-closure care financial assurance instrument in accordance with the requirements of OAC 3745-27-16.

On August 31, 1999, Ohio EPA conducted a review of the financial assurance documentation submitted by the commissioners for the Carroll County Landfill on August 18, 1999. This submittal was dated August 13, 1999. To demonstrate financial assurance for closure and/or post-closure care, the Carroll County Commissioners use the Local Government Financial Test mechanism. Based on the review of this document, Ohio EPA identified several deficiencies which were detailed in a September 17, 1999 letter addressed to Mr. E. Leroy VanHorne, Carroll County Auditor. In letters dated March 13, 2002, and September 19, 2002, Ohio EPA informed the auditor that the amounts guaranteed for closure and post-closure in the Local Government Financial Test had not been updated for inflation. This financial assurance mechanism must be updated for inflation for the years 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, and 2012 in order to come into compliance with this rule. The Ohio EPA Northeast District Office had not received verification that the Carroll County

Commissioners had addressed the above deficiencies and had come into compliance with the financial assurance rules as of the date of this inspection.

The Carroll County Commissioners must correct the deficiencies identified in the September 17, 1999, March 13, 2002, and September 19, 2002 deficiency letters, or submit a post-closure care financial assurance instrument that satisfies the requirements of OAC 3745-27-16 in order to return to compliance with this rule.

25. **OAC Rule 3745-27-19(B)(6)(e):** *The owner or operator shall comply with all of the following...The explosive gas monitoring and corrective measures requirements of rule 3745-27-12 of the Administrative Code.*

The Carroll County Commissioners are in violation of this rule.

On May 22, 2009, Ohio EPA approved the explosive gas monitoring plan for the Carroll County Landfill. Both Ohio EPA's rules and the approved Carroll County Landfill Explosive Gas Monitoring Plan require that the installed permanent gas monitoring probes and approved punch bar stations be monitored for explosive gas on a monthly basis prior to the closure of the facility. Following closure of the facility, the permanent gas monitoring probes and approved punch bar stations must be monitored on a quarterly basis.

The Carroll County Commissioners have failed to monitor the permanent gas monitoring probes and approved punch bar stations for explosive gas. There is no documentation in Ohio EPA's files which would indicate that any explosive gas monitoring has occurred at the Carroll County Landfill since the approval of the Explosive Gas Monitoring Plan on May 22, 2009.

The Carroll County Commissioners must monitor for explosive gas at the landfill in accordance with their approved Explosive Gas Monitoring Plan.

The Carroll County Commissioners are obligated to comply with all applicable laws and regulations, and it is their responsibility to complete final closure of the Carroll County Landfill facility in a manner that minimizes the need for further maintenance and minimizes post-closure formation and release of leachate and explosive gases to air, soil, ground water, or surface water to the extent necessary to protect human health and the environment. Every effort should be made to immediately comply with the violations contained in this letter.

Please note that off-road vehicles continue to access the facility. On March 14, 2012, damage to work that Ohio EPA had been doing to assist the county in its efforts to come to an agreement on a cap for the facility was discovered. The vehicle that apparently caused the damage was also discovered on county property adjacent to the landfill was

also discovered. The Carroll County Sheriff was notified, and the vehicle was impounded. Measures should be taken to deter unauthorized access to the facility. Several trees have been fallen in areas where unauthorized access to the facility has been taking place.

As stated previously in this letter, it is *strongly* recommended that vegetated portions of the landfill be mowed at least once per year. Tall vegetation will impede the growth of ground-level vegetation on the landfill. Mowing the landfill will help to encourage the growth of the existing ground-level vegetation at this facility. Failure to encourage ground-level vegetation could have a long term negative impact on the current landfill cover.

The Carroll County Commissioners need to immediately take the necessary measures to return to compliance with Ohio's environmental laws. Within 14 days of receipt of this letter, the Carroll County Commissioners are requested to provide documentation to this office including the steps taken to abate the violations cited above. Documentation of steps taken to return to compliance includes written correspondence, updated policies, and photographs, as appropriate, and may be submitted via the postal service or electronically to jerry.weber@epa.state.oh.us.

Please be advised that violations cited above will continue until the violations have been properly abated. Failure to comply with Chapter 3734. of the Ohio Revised Code and rules promulgated thereunder may result in a civil penalty of up to $10,000 per day for each violation. It is imperative that you return to compliance. If circumstances delay the abatement of violations, the Carroll County Commissioners are requested to submit written correspondence of the steps that will be taken by date certain to attain compliance.

If you have any questions, please feel free to contact me at (330) 963-1274, or e-mail me at jerry.weber@epa.state.oh.us.

Sincerely,

Jerry W. Weber, R.S.
Environmental Specialist
Division of Materials and Waste Management

JWW:cl

ec: Kelly Jeter, DMWM-CO
Joe Trocchio, DSW-NEDO

cc: John Cayton, AGO
Village Administrator, Village of Carrollton
File: [Sowers/LAND/Carroll County Landfill/COR/10]