COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
4949-A Cox Road, Glen Allen, Virginia 23060
(804) 527-5020 Fax (804) 527-5106
www.deq.virginia.gov

Preston Bryant
Secretary of Natural Resources

David K. Paylor
Director

VIRGINIA WASTE MANAGEMENT BOARD ENFORCEMENT ACTION - ORDER BY CONSENT ISSUED TO THE EAST END LANDFILL, LLC AND DARBYTOWN ROAD LANDFILL, INC.

SECTION A: Purpose

This is a Consent Order issued under the authority of Va. Code § 10.1-1455 (C) and (F) between the Virginia Waste Management Board and The East End Landfill, LLC. Also, this is a Consent Order issued under the authority of Va. Code § 10.1-1455 (C) and (F) between the Virginia Waste Management Board and Darbytown Road Landfill, Inc. This Consent Order is for the purpose of addressing certain violations of the Virginia Waste Management Act and the Virginia Solid Waste Management Regulations.

The Virginia Waste Management Board is issuing this Consent Order to The East End Landfill, LLC because it is the owner, operator, and permittee of The East End Landfill (Solid Waste Permit No. 524) and as the operator of Darbytown Road Landfill (Solid Waste Permit No. 525). The Virginia Waste Management Board is issuing this Consent Order to Darbytown Road Landfill, Inc. because it is the owner and permittee of the Darbytown Road Landfill (Solid Waste Permit No. 525).

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Board" means the Virginia Waste Management Board, a permanent citizens board of the Commonwealth of Virginia as described in Code §§ 10.1-1401 and 10.1-1184.

2. "Construction/Demolition/Debris landfill" or "CDD landfill" means a land burial facility engineered, constructed and operated to contain and isolate construction waste, demolition waste, debris waste, or combinations of the above solid wastes.

3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in Va. Code § 10.1-1183.

4. "Director" means the Director of the Department of Environmental Quality.

5. "DRL" means Darbytown Road Landfill, Inc., a corporation certified to do business in Virginia, and its affiliates, partners, subsidiaries, and parents. DRL is a "person" within the meaning of Va. Code § 10.1-1400.

6. "DRL Facility" means the Darbytown Road Landfill, a private construction/demolition/debris landfill located at 1850 Darbytown Road, in Henrico County, Virginia.

7. "DRL Permit" means SWP No. 525, which was issued under the Virginia Waste Management Act and the Regulations to Darbytown Road Landfill Inc. on January 1, 2008.

8. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 10.1-1455.

9. "Order" means this document, also known as a Consent Order.

10. "PRO" means the Piedmont Regional Office of DEQ, located in Glen Allen, Virginia.

11. "TEEL" means The East End Landfill, LLC, a limited liability company certified to do business in Virginia, and its affiliates, partners, subsidiaries, and parents. TEEL is a "person" within the meaning of Va. Code § 10.1-1400.

12. "TEEL Facility" means The East End Landfill, a private construction/demolition/debris landfill located at 1790 Darbytown Road, in Henrico County, Virginia.

13. "TEEL Permit" means SWP No. 524, which was issued under the Virginia Waste Management Act and the Regulations to The East End Landfill LLC on May 1, 2006.

15. "Va. Code" means the Code of Virginia (1950), as amended.

16. "VSWMR" means the Virginia Solid Waste Management Regulations, 9 VAC 20-80-10 *et seq.*

SECTION C: Findings of Fact

1. TEEL owns and operates a private CDD landfill located at 1790 Darbytown Road in Richmond, Virginia. The TEEL Permit is issued to TEEL. The TEEL Facility is subject to the Solid Waste Permit Number 524. The TEEL Permit authorizes, among other things, the operation of a CDD landfill.

2. DRL is the owner of the Darbytown Road Landfill located at 1850 Darbytown Road in Richmond, Virginia. The DRL Permit is issued to DRL, and TEEL operates the DRL Facility. The DRL Facility is subject to the Solid Waste Permit Number 525. The DRL Permit authorizes, among other things, the operation of a CDD landfill.

The TEEL Facility

3. On August 28, 2008 (August inspection), Department staff conducted a compliance inspection of the TEEL Facility. Department staff also reviewed documents provided by TEEL in preparation for the inspection.

4. Based on Global Position System readings taken during the inspection, the maximum height of the landfill varied from 256 to 268 feet. The approved closure plan, which was incorporated into the TEEL Permit effective at the time of the August inspection, limits the maximum final elevation to 255 feet above mean sea level to include the final cover system. In accordance with 9 VAC 20-80-260(B)(10), the final elevation of the landfill shall be limited by the structural capacity of the liner and leachate collection and removal system. According to 9 VAC 20-80-240(B), solid waste disposal facilities must be maintained and operated in accordance with the permit issued. 9 VAC 20-80-260(C)(11)(d)(2) requires the initiation of final cover construction within ninety days of reaching final elevation.

5. Photographs taken during the inspection were analyzed by DEQ staff and revealed that the steepness of the northern side slope of Cell II was greater than 33%. The TEEL Permit states that finished side slopes are to be no steeper than 33%. The Department's file for the TEEL Facility and the TEEL Permit do not contain any approved slope stability calculations for slopes greater than 33%. 9 VAC 20-80-260(B)(12) requires that slopes of up to 33% be allowed provided adequate run off controls are established. Steeper slopes may be considered if supported by necessary stability calculations. 9 VAC 20-80-260(C)(15) requires

that all items designed in accordance with this section of the regulation shall be properly maintained.

6. The current financial assurance amount is based on the fill configurations specified in the TEEL Permit. At the time of the August inspection, the contours and elevation exceeded the design plans and specifications in the TEEL Permit. Removal and disposal or re-grading of the excess waste to meet approved grading is not included in the current financial assurance cost estimates. 9 VAC 20-70-111, 112, and 140 require the owner or operator to demonstrate adequate financial resources to properly close and provide post-closure care in accordance with the approved closure plan as outlined in 9 VAC 20-80-240(D).

7. Department staff observed waste placed in a layer approximately twice as deep as a roll off container without compaction. Roll off containers are typically 4-5 feet in height. 9 VAC 20-80-260(C)(11)(a) requires waste to be compacted into shallow layers during the placement of lifts. The Operations Manual, TEEL Permit Module II.V.D.1 & 2, Pages 20 and 21), which is incorporated into the TEEL Permit states that waste will be spread in layers not more than 2 feet thick with a maximum lift height of 12 feet.

8. Waste was visible through insufficient cover along the west and south side slopes. It appeared that waste was cut from the lower portion of the side slope to construct Cell IV. DEQ staff observed a nearly vertical wall of waste remaining exposed without progressive or intermediate cover. 9 VAC 20-80-260(C)(11)(b), requires that compacted soil cover shall be applied as needed for safety and aesthetic purposes. A minimum of one foot thick progressive cover and fire break shall be maintained weekly.

9. On October 7, 2008 (October inspection), DEQ staff performed a follow-up inspection at the TEEL Facility and observed the same conditions that were noted during the August inspection and described above, and made additional observations as well.

10. During the October inspection, DEQ staff observed black plastic piping being used to mark the edge of the liner along a portion of Cell IV. The use of permanent stakes to mark the edge of the liner was not observed along any other portion of the disposal area. The Operations Manual for the TEEL Facility, TEEL Permit Module II.V.B.8, Page 18, which was incorporated into the TEEL Permit effective at the time of the October inspection, required that the edge of the liner to be marked with permanent stakes and that they be placed not more than 150 feet apart and at breaks. According to 9 VAC 20-80-240(B), solid waste disposal facilities must be maintained and operated in accordance with the permit issued.

11. DEQ staff observed that Cell II did not have adequate fire breaks in place, as required by 9 VAC 20-80-260(C)(10).

12. During the October inspection, a TEEL representative acknowledged that during the construction of Cell IV waste was found to have been placed outside of the permitted cell boundary by the previous owner. This was not reported to DEQ at the time that TEEL management became aware of this condition. 9 VAC 20-80-570(C), requires the permittee to report to DEQ noncompliance conditions that may threaten human health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. Because the waste at issue was confined to the surrounding area outside the boundary and appeared to consist of construction, demolition, and debris waste, TEEL did not consider this to threaten human health or the environment. However, this condition would require notification to the Department. Nonetheless, documentation of the discovery of such waste outside of the limits of Cell II was subsequently provided to the Department on April 3, 2009.

13. On October 20, 2008, Notice of Violation ("NOV") Number 2008-10-PRO-602 was issued to TEEL for violations of the TEEL Permit and the VSWMR observed during the August 2008 inspection, as discussed in paragraphs 3 through 8, above.

14. TEEL has consistently disputed the alleged violations in the October 2008 NOV, beginning immediately after DEQ notified TEEL of each alleged violation. TEEL maintains that:

    a. the slopes and elevations at the TEEL Facility were and still are neither final nor finished due to ongoing site work and waste management activities;
    b. ongoing activities in any event would restore elevations and slopes to design parameters before final conditions were attained;
    c. the Part B TEEL Permit for Cell IV, pending in August and October 2008 and issued on November 26, 2008, includes final elevations in concert with the current condition of the Facility;
    d. the Facility's current financial assurance is sufficient to address the existing slopes and elevations;
    e. layers of waste were not spread in the thicknesses as alleged in paragraph 7, above
    f. the outer limits of the landfill (but not of the liner or disposal area) have been delineated; and
    g. it has complied with the regulations with regard to fire breaks.

15. On October 22, 2008, the Department sent a letter to TEEL notifying it of the observations made during the October 7, 2008 inspection, which included continued violations identified in the NOV.

16. On October 29, 2008, a meeting was held between DEQ staff and representatives of TEEL to discuss the NOV. TEEL representatives asserted in the meeting that the current slopes and elevations at the Facility were neither final nor finished due to ongoing site work and waste management activities, including integration with

a new landfill cell (Cell IV) and that ongoing activities would restore elevations and slopes to within design parameters before beginning closure. They also noted that closure was not needed or appropriate at that time because the TEEL Facility was still in operation and that current financial assurance posted for the site was sufficient due to the excess amount in place recently posted for Cell IV. TEEL representatives also noted that the new Part B permit for Cell IV included a maximum final elevation of approximately 280 feet above mean sea level.

17. TEEL representatives also discussed during the meeting how they planned in any event to address the violations alleged in the NOV which included the following:

    a. In areas currently above final contour elevations, TEEL would move material from those areas into the road bed leading to the top of Cells II and III or into Cell IV as needed or most efficient. The waste would be compacted in 2-foot layers and then covered appropriately to attain the final contour elevations. The road would then be re-graded to the top to allow access for emergency and maintenance purposes.
    b. Upon completion of work on top, the slopes observed in excess of 33% would be re-worked to achieve no greater than a 33% slope to achieve finished slope grades. The excess material would either be placed in the road fill as outlined above or placed in Cell IV depending on which is most efficient. The waste would be compacted in 2-foot layers to attain the required elevations and then covered appropriately in accordance with the Permit.

18. On October 30, 2008, the Department received a letter from TEEL responding to the NOV. The letter reiterated TEEL's assertions made in the October 29, 2008 meeting that no violations related to slopes, elevations, financial responsibility, and closure had occurred.

19. On November 4, 2008, the Department issued the Certificate to Operate Cell IV at the TEEL Facility to allow TEEL to regrade and relocate waste to address slope and height issues at the TEEL Facility, in accordance with the written and oral communications from TEEL to the Department.

20. On November 25, 2008 (November inspection), DEQ staff performed a follow-up inspection at the TEEL Facility and observed the same conditions that were noted in the August 28, 2008 and October 7, 2008 inspections and made additional observations as well. The November inspection revealed the following:

    a. Waste fines from the shredding operation appeared to have been used as progressive cover without Department approval, as required by 9 VAC 20-80-260(C)(11).
    b. The Department did not receive written notice from TEEL regarding an October 22, 2008 fire or a fire that also was observed during the November inspection, as required by 9 VAC 20-80-570(C)(3).

c. In writing and in meetings, TEEL has provided information to the Department regarding the alleged violations referenced in this paragraph. TEEL believes the fines are not a solid waste by virtue of the VSWMR definition of "solid waste" but has submitted at the request of DEQ a beneficial use determination request to use the fines as cover and fire break. TEEL asserts that it immediately reported the presence of smoke to the Henrico County Fire Department and solicited the viewpoints of the Fire Department on numerous occasions as to how to treat the smoke episodes. TEEL informed the Department on April 20, 2009 that it would contract with a landfill fire safety expert and provide its analysis of the reasons for occasional smoke being present at the landfill and long-term plan to manage it.

21. On November 26, 2008, the Department issued TEEL an amendment to the TEEL Permit to incorporate the design and operation of Cell IV and the new design maximum elevation of approximately 280 feet.

22. On December 15, 2008, the Department sent a letter to TEEL notifying them of the observations made during the November inspection, which included continued violations alleged in the October NOV.

23. On December 22, 2008 (December inspection), DEQ staff performed a follow-up inspection at the TEEL Facility and observed the same conditions that were noted in the August 28, 2008, October 7, 2008, and November 25, 2008 inspections, including the finished slope and final elevation issue. The new Part B TEEL Permit amendment for Cell IV had been issued allowing a new final elevation of 280 feet. DEQ made additional observations as well. The December inspection revealed the following:

a. The Department had not received a request from TEEL to amend the closure plan to be consistent with the TEEL Facility's operations, as required by 9 VAC 20-80-260(E)(2)(b).
b. TEEL Permit condition I.F.7, which was part of the November 26, 2008 permit amendment, states that no waste shall be placed in areas where the elevations exceed those shown in the Facility design plan. DEQ staff observed that the elevations and slopes at the Facility appeared to have been exceeded with estimations that the elevations up to approximately 297 feet.

24. On January 7, 2009, the Department received a response from TEEL regarding the findings from the November inspection.

25. On January 21, 2009, the Department sent a letter to TEEL notifying them of the observations made during the December inspection, which included continued violations alleged in the October NOV.

26. On January 26, 2009 (January inspection), DEQ staff performed a follow-up inspection at the TEEL Facility and observed the same conditions that were noted in the December inspection and the previous inspections.

27. On February 18, 2009, the Department sent a letter to TEEL notifying them of the observations made during the January inspection, which included continued violations identified during the December inspection and the previous inspections.

28. TEEL has provided written and oral responses to the Department to address the alleged violations identified in the Department's January 21, 2009 and February 18, 2009 letters and the December 22, 2008 and January 26, 2009 inspections.

29. On March 6, 2009 (March inspection), DEQ staff performed a follow-up inspection at the TEEL Facility. The inspection and review of documents provided by TEEL revealed that the following alleged violations continue at the TEEL Facility unabated:

    a. Department staff measured the steepness of the northern side slope of Cell II with a clinometer and found the slope was greater than 33%, which is prohibited by 9 VAC 20-80-240(B), 9 VAC 20-80-260(B)(12), 9 VAC 20-80-260(C)(15), the Operations Manual (TEEL Permit Module II.V.B.7), and TEEL Permit condition I.F.7.
    b. The Department has not received a request from TEEL to amend the closure plan to be consistent with the TEEL Facility's operations, as required by 9 VAC 20-80-260.E(2)(a)(2)-(3).
    c. The financial assurance for the Facility had not been adjusted to account for the need to remove waste, re-grade, and re-cover slopes, as required by 9 VAC 20-70-10 *et seq.*, 9 VAC 20-70-111(A)(1), and 9 VAC 20-80-240(D).

    The following additional alleged violations resulted from the March inspection:

    d. Unauthorized wastes were at the Facility and were not being removed or segregated and the Department was not notified of its receipt, as required by 9 VAC 20-80-113, 9 VAC 20-80-260, 9 VAC 20-80-700(D)(4)-(5), Operations Manual TEEL Permit Module I and II.V.C.
    e. TEEL failed to provide certain records at the time of the March inspection, as required by 9 VAC 20-80-260(C)(9), TEEL Permit condition I.B.7, 9 VAC 20-80-570(B)(1), TEEL Permit condition I.C.8.d., and 9 VAC 20-80-240(B).
    f. TEEL failed to extinguish a fire that was first observed on October 22, 2008, as required by 9 VAC 20-80-260(C)(10), TEEL Permit Module II Emergency Plan Section II.3(b), and 9 VAC 20-80-240(B). Although no open flame was observed, DEQ did observed smoke.

30. On March 12, 2009, DEQ received digital copies of return manifests from the Army National Guard Readiness Center in Arlington, VA indicating that TEEL had received material identified on corresponding manifests as "NON-hazardous

Petroleum Contaminated Soil 50-3,000 PPM." Subsequent documentation from the Army National Guard Readiness Center and ECS Mid-Atlantic along with TEEL inbound invoices indicate that 26 loads containing 646.89 tons of soil manifested at levels above 50 TPH (total petroleum hydrocarbon) was accepted by TEEL from February 18 to February 27, 2009. Manifests and documentation from ECS Mid-Atlantic also reveal that these 26 loads were intended by ECS-Mid Atlantic to be disposed of at the Old Dominion Landfill on Charles City Road in Richmond, VA. TEEL did not report to DEQ the acceptance of this soil at the time of its disposal or immediately thereafter. 9 VAC 20-80-260 states that CDD landfills "may only receive demolition waste, construction waste, debris waste, land clearing debris, split tires, and white goods. No other wastes are authorized for the CDD landfill." 9 VAC 20-80-700(D) provides that soils containing greater than 50 mg/kg TPH may only be disposed of at sanitary or industrial landfills. The TEEL Permit Module II Operations Manual Appendix V which contains TEEL control program for unauthorized waste states that "each incident of unauthorized waste refusal or acceptance" will be recorded and provided to DEQ.

31. On April 8, 2009, NOV Number 2009-04-PRO-601 was issued to TEEL for violations of the TEEL Permit and the VSWMR discussed in paragraph 29 and 30, above.

32. On April 20, 2009, a meeting was held between DEQ staff and representatives of TEEL to discuss the NOV that was issued on April 8, 2009 and the ongoing compliance issues at the Facility. TEEL believes that:

    a. the issuance of the Certificate to Operate Cell IV serves to moot, to a large degree, the issue of slopes and height because it allows the facility to regrade and relocate waste to Cell IV, and
    b. recordkeeping at the Facility has been modified to accommodate the Department's concerns, and TEEL requested a compliance visit to have the modified system evaluated. A compliance visit was conducted by the Department.

33. On June 17, 2009 DEQ Staff received information that U.S. Product Conversion had delivered, between June 4 and June 9, 2009, to TEEL 470 tons of passenger tire equivalents (PTEs), equivalent to 47,000 tires, from a waste tire-pile clean-up. DEQ Staff performed an inspection on June 19 and again on June 23 at the TEEL facility. Based on observations, measurements, and calculations, TEEL appeared to have 7,780 PTEs of whole tires and 46,600 PTEs of rough cut tires stored in piles at the facility. Observations from DEQ Staff and TEEL Staff confirmed that none of the waste tire material observed qualified as tire-shred under the Solid Waste Management Regulations. Information received by DEQ Staff indicates that TEEL took another 1,300 PTEs on June 24, 2009 from Hanover County. TEEL's Permit, Solid Waste Permit Number 524, does not include a provision to

store more than 1,000 discarded tires. 9 VAC 20-80-670(D) states that "[m]ore than 1,000 discarded tires shall not be stored at a solid waste disposal facility unless the permit for the facility expressly allows such storage." The Operations Manual on page 12 in Permit Module II of Solid Waste Permit 524 at (V)(B)(9)(b) states that "[n]o more than 1,000 discarded tires may be stored on-site unless the facility's permit expressly allows such storage."9 VAC 20-80-240(B) states that "[s]olid waste disposal facilities shall be maintained and operated in accordance with the permit issued pursuant to this chapter..."

34. Measurements taken on June 23, 2009 indicate that one tire pile had a maximum height of 6 feet and four piles of rough cut tires had maximum heights ranging from 6 feet to 10 feet. The distance between two of the tire piles was measured at 20 feet. Additionally, a distance of 10 feet 8 inches was measured between two other tire piles. One pile of rough cut tires had maximum measurements of 60 feet by 125 feet. This measurement indicates a maximum square footage of 7,500 feet. This tire pile was also directly next to a trailer. 9 VAC 20-80-670(C)(1)-(2) states that "[o]wners or operators of facilities that store or treat waste tires in piles shall, in addition to the requirements contained in 9VAC20-80-400: 1. Place the waste tires in piles that: a. Do not exceed five feet in height; b. Do not exceed 5,000 square feet in base surface area; and c. Do not exceed 50 feet in width. 2. Provide a minimum separation distance of 50 feet between waste tire piles and between waste pile and any structure. These separation areas shall be maintained free of obstructions and maintained in such a manner that emergency vehicles will have adequate access to all waste tire management areas." The Operations Manual on page 12 in Permit Module II of Solid Waste Permit 524 at (V)(B)(9)(b) states that "[t]ire storage at the facility will be conducted in accordance with 9 VAC 20-80-670.C" 9 VAC 20-80-240(B) states that "[s]olid waste disposal facilities shall be maintained and operated in accordance with the permit issued pursuant to this chapter..."

35. On June 26, 2009, NOV Number 2009-06-PRO-601 was issued to TEEL for violations of the TEEL Permit and the VSWMR discussed in paragraph 33 and 34, above.

36. Based on the results and findings of the August inspection, October inspection, November inspection, December inspection, January inspection, the March inspection, the inspections in June of the TEEL Facility, and the information received by DEQ, the Board concludes that TEEL as owner and operator of the TEEL Facility and permittee of the TEEL Permit has violated 9 VAC 20-80-260(B)(10), 9 VAC 20-80-240(B), 9 VAC 20-80-260(C)(11)(d)(2), 9 VAC 20-80-260(B)(12), 9 VAC 20-80-260(C)(15), 9 VAC 20-70-111, 112, and 140, 9 VAC 20-80-240(D), 9 VAC 20-80-260(C)(11)(a), the Operations Manual (TEEL Permit Module II.V.D.1 & 2, Pages 20 and 21), 9 VAC 20-80-260(C)(11), the

Operations Manual (PM II.V.B.8 Page 18), 9 VAC 20-80-260(C)(10), 9 VAC 20-80-570(C), 9 VAC 20-80-570(C)(3), 9 VAC 20-80-260(E)(2)(b), TEEL Permit condition I.F.7, the Operations Manual (TEEL Permit Module II.V.B.7), 9 VAC 20-80-260(E)(2)(a)(2)-(3), 9 VAC 20-70-10 *et seq.*, 9 VAC 20-70-111(A)(1), 9 VAC 20-80-260(C)(9), TEEL Permit condition I.B.7, 9 VAC 20-80-570(B)(1), TEEL Permit condition I.C.8.d.,TEEL Permit Module II Emergency Plan Section II.3(b), 9 VAC 20-80-260, 9 VAC-20-80-700(D), TEEL Permit Module II Operations Manual Appendix V, 9 VAC 20-80-113, 9 VAC 20-80-260, 9 VAC 20-80-700(D)(4)-(5), Operations Manual TEEL Permit Module I and II.V.C.; Operations Manual TEEL Permit Module I (V)(B)(9)(b), and 9 VAC 20-80-670(C)-(D).

37. In multiple writings, meetings and oral communications, TEEL has addressed each issue raised by the Department, citing the VSWMR, its interpretations of the VSWMR and the actions taken, when it felt necessary, to address the issues raised by the Department. However, the Board concludes that TEEL is in violation as provided in the paragraph above.

The DRL Facility

38. On August 28, 2008 and October 7, 2008, Department staff conducted compliance inspections of the DRL Facility. Department staff also reviewed documents provided by TEEL in preparation for the inspection.

39. Department staff observed that erosion along the western end of Cell 2 had cut into the side of the cell berm and undercut the silt fence along that portion of the storm water conveyance system, which is prohibited by 9 VAC 20-80-260(B)(6). 9 VAC 20-80-260(C)(15) requires that all items designed in accordance with the requirements of subsection B of the VSWMR shall be properly maintained.

40. On October 7, 2008, Department staff observed litter migrating towards the storm water conveyance system, which is prohibited by 9 VAC 20-80-260(C)(2).

41. Department staff used a clinometer to perform an analysis of the steepness of the southern side slope, which was recently overfilled with additional waste, and found the slope was steeper than 44%. Areas on the southern and western side slopes where additional waste had not been placed since receiving intermediate cover were measured at 32-33% grade. The DRL Permit indicates that final grades are to be no steeper than 33%. The Department's file for the DRL Facility and the DRL Permit do not contain any slope stability calculations for slopes steeper than 33%. 9 VAC 20-80-260(B)(7) and 9 VAC 20-80-260(C)(17), requires that the landfill be constructed in accordance with approved plans and not modified without approval by DEQ.

42. Department staff observed lift heights to be more than 15 feet high, nearly vertical at the edges, and without compaction, which is prohibited by 9 VAC 20-80-260(C)(11)(a), the Operations Manual DRL Permit Module II.V.B.7, D.1 & 2, and Module IV, attachment IV-2, Design Report Section VIII.A. The lifts appeared to have been pushed down-slope from the crest of the landfill, which is prohibited by the Operations Manual DRL Permit Module IV, attachment IV-2, Design Report Section VIII.A. TEEL and DRL are required by 9 VAC 20-80-240(B) to comply with the DRL Permit.

43. During the October 7, 2008 inspection, an uncovered area of waste was observed on the top and northern slope of the western half of the landfill, estimated at approximately 45,000 square feet in size with what appears to be an active working face covering the top of the western half of the landfill, approximately 12,000 square feet in size, as presented on the design drawing. TEEL personnel reported on October 7, 2008, the intake rate of approximately 3800 cubic yards per week. This size working face and uncovered area are prohibited by 9 VAC 20-80-260(C)(11)(b), Operations Manual DRL Permit Module II.V.B.7, and Module IV, attachment IV-2, Design Report Section VIII.A. TEEL and DRL are required by 9 VAC 20-80-240(B) to comply with the DRL Permit.

44. The current financial assurance amount is based on the fill configurations specified in the DRL Permit. At the time of the inspections, the contours were exceeding the design plans and specifications in the DRL Permit. Removal and disposal or re-grading of waste to meet approved grading is not included in the current financial assurance cost estimates. 9 VAC 20-70-111, 112, and 140 require the owner and operator to demonstrate adequate financial resources to properly close and provide post-closure care in accordance with the approved closure plan as outlined in 9 VAC 20-80-240(D).

45. The Department has not received a request from TEEL or DRL to amend the closure plan to be consistent with the operations at the DRL Facility, as required by 9 VAC 20-80-260(E)(2).

46. Department staff did not observe any markers delineating the edge of the liner for the waste disposal area, as required by 9 VAC 20-80-240(B) and Operations Manual DRL Permit Module II.V.B.7.

47. DEQ staff noted that TEEL and DRL had ceased accepting waste at the DRL Facility on November 4, 2008.

48. On November 25, 2008, DEQ staff performed a follow-up inspection at the DRL Facility and observed the same conditions that were noted during the August 28, 2008 and October 7, 2008 inspections, as noted in paragraphs C(39), C(40), C(42), and C(43), with the exception of stormwater control and waste entering surface waters

49. On December 10, 2008, Notice of Violation ("NOV") Number 2008-12-PRO-601 was issued to DRL for violations of the DRL Permit and the VSWMR discussed in paragraphs C(39) through C(43) and C(46) above.

50. On December 22, 2008, DEQ staff performed a follow-up inspection at the DRL Facility and observed the same conditions that were noted during the August 28, 2008 and October 7, 2008 inspections with the exception of the items noted in paragraph C(48). Neither TEEL nor DRL had begun closure activities as required by 9 VAC 20-80-260(E)(3).

51. On December 23, 2008, the Department sent a letter to DRL notifying them of the observations made during the November 25, 2008 inspection, which included continued violations previously identified.

52. On January 23, 2009, the Department sent a letter to DRL notifying them of the observations made during the December 22, 2008 inspection, which included continued violations previously identified along with a newly identified violation.

53. On January 26, 2009, DEQ staff performed a follow-up inspection at the DRL Facility and observed the same conditions noted during the December 22, 2008 inspection.

54. On January 29, 2009, a meeting was held between DEQ staff and representatives of TEEL to discuss the compliance issues at the DRL Facility.

55. On February 17, 2009, the Department sent a letter to DRL notifying them of the observations made during the January 26, 2009 inspection, which included continued violations previously identified.

56. In conjunction with and to facilitate TEEL's efforts to reclaim recyclable materials from the Facility's Cell II, and to address concerns raised by DEQ in October 2008 and from early November through February 2009, TEEL continued to shred existing waste at the DRL Facility to gain additional compaction, began to move some waste from the DRL Facility to the TEEL Facility, and performed further reclamation of recyclable materials from the DRL Facility. These efforts resulted in the systematic and continuous reduction of the existing maximum elevation at the DRL Facility site and side slopes and the total amount of waste present in Cell II at the DRL Facility during that time.

57. On April 20, 2009, a meeting was held between DEQ staff and representatives of TEEL to discuss the ongoing compliance issues at the DRL Facility.

58. Based on the results and findings of the August inspection, October inspection, November inspection, December inspection, January inspection, and the March inspection of the DRL Facility, the Board concludes that TEEL, as operator of the DRL Facility, and DRL, as owner of the DRL Facility and the permittee of the

DRL Permit, have violated 9 VAC 20-70-111-112, 140; 9 VAC 20-80-240(B); 9 VAC 20-80-260(B)(6),(7); 9 VAC 20-80-260(C)(2),(11)(a)-(b),(15),(17); 9 VAC 20-80-260(E)(2)-(3); Operations Manual DRL Permit Module II.V.B.7, Module IV, attachment IV-2, Design Report Section VIII.A.

SECTION D: Agreement and Order

By virtue of the authority granted it pursuant to Va. Code §§ 10.1-1455(C) and (F) and upon consideration of Va. Code § 10.1-1186.2, the Board orders TEEL and DRL, jointly and severally, and TEEL and DRL jointly and severally agree:

1. TEEL shall perform the actions described in Appendices A, B, and C of this Order;

2. DRL shall perform the actions described in Appendices B and C of this Order;

3. To a civil charge of $110,000 in settlement of the violations cited in this Order, to be paid as follows:

   a. TEEL and DRL shall pay $38,000 of the civil charge within 30 days of the effective date of this Order. Payment shall be made by check, certified check, money order or cashier's check payable to the "Treasurer of Virginia," delivered to:

      Receipts Control
      Department of Environmental Quality
      Post Office Box 1104
      Richmond, Virginia 23218

      TEEL and DRL shall include their Federal Employer Identification Numbers (FEINs) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF).

   b. TEEL and DRL shall satisfy $72,000 of the civil charge by satisfactorily completing the Supplemental Environmental Project (SEP) described in Appendix C of this Order.

   c. The net project costs of the SEP to TEEL and DRL collectively shall not be less than the amount set forth in Paragraph D.3.b. If it is, TEEL and DRL shall pay the remaining amount in accordance with Paragraph D.3.a of this Order, unless otherwise agreed to by the Department. "Net project costs" means the net present after-tax cost of the SEP, including tax savings, grants, and first-year cost reductions and other efficiencies realized by virtue of project implementation. If the proposed SEP is for a project for which the party will receive an identifiable tax savings (e.g., tax credits for pollution control or recycling equipment), grants, or first-year operation cost reductions or other efficiencies, the net project cost shall be reduced by those

amounts. The costs of those portions of SEPs that are funded by state or federal low-interest loans, contracts, or grants shall be deducted.

d. By signing this Order TEEL and DRL certify that they have not commenced performance of the SEP.

e. TEEL and DRL acknowledge that they are solely responsible for completing the SEP project. Any transfer of funds, tasks, or otherwise by TEEL or DRL to a third party, shall not relieve TEEL or DRL of their responsibility to complete the SEP as described in this Order.

f. TEEL and DRL shall submit any resulting report and shall report any violations discovered as a result of the development and implementation of the Comprehensive Environmental Management System to DEQ immediately and shall correct those violations, including any required remedial actions.

g. In the event they publicize the SEP or the SEP results, TEEL and DRL shall state in a prominent manner that the project is part of a settlement of an enforcement action.

h. The Department has the sole discretion to:

   i. Authorize any alternate, equivalent SEP proposed by the Facility; and

   ii. Determine whether the SEP, or alternate SEP, has been completed in a satisfactory manner.

i. Should the Department determine that TEEL and DRL have not completed the SEP, or alternate SEP, in a satisfactory manner, the Department shall so notify TEEL and DRL in writing. Within 30 days of being notified, TEEL and DRL shall pay the amount specified in Paragraph D.3.b., above, as provided in Paragraph D.3.a., above.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend the Order with the consent of TEEL and DRL for good cause shown by TEEL and DRL, or on its own motion pursuant to the Administrative Process Act after notice and opportunity to be heard.

2. This Order only addresses and resolves those violations specifically identified Section C of this Order. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility as may be authorized by law; or (3) taking subsequent action to enforce

the Order. This Order shall not preclude appropriate enforcement actions by other federal, state, or local regulatory authorities for matters not addressed herein.

3. For purposes of this Order and subsequent actions with respect to this Order, TEEL and DRL admit the jurisdictional allegations, and agree not to contest, but do not admit, the findings of fact and conclusions of law in this Order.

4. TEEL and DRL consent to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.

5. TEEL and DRL declare that they have received fair and due process under the Administrative Process Act, Va. Code §§ 2.2-4000 *et seq.*, and the Waste Management Act and they waive the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to enforce this Order.

6. Failure by TEEL or DRL to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.

7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.

8. TEEL and DRL shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. TEEL and DRL shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on their part. TEEL and DRL shall notify the DEQ Regional Director in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:

   a. the reasons for the delay or noncompliance;

   b. the projected duration of any such delay or noncompliance;

   c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and

   d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director verbally within 24 hours in writing within three business days of learning of any condition above, which TEEL and DRL intend to assert will result in the impossibility of compliance, shall constitute a waiver of any claim of inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.

10. This Order shall become effective upon execution by both the Director or his designee, TEEL, and DRL. Notwithstanding the foregoing, TEEL and DRL agree to be bound by any compliance date which precedes the effective date of this Order.

11. This Order shall continue in effect until:

    a. TEEL and DRL petition the Director or his designee to terminate the Order after they have completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or

    b. the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to TEEL and DRL.

12. Any plans, reports, schedules or specifications attached hereto or submitted by TEEL or DRL and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.

13. The undersigned representative of TEEL and DRL certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind TEEL and DRL to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of TEEL.

14. This Order constitutes the entire agreement and understanding of the parties concerning settlement of the violations identified in Section C of this Order, and there are no representations, warranties, covenants, terms or conditions agreed upon between the parties other than those expressed in this Order.

15. By their signature below, The East End Landfill, LLC and Darbytown Road Landfill, Inc. voluntarily agree to the issuance of this Order.

And it is so ORDERED this _____day of _____, 2009.

_____
Richard F. Weeks, Regional Director
Department of Environmental Quality

(remainder of page intentionally left blank)

Darbytown Road Landfill, Inc. voluntarily agrees to the issuance of this Order.

By: _____

Date: 07/07/2009

Commonwealth of Virginia

City/County of Richmond

The foregoing document was signed and acknowledged before me this 7th day of July, 2009, by Mathew P. Appelget, who is President of Darbytown Road Landfill, Inc., on behalf of the corporation.

Sonya M. Vaughan
Notary Public

307891
Registration Number

My commission expires: Dec. 31, 2009.

Notary seal:

SONYA M. VAUGHAN
NOTARY PUBLIC
REG. #307891
MY COMMISSION EXPIRES
12/31/2009
COMMONWEALTH OF VIRGINIA

The East End Landfill, LLC voluntarily agrees to the issuance of this Order.

By: _____

Date: 07/02/2009

Commonwealth of Virginia
City/County of Richmond

The foregoing document was signed and acknowledged before me this 2nd day of July, 2009, by Mathew P. Appelget, who is President of The East End Landfill, LLC, on behalf of the limited liability company.

Tonya M. Vaughan
Notary Public

307891
Registration No.

My commission expires: Dec. 31, 2009.

Notary seal:

TONYA M. VAUGHAN
NOTARY PUBLIC
REG. #307891
MY COMMISSION EXPIRES 12/31/2009
COMMONWEALTH OF VIRGINIA

APPENDIX A
SCHEDULE OF COMPLIANCE

For the TEEL Facility, TEEL shall:

1. **During the period beginning with the effective date of this Order** and lasting until the pending TEEL Part B Permit modification is finally issued, denied, or withdrawn, the TEEL Facility shall not exceed an interim slope limit of 2.5 to 1 and a maximum elevation of 280 feet above mean sea level. This interim limit does not establish the permit slope limit to be determined pursuant to the permit application process.

2. **No later than July 31st, 2009,** complete and submit to DEQ a proper and complete characterization of the nature and extent of any burning or smoldering waste and a plan and schedule for extinguishing any burning or smoldering waste. Such characterization and plan and schedule shall be performed and prepared by a licensed professional engineer with experience in assessing and addressing landfill fires. Such characterization, plan and schedule shall take in account all activities or actions at the landfill including any cut and fill activities or other activities or actions that TEEL may take in order to come in compliance or pursuant to the requirements of this Order. Upon receipt of the plan and schedule, TEEL shall immediately implement the same. Any plan or schedule amendments required by DEQ shall be immediately implemented upon written notification. In addition, any variation from the plan and schedule shall also first be approved by DEQ in writing.

3. **Within 30 days of the effective date of this Order,** perform a topographic survey of the constructed landfill cells at the TEEL Facility; this survey shall be certified by a professional engineer or certified land surveyor licensed in the Commonwealth of Virginia. **Within 45 days of the effective date of this Order,** TEEL shall submit a copy of the survey and a report with a determination of areas of the TEEL Facility that have exceeded the Permit final elevations and grades. The report shall identify the current disposal capacity available in Cells I, II, III and IV, the rate at which the available disposal capacity is being used and the remaining site life as currently permitted. The report shall also assess the volume of waste which shall be moved in order to reach approved elevations and grades of both 2.5:1 and 3:1.

4. **In accordance with the timeframes specified below,** (1) submit to DEQ plans and schedules as specified below for the current continuing operations at the TEEL Facility until the TEEL Permit amendment is issued, denied, or withdrawn and (2) begin maintaining the reports specified below on site and available for DEQ review at all times. TEEL shall abide by such plans submitted and reporting requirements until such time as DEQ issues a final decision on the TEEL Permit amendment or modification to the pending TEEL Permit amendment application requested under item 6, below, at which time the terms of such TEEL Permit amendment as issued shall control. In the interim, TEEL shall immediately incorporate and abide by any plan or reporting changes requested by DEQ. The plans and reporting requirements include the following:

a. **TEEL shall immediately** (i) implement daily inspections for evidence of any fire at the TEEL Facility and keep records of observations in a daily log and (ii) maintain the logs on site and make available for review and copy by DEQ.

b. **TEEL shall immediately** begin maintaining monthly reports of daily incoming waste volume and waste volume received from Darbytown Road Landfill mining operations. This report shall be updated every 30 days and include remaining capacity at the TEEL Facility.

c. **Within 14 days of the effective date of this Order,** TEEL shall submit to DEQ plans and schedules for diversion of waste if final grades are reached.

d. **Within 14 days of the effective date of this Order** submit a contingent closure plan to include a plan and cost estimates for third party re-grading and proper disposal of wastes filled beyond approved slopes and elevations.

e. **Within 30 days of the completion of the survey** requested under item 3 above, submit to DEQ a cut and fill plan and schedule to achieve compliance with grades as specified in the existing Permit as well as 2.5:1. The cut and fill plan must be prepared by a firm registered to practice professional engineering in the Commonwealth and certified by a registered professional engineer registered in the Commonwealth. The cut and fill plan shall take in account the handling of or responding to any burning or smoldering waste discovered during the cut and fill process.

5. **Within 30 days of the completion of the survey** requested under item 3 above, submit an updated, current, and accurate cost estimate and sufficient additional financial assurance, if necessary to provide coverage for re-grading and/or proper disposal of waste that is beyond permitted elevation and slopes at the Facility. Submit this information to the following address:

Department of Environmental Quality
Attn: Leslie Beckwith
629 E. Main St.
Richmond 23219

6. **Within 30 days of the completion of the survey** requested under item 3 above, submit a request for an amendment to the TEEL Permit and if not already addressed in the existing request for permit amendment, modify the existing request for a permit amendment, to include:

a. A revised fire control plan specifying how of fires will be prevented and more explicitly detailing how deep seated fires will be extinguished, monitored, and reported. Such revised fire control plan shall taken into account any characterization, plan, schedules, and/or amendments from Item 2 above.

b. A revised contingency plan to include how the TEEL Facility will respond and how or where incoming waste will be managed when on-site design capacity is reached.

c. A revised operations plan providing a detailed description of materials recovery processes, including but not limited to waste placement techniques, timeframes, a description of methods to determine the usefulness of the recovered material, a description of methods to conduct recovery and process the materials, frequency of testing, and the action TEEL will take whenever the material fails the standards applicable to the recovered product and must be disposed of as waste.

7. **Within 30 days of a final decision on the TEEL Permit amendment** requested under item 6, above, TEEL shall submit a plan and schedule for compliance with the final TEEL permit. However, TEEL must immediately comply with the final decision on the TEEL Permit. Within 14 days of any request by DEQ for a plan or schedule amendment, TEEL shall submit the amended plan and/or schedule, unless additional time requested in writing is authorized by DEQ. TEEL shall abide by the terms and schedule within the compliance plan and any requested/approved amendments in them. TEEL shall not implement any changes to the compliance plan unless approved by DEQ in writing in advance of implementation. The compliance plan shall include:

a. Cut and fill plan and schedule to achieve compliance with grades as specified in the final Permit. The cut and fill plan must be prepared by a firm registered to practice professional engineering in the Commonwealth and certified by a registered professional engineer registered in the Commonwealth.

b. Monthly reports of daily incoming waste volume including new waste and waste mined from Darbytown Road Landfill, Inc. and available remaining capacity reports for the TEEL Facility.

8. Unless other specified in this Order, all communications regarding this Order and its requirements shall be addressed as follows:

Jennifer Hoeffner, Enforcement Specialist, Sr.
Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060
(804) 527-5123 phone
(804) 527-5106 fax
jennifer.hoeffner@deq.virginia.gov

APPENDIX B
SCHEDULE OF COMPLIANCE

For the DRL Facility, TEEL and DRL shall:

1. **Within 30 days of the effective date of this Order** perform a topographic survey of the DRL Facility; this survey must be certified by a professional engineer or certified land surveyor licensed in the Commonwealth of Virginia. **Within 45 days of the effective date of this Order,** TEEL and DRL must submit a copy of the survey and a report with a determination of areas of the landfill that have exceeded the DRL Permit final elevations and grades.

2. **Within 30 days of the effective date of this Order,** submit a complete, accurate landfill mining plan which meets the requirements of 9 VAC 20-80-460. TEEL and DRL shall update and revised this plan, as necessary, to reflect the current conditions and activities at the DRL Facility including actions or steps to bring the DRL Facility into compliance with approved elevations and grades. DRL and TEEL shall also submit a permit amendment request pursuant to and meeting the requirements of 9 VAC 20-80-620 to encompass the landfill mining operations.

3. **Within 30 days of the completion of the survey** requested under item 1 above, submit an updated, current, and accurate cost estimate and sufficient additional financial assurance, if necessary, to provide coverage for re-grading and/or proper disposal of waste that is beyond permitted elevation and slopes at the Facility. Submit this information to the following address:

   Department of Environmental Quality
   Attn: Leslie Beckwith
   629 E. Main St.
   Richmond 23219

4. **Within 30 days of the effective date of this Order,** TEEL and DRL shall submit a revised operations plan providing a detailed description of grinding and materials recovery processes, including but not limited to waste placement techniques, timeframes, a description of methods to determine the usefulness of the recovered material, a description of methods to conduct recovery and process the materials, frequency of testing, and the action TEEL will take whenever the material fails the standards applicable to the recovered product and must be disposed of as waste. DRL and TEEL shall also submit a permit amendment request pursuant to and meeting the requirements of 9 VAC 20-80-620 to encompass the material recovery process.

5. If results of the survey reveal that elevations and/or grades are exceeding the current Permit limits, TEEL and DRL must **within 30 days from the results of the survey** submit a request for an amendment to the DRL Permit, to include:

a. A revised closure plan to include a plan and cost estimates for 3rd party re-grading and proper disposal of overfilled wastes and spoils from the landfill mining process, prior to landfill closure.

b. A revised contingency plan to include how TEEL and DRL will respond and how or where incoming waste will be managed when on-site design capacity is reached.

c. A revised operations plan, if necessary and different from the plan submitted pursuant to item 4 above, providing a detailed description of grinding and materials recovery processes, including but not limited to waste placement techniques, timeframes, a description of methods to determine the usefulness of the recovered material, a description of methods to conduct recovery and process the materials, frequency of testing, and the action TEEL will take whenever the material fails the standards applicable to the recovered product and must be disposed of as waste.

d. A revised landfill mining operations plan, if necessary and different from the plan submitted pursuant to item 2 above, meeting the requirements of 9 VAC 20-80-460.

6. If results of the survey reveal that elevations and/or grades are exceeding the current Permit limits than TEEL and DRL **within 45 days from the results of the survey,** (1) submit to DEQ plans and schedules as specified below for the current continuing operations at the Facility until the DRL Permit amendment is issued or denied and (2) begin maintaining the reports specified below on site and available for DEQ review at all times. TEEL and DRL must abide by the plans submitted and reporting requirements until such time as DEQ issues a final decision on the permit amendment requested under item 4, above. TEEL and DRL must immediately incorporate and abide by any plan or reporting changes requested by DEQ. Those plans and or reports must include the following:

a. Cut and fill plan to achieve compliance with grades as specified in the existing Permit. The cut and fill plan must include a schedule of work to be performed. This may be submitted as part of the closure plan revision specified in item 4 above. The cut and fill plan must be prepared by a firm registered to practice professional engineering in the Commonwealth and certified by a registered professional engineer registered in the Commonwealth.

b. Monthly reports of daily incoming waste volume, if or when waste is being accepted at the DRL Facility, and available remaining capacity reports for the DRL Facility.

c. Plan for diversion of waste if final grades are reached. This may be submitted as part of the contingency plan revision specified in item 4 above.

7. Unless other specified in this Order, all communications regarding this Order and its requirements shall be addressed as follows:

Jennifer Hoeffner, Enforcement Specialist, Sr.
Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060
(804) 527-5123 phone
(804) 527-5106 fax
jennifer.hoeffner@deq.virginia.gov

APPENDIX C
SUPPLEMENTAL ENVIRONMENTAL PROJECT

The Supplemental Environmental Project to be performed by TEEL and DRL shall consist of the development, implementation, and maintenance of a Comprehensive Environmental Management System (EMS). The EMS shall be developed, implemented, and maintained by TEEL for the TEEL Facility and by TEEL and DRL for the DRL Facility. The EMS shall address, at a minimum, the 12 key elements listed below, and shall be described in an "Environmental Management System Manual." The 12 key elements are:

1. Environmental Policy
2. Organization, Personnel, and Oversight of EMS
3. Accountability and Responsibility
4. Environmental Requirements
5. Assessment, Prevention, and Control
6. Environmental Incident and Noncompliance Investigations
7. Environmental Training, Awareness, and Competence
8. Environmental Planning and Organizational Decision-Making
9. Maintenance of Records and Documentation
10. Pollution Prevention Program
11. Continuing Program Evaluation and Improvement
12. Public Involvement/Community Outreach.

1. Initial Auditor Selection. Within 30 days of the effective day of this Order, TEEL and DRL shall submit to DEQ in writing:
   - the name and affiliation of the Initial Auditor(s) selected by TEEL and DRL to conduct the Initial EMS Review and Evaluation;
   - evidence that each Initial Auditor(s) satisfies the qualification requirements of International Organization for Standardization (ISO) 14012 and that the team conducting the Initial EMS Review and Evaluation, in composite, has a working process knowledge of both the TEEL Facility and DRL Facility, respectively, or similar operations, and has a working knowledge of federal and state environmental requirements which apply to the TEEL Facility and DRL Facility;
   - a schedule, including milestones, for conducting the Initial EMS Review and Evaluation.

2. Initial Environmental Management System Review and Evaluation. TEEL and DRL shall direct the Initial Auditor(s) to conduct and complete an Initial EMS Review and Evaluation (commonly referred to as a "gap" analysis) for both the TEEL Facility and DRL Facility, respectively. The designated Initial Auditor(s) shall review and evaluate the current EMS or environmental auditing system, using the elements set forth in paragraph 4, below to identify where systems or subsystems have not been adequately developed or implemented. The results of

the Initial EMS Review and Evaluation shall be documented in a report prepared by the Initial Auditor(s) and provided to TEEL and DRL.

3. Comprehensive Environmental Management System. Based on the Initial EMS Review and Evaluation results and other information, TEEL and DRL shall develop a Comprehensive EMS for the TEEL Facility and DRL Facility, respectively, addressing, at a minimum, the twelve key elements as identified above and in detail below in paragraph 4 below . The purpose of developing the Comprehensive EMS is to assist TEEL and DRL in their efforts to comply with federal, state and local environmental requirements at the TEEL Facility and DRL Facility.

4. Environmental Management System Manual. Within two hundred ten (210) days of the effective date of this Order, TEEL and DRL shall complete the preparation of an "EMS Manual" for each facility, which shall describe and document the Comprehensive EMS and contain an EMS implementation schedule for each of the described systems and subsystems not already implemented. For each of the elements identified in paragraph 4, below, as appropriate, the manual shall describe the EMS, in detail, by explaining how the activity or program is or will be:

- established as a formal system, subsystem or task;
- integrated into ongoing department operations; and
- continuously evaluated and improved.

Each Environmental Management System Manual shall describe respective management systems, subsystems, and tasks for the following 12 elements:

a. Environmental Policy

1. This policy, upon which the EMS is based, must clearly communicate management commitment to achieving compliance with applicable federal, state, and local environmental statutes, regulations, enforceable agreements, and permits (hereafter, "environmental requirements") and continual improvement in environmental performance. The policy should also state management's intent to provide adequate personnel and other resources for the EMS.

b. Organization, Personnel, and Oversight of EMS

1. Describes, organizationally, how the EMS is implemented and maintained.

2. Includes organization charts that identify units, line management, and other individuals having environmental performance and regulatory compliance responsibilities.
3. Identifies and defines specific duties, roles, responsibilities, and authorities of key environmental program personnel in implementing and sustaining the EMS (e.g., could include position descriptions and performance standards for all environmental department personnel, and excerpts from others having specific environmental program and regulatory compliance responsibilities).
4. Includes ongoing means of communicating environmental issues and information to all organization personnel, on-site service providers, and contractors, and for receiving and addressing their concerns.

c. Accountability and Responsibility

1. Specifies accountability and environmental responsibilities of organization's managers, on-site service providers, and contractors for environmental protection practices, assuring compliance, required reporting to regulatory agencies, and corrective actions implemented in their area(s) of responsibility.
2. Describes incentive programs for managers and employees to perform in accordance with compliance policies, standards and procedures.
3. Describes potential consequences for departure from specified operating procedures, including liability for civil/administrative penalties imposed as a result of noncompliance.

d. Environmental Requirements

1. Describes process for identifying, interpreting, and effectively communicating environmental requirements to affected organization personnel, on-site service providers, and contractors, and then ensuring that facility activities conform to those requirements (i.e., ongoing compliance monitoring). Specifies procedures for prospectively identifying and obtaining information about changes and proposed changes in environmental requirements, and incorporating those changes into the EMS (i.e., regulatory "change management").
2. Establishes and describes processes to ensure communication with regulatory agencies regarding environmental requirements and regulatory compliance.

e. Assessment, Prevention, and Control

1. Identifies an ongoing process for assessing operations, for the purposes of preventing and controlling releases, ensuring environmental protection, and maintaining compliance with statutory and regulatory requirements. This section shall describe monitoring and measurements, as appropriate, to ensure sustained compliance. It shall also include identifying operations and waste streams where equipment malfunctions and deterioration, operator errors, and discharges or emissions may be causing, or may lead to:

    - releases of hazardous waste or other pollutants to the environment,
    - threat to human health or the environment, or
    - violations of environmental requirements.

2. Describes process for identifying operations and activities where documented standard operating practices (SOPs) are needed to prevent potential violations or pollutant releases, and defines a uniform process for developing, approving and implementing the SOPs.
3. Describes a system for conducting and documenting routine, objective, self inspections by department supervisors and trained staff, especially at locations identified by the process described in a. above, to check for malfunctions, deterioration, worker adherence to SOPs, and unauthorized releases.
4. Describes process for ensuring input of environmental requirements (or concerns) in planning, design, and operation of ongoing, new, and/or changing buildings, processes, equipment, maintenance activities, and products (i.e., operational "change management").

f. Environmental Incident and Noncompliance Investigations

1. Describes standard procedures and requirements for internal and external reporting of potential violations and release incidents.
2. Establishes procedures for investigation, and prompt and appropriate correction of potential violations. The investigation process includes root-cause analysis of identified problems to aid in developing the corrective actions.

3. Describes a system for development, tracking, and effectiveness verification of corrective and preventative actions.
4. Each of these procedures shall specify self-testing of such procedures, where practicable.

g. Environmental Training, Awareness, and Competence

1. Identifies specific education and training required for organization personnel, as well as process for documenting training provided.
2. Describes program to ensure that organization employees are aware of its environmental policies and procedures, environmental requirements, and their roles and responsibilities within the environmental management system.

c. Describes program for ensuring that personnel responsible for meeting and maintaining compliance with environmental requirements are competent on the basis of appropriate education, training, and/or experience.

h. Environmental Planning and Organizational Decision-Making

1. Describes how environmental planning will be integrated into organizational decision-making, including plans and decisions on capital improvements, product and process design, training programs, and maintenance activities.
2. Requires establishing written targets, objectives, and action plans by at least each operating organizational subunit with environmental responsibilities, as appropriate, including those for contractor operations conducted at the facility, and how specified actions will be tracked and progress reported. Targets and objectives must include actions which reduce the risk of noncompliance with environmental requirements.

i. Maintenance of Records and Documentation

1. Identifies the types of records developed in support of the EMS (including audits and reviews), who maintains them and where, and protocols for responding to inquiries and requests for release of information.
2. Specifies the data management systems for any internal waste tracking, environmental data, and hazardous waste determinations.
3. Specifies document control procedures.

j. Pollution Prevention Program

Describes an internal program for preventing, reducing, recycling, reusing, and minimizing waste and emissions, including procedures to encourage material substitutions. Also includes mechanisms for identifying candidate materials to be addressed by program and tracking progress.

k. Continuing Program Evaluation and Improvement

1. Describes program for periodic (at least annually) evaluation of the EMS, including incorporating the results of the assessment into program improvements, revisions to the manual, and communicating findings and action plans to affected employees, onsite service providers, and contractors.
2. Describes a program for periodic audits (at least annually) of facility compliance with environmental requirements by an independent auditor(s). Audit results are reported to upper management and potential violations are addressed through the process described in element 6 above.

l. Public Involvement/Community Outreach

Describes a program for ongoing community education and involvement in the environmental aspects of the organization's operations and general environmental awareness.

5. Environmental Management System Manual. Within two hundred forty (240) days of the effective date of this Order, TEEL and DRL shall submit the complete EMS Manuals to DEQ.

6. Quarterly Reports. TEEL and DRL shall submit implementation status reports to DEQ on a quarterly basis. The status reports shall be due within fifteen (15) days after the end of each quarter, until the Audit set forth in paragraph 9 is completed.

7. Auditor Selection. TEEL and DRL shall select an independent Auditor who:

- was not involved in the Initial EMS Review and Evaluation,
- meets the qualification requirements of ISO 14012
- has expertise and competence in the regulatory programs under federal and state environmental laws.
- is paid by TEEL and DRL in an amount sufficient to fully carry out the provisions of this Appendix.

- does not directly own any stock in TEEL or DRL or in any parent or subsidiary, and must have no other direct financial stake in the outcome of the EMS audit conducted pursuant to this Order.
- is capable of exercising the same independent judgment and discipline that a certified public accounting firm would be expected to exercise in auditing a publicly held corporation. If TEEL or DRL has any other contractual relationship with the Auditor, TEEL and DRL shall disclose to DEQ such past or existing contractual relationships.

8. Auditor Safety and Training. TEEL and DRL shall identify any and all site-specific safety and training requirements for the Auditor(s), and shall ensure that the requirements are met prior to conducting the Audit.

9. Audit. TEEL and DRL shall require the Auditor to conduct an EMS Audit for each facility twelve (12) months after the completion of the EMS Manuals, to evaluate the adequacy of EMS implementation, from top management down, throughout each major organizational unit at the TEEL Facility and DRL Facility, respectively, and to identify where further improvements should be made to the EMS. The EMS Audits shall be conducted in accordance with ISO 14011 using ISO 14010, as supplemental guidance. The Auditor shall assess conformance with the elements specified in Paragraph 4, above and with the EMS Manuals, and shall determine the following for each facility:

- Whether there is a defined system, subsystem, program, or planned task for the respective EMS element;
- To what extent the system, subsystem, program, or task has been implemented, and is being maintained
- Adequacy of each Operation's internal self-assessment procedures for programs and tasks composing the EMS;
- Whether the Facility is effectively communicating environmental requirements to affected parts of the organization, Contractors and on-site service providers;
- Whether further improvements should be made to the EMS;
- Whether there are observed deviations from the Facility's written requirements or procedures;
- And, whether continuous improvement is occurring.

10. Notification and Participation of Department. Designated representatives from DEQ and other environmental regulatory agencies may participate in the EMS audit as observers. TEEL and DRL shall notify DEQ fifteen (15) days prior to any scheduled audit during the EMS development and implementation in order to make arrangements for observers to be present. TEEL and/or DRL personnel or consultants may also participate in the on-site audits as an observer(s), but may not interfere with the independent judgment of the Auditor.

11. Audit Reports. TEEL and DRL shall direct the Auditor to develop and concurrently submit Audit Reports for both the TEEL Facility and DRL Facility, respectfully and DEQ for the EMS Audit as required by this Order, within thirty (30) days following the completion of the on-site portion of the audit. The Audit Report shall present the Audit Findings and shall, at a minimum, contain the following information:

- Audit scope, including the period of time covered by the audit;
- The date(s) the on-site portion of the audit was conducted;
- Identification of audit team members;
- Identification of any company, facility, or consulting representatives and regulatory agency personnel observing the audit;
- The distribution for the EMS Audit Report;
- A summary of the audit process, including any obstacles encountered;
- Detailed Audit Findings, including the basis for each finding and each
- Area of Concern identified;
- Identification of any Audit Findings corrected or Areas of Concern
- addressed during the audit, and a description of the corrective measures and when they were implemented; and,
- Certification by the Auditor that the EMS Audit was conducted in accordance with the provisions of this Appendix.

12. Follow-Up Corrective Measures & Action Plan. Upon receiving the Audit Reports, TEEL and DRL shall conduct a root cause analysis of the identified Audit Findings, as appropriate, investigate all areas of concern and develop an Action Plan for expeditiously bringing the TEEL Facility and DRL Facility, respectively, into full conformance with the EMS provisions in Paragraph 4, above, of this Appendix and the EMS Manuals. The Action Plan shall include the results of any root-cause analysis, specific deliverables, responsibility assignments, and an implementation schedule. The Action Plan shall be submitted to DEQ within thirty (30) days of TEEL and DRL receiving the Audit Report.

13. Action Plan Completion Certification. Within thirty (30) days of completing all items or activities outlined in the Action Plan, TEEL and DRL shall submit to the EMS Auditor a Request for Certification of EMS Implementation. Within thirty (30) days after it has received the request from TEEL and DRL, the EMS Auditor shall, as necessary, conduct a Certification Review identifying those Audit Findings which have been addressed, and those which have not been addressed, along with an explanation describing the uncorrected items. When the EMS Auditor concludes that all Audit Findings have been addressed at the TEEL Facility and DRL Facility, respectively, the Auditor shall issue TEEL and DRL a Certification of EMS Implementation, indicating that the EMS is fully implemented and conforms to the EMS Standard. Within ten (10) days of receipt, TELL and DRL shall submit a copy of the Certification of EMS Implementation to DEQ.

14. Department Access to Property and Documents. TEEL and DRL consent to grant reasonable access by the Department to the TEEL or DRL Facility and any documents under the control of TEEL or DRL for the purpose of verifying the progress and completion of the SEP.

15. Notification of Default. If TEEL or DRL cannot meet or have not met a requirement or deadline required in this SEP, TEEL and DRL shall notify the Department verbally within twenty-four (24) hours and in writing within three business days of not meeting or of learning that they cannot meet a requirement or deadline. Such notification shall include:
    - The deadline or requirement that has not or met.
    - The reason(s) that the requirement or deadline has not been met

    Within five (5) days of not meeting or of learning that they cannot meet a requirement or deadline, TEEL and DRL shall submit either a proposal for alternative, equivalent SEP or pay amount specified in Section D Paragraph 3.b of this Order, as provided in Section D Paragraph 3.a. of this Order.

16. Submittal of Documentation and Notification. All communication, notification, and/or documentation required or provided pursuant to this SEP shall be addressed as follows:

    Jennifer Hoeffner
    Enforcement Specialist, Sr.
    Department of Environmental Quality
    Piedmont Regional Office
    4949-A Cox Road
    Glen Allen, Virginia 23060
    (804) 527-5123 phone
    (804) 527-5106 fax
    jennifer.hoeffner@deq.virginia.gov