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COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
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Douglas W. Domenech
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David K. Paylor
Director

Michael P. Murphy
Regional Director

VIRGINIA WASTE MANAGEMENT BOARD
ENFORCEMENT ACTION
AMENDMENT TO ORDER BY CONSENT
ISSUED TO
CITY OF COLONIAL HEIGHTS, VIRGINIA
FOR
UNPERMITTED SOLID WASTE FACILITY

SECTION A: Purpose

This is an Amendment of an Order by Consent ("Second Amended Order") issued under the authority of Va. Code § 10.1-1455, between the Virginia Waste Management Board and the City of Colonial Heights, regarding the Colonial Heights unpermitted waste facility near the intersection of Charles H. Dimmock Parkway and Temple Avenue, for the purpose of revising certain provisions of the Order by Consent ("Order") issued by the Board to the City of Colonial Heights on January 30, 1991, amended on September 5, 2000, for resolving violations of the Virginia Waste Management Act and the applicable regulations.

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 Va. Code §§ 10.1-1184 and -1401.

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

3. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.

4. "Facility" or "Landfill" means the City of Colonial Heights unpermitted landfill, located at the 400 block of Charles Dimmock Parkway, near the intersection of Charles H. Dimmock Parkway and Temple Avenue in the City of Colonial Heights, Virginia, which is owned and operated by the City of Colonial Heights.

5. "FAR" means the Financial Assurance Regulations for Solid Waste Disposal, Transfer and Treatment Facilities, 9 VAC 20-70-10 *et seq.*

6. "First Amended Order" means the amended consent order issued to the City of Colonial Heights on September 5, 2000.

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

8. "Order" means the consent order issued to the City of Colonial Heights on January 30, 1991.

9. "Permit" means a Solid Waste Permit (SWP) or Permit by Rule (PBR), which are issued under the Virginia Waste Management Act and the Regulations.

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

11. "Regulations" or "VSWMR" means the Virginia Solid Waste Management Regulations, 9 VAC 20-81-10 *et seq.*

12. "Second Amended Order" means this document.

13. "The City" means the City of Colonial Heights, a political subdivision of the Commonwealth of Virginia. The City is a "person" within the meaning of Va. Code § 10.1-1400.

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

15. "VAC" means the Virginia Administrative Code.

16. "Virginia Waste Management Act" means Chapter 14 (§ 10.1-1400 *et seq.*) of Title 10.1 of the Va. Code. Article 2 (Va. Code §§ 10.1-1408.1 through -1413.1) of the Virginia Waste Management Act addresses Solid Waste Management.

17. "Warning Letter" or "WL" means a type of Notice of Alleged Violation under Va. Code § 10.1-1455.

SECTION C: Basis for Amendment

1. The City has owned and operated the Facility for nearly 40 years beginning in 1938.

2. In 1975 The City applied to DEQ (or its predecessor the Department of Waste Management "DWM") for an operating permit but abandoned the application process due to issues relating to siting of the Facility

3. The City ceased accepting waste in 1976 and in 1977 The City began negotiations with the DWM. Ultimately, these negotiations culminated in the 1991 Enforcement Order to The City for closure of the Facility. (A copy of the 1991 Enforcement Order is Appendix A of this order).

4. The 1991 Enforcement Order contained a Schedule of Compliance which prohibited The City from constructing, operating, or modifying any solid waste management facility without a permit and provided that The City close the Facility in two phases (Phase I and Phase II) in accordance with VSWMR, and any closure/post-closure plans approved by the DWM.

5. Phase I was directed at an estimated 66 acres situated in the southern portion of the Facility. Phase II was directed at an estimated 27 acres situated in the northern portion of the Facility.

6. During the summer of 1997, the Phase I southern area was accepted into DEQ's Voluntary Remediation Program, therefore the Phase I southern area is no longer subject to the 1991 Order, the First Amended Order or the Second Amended Order. The City's obligations, with respect to closure/post-closure of the Phase I southern area under the 1991 Order were terminated in the First Amended Order.

7. The City submitted closure plans for the Phase II Northern area in November 1992. The plans included provisions for groundwater monitoring, surface water monitoring and treatment, landfill gas monitoring, and post-closure care as required by the 1991 Order. In March 1994 The City submitted additional revisions addressing issues related to post-closure land use at the Phase II northern area.

8. The City has implemented all of the requirements of the 1991 Order and the closure plan for the Phase II northern area.

9. On September 18, 1997, The City submitted the "Closure Certification Report for the Colonial Heights Landfill (North)" certifying that The City has closed the Phase II northern area in accordance with the closure plan.

10. On May 18, 1998, DEQ staff completed a review of the Closure Certification Report for the Colonial Heights Landfill (North), and verified that The City has closed the Phase II northern area in accordance with the requirements of the closure plan and the 1991 Order.

11. On September 5, 2000, the First Amended Order was issued which contained a civil penalty and an Appendix B. Appendix B contained post-closure requirements in

accordance with VSWMR, including groundwater monitoring, financial assurance, gas management, leachate management, post-closure completion certification, and recordation of a deed notation for the Phase II northern area. The post-closure care period was to run 10 years from the date of the closure certification report, until September 18, 2007, unless the post-closure period was extended to meet the requirements of corrective action. (A copy of the First Amended Order is Appendix B of this order).

12. In November 2000, The City submitted a Post Closure Care Plan ("PCCP") to DEQ.

13. On November 28, 2000, The City submitted evidence of financial assurance.

14. On March 1, 2001, The City submitted to DEQ the Proposed Groundwater Protection Standards ("GPS").

15. On May 29, 2003, DEQ approved a Groundwater Monitoring Plan for the Facility.

16. On May 29, 2003, DEQ also approved the GPS that were submitted on March 1, 2001 and a variance to use Alternate Concentration Limits ("ACL") at the Facility.

17. On June 23, 2003, GPS were exceeded at the Facility. The GPS continued to be exceeded at the Facility.

18. On November 23, 2005, the deed note was recorded with the Clerk of the Circuit Court of the City of Colonial Heights. DEQ was notified of this recordation on April 25, 2013.

19. On July 26, 2006, The City replaced groundwater monitoring well MW-5 with MW-5A at the Facility.

20. On July 28, 2006, The City replaced groundwater monitoring well MW-3 with MW-3A at the Facility.

21. On November 5, 2007, The City submitted to DEQ the Post Closure Plan Certification Report.

22. On January 11, 2008, DEQ sent a letter to The City indicating that the period of post-closure care must be extended to meet the requirements for corrective action for groundwater and methane gas as required by the VSWMR, the Order and the First Amended Order. The letter indicated initial steps to implement a corrective action program as required by the VSWMR, the Order and First Amended Order. The letter requested The City submit a revised post-closure care plan by March 28, 2008.

23. On April 16, 2008, DEQ staff met with representatives of The City to discuss the post-closure care plan.

24. On June 2, 2008, DEQ, as a result of the April 16, 2008 meeting, sent a letter to The City requesting the revised post-closure care plan be submitted by July 28, 2008.

25. On August 28, 2008, DEQ received the revised post-closure care plan.

26. After review of the revised post-closure care plan submitted on August 28, 2008, DEQ sent comments to The City on March 9, 2009, and requested The City submit another revised post-closure care plan within 60 days.

27. On May 8, 2009, DEQ received the revised post-closure care plan from The City.

28. On May 21, 2009, groundwater monitoring well MW-3A was replaced by MW-3B at the Facility.

29. On November 29, 2010, DEQ approved a variance for The City to use updated ACLs as GPS.

30. On October 26, 2011, DEQ approved the background based GPS value of 16 μ/L for Cobalt.

31. On January 30, 2013, DEQ received a Trend Analysis for various metals detected at the Facility.

32. On March 19, 2013, DEQ approved a reduction from monthly landfill gas monitoring at the Facility to quarterly landfill gas monitoring, as landfill gas records indicated there was an initial landfill gas plan dated December 21, 1989 and gas monitoring has been conducted since January 4, 1995.

33. On April 24, 2013, DEQ staff met with representatives for The City to discuss the requirements under the First Amended Order.

34. On April 25, 2013, DEQ determined there was not sufficient data to run a trend analysis for cobalt, nickel, vanadium and zinc at MW-3b and the trend analysis for cobalt was not valid.

35. In May of 2013, The City submitted its 2012 Annual Report for the Facility.

36. On May 16, 2013, DEQ received a revised trend analysis report for various metals per DEQ's request.

37. On June 25, 2013, The City submitted a revised groundwater report per DEQ's request.

38. There is no record of leachate detection at the Facility.

39. Based on the information available to DEQ to date, The City is otherwise in compliance with the Order and the First Amended Order.

SECTION D: Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §§ 10.1-1455, the Board orders The City and The City agrees to:

1. Perform the actions described in Appendix C of this Second Amended Order, in addition to any uncompleted requirements of Appendix A of the Order and Appendix B of the First Amended Order. To the extent any actions in Appendix C of this Second Amended Order conflict with requirements in Appendix A and Appendix B of the Order and First Amended Order respectively, the requirements of Appendix C of the Second Amended Order shall control. Both the Board and The City understand and agree that this Amendment does not alter, modify or amend any other provision of the Order or First Amended Order, and that the unmodified provisions of the Order and First Amended Order remain in effect by their own terms.

And it is so ORDERED this 16th day of JUNE, 2014.

Michael P. Murphy, Regional Director
Department of Environmental Quality

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The City of Colonial Heights voluntarily agrees to the issuance of this Order.

Date: 4/23/14 By: _____, City Manager
(Person) (Title)
For The City of Colonial Heights

Commonwealth of Virginia
City/County of Colonial Heights

The foregoing document was signed and acknowledged before me this 23rd day of April, 2014, by Thomas L. Mattis, who is City Manager of The City of Colonial Heights, on behalf of the The City of Colonial Heights.

Elke B. Gibbs
Notary Public

7029936
Registration No.

My commission expires: 12-31-14

Notary seal:

ELKE B. GIBBS
COMMONWEALTH OF VIRGINIA
Expires 12-31-14
ID# 7029936
NOTARY PUBLIC

APPENDIX A

COMMONWEALTH of VIRGINIA
DEPARTMENT OF WASTE MANAGEMENT
11th Floor, Monroe Building
101 N. 14th Street
Richmond, VA 23219
(804) 225-2667
TDD (804) 371-8737

COMMONWEALTH OF VIRGINIA
WASTE MANAGEMENT BOARD
ENFORCEMENT ORDER

TO: City Council, City of Colonial Heights

RE: City of Colonial Heights Unpermitted Disposal Facility
City of Colonial Heights, Virginia

SECTION A: PREAMBLE AND AUTHORITY

This is an Enforcement Order issued by the Virginia Waste Management Board ("the Board") to the City Council, City of Colonial Heights, ("the City") regarding the City of Colonial Heights Unpermitted Disposal Facility ("the Facility," or "the Site"). This Enforcement Order is issued by the Board, through the Director of the Department of Waste Management ("DWM"), pursuant to the authority granted to the Board and the Director under §§ 10.1-1402, -1405, -1408.1, and -1455 of the 1950 Code of Virginia, as amended.

SECTION B: FACTS

1. The Facility comprises approximately ninety-three and one-half (93.5) acres of land, more or less, owned by the City, in City of Colonial Heights, Virginia. The Facility is approximately 2,000 feet west of the Appomattox River, 3,000 feet east of Interstate 95, and 800 feet south of Old Town Creek. It is located adjacent to the eastern right-of-way of Charles H. Dimmock Parkway near the intersection of Charles H. Dimmock Parkway and Temple Avenue.

2. Portions of the Facility were used as sand and gravel borrow areas until the 1950's. Solid waste management activities began in approximately 1938 and were of two different types. At the beginning of the operation of the Site, combustible solid wastes were burned, and the resulting ash was spread and covered in a portion of the southern sixty-six (66)

acres, more or less, of the Site ("the Phase I Area"). Also, on two acres, more or less, in the southwestern portion of the Site (a part of the Phase I area), solid wastes were reportedly disposed of by burial. From approximately the 1960's to 1976, municipal solid wastes were buried in trenches on the northern 27.5 acres, more or less, of the Site ("the Phase II area").

3. In April 1970, the Department of Health, predecessor-in-interest to the Department in matters pertaining to solid waste, issued regulations entitled Regulations Governing the Disposal of Solid Waste. Part I, Article 3, Section A of these regulations required a permit for the ownership or operation of a solid waste disposal facility. The City did apply for a permit for the Facility by application dated May 30, 1975; however, the application was not pursued, in part because of the high water table and because at least a portion of the Facility lies within the floodplain of the Appomattox River. A portion of the waste buried in the Phase II Area may be inundated in groundwater.

4. Following the denial of the permit application, the City continued to use the Facility for a time for the disposal of leaves, brush, land-clearing debris, and construction demolition debris.

5. The City and the Department (or its predecessor) have been involved in discussions regarding the closure of the Facility beginning in 1977 and continuing periodically thereafter. The Superfund Program of the Department performed a site inspection of the Facility on September 18, 1986 (Site Number VA-376).

6. The City retained a consultant, which submitted a closure plan for the Phase II area, dated June 1988. DWM approved this plan with conditions in a letter dated December 15, 1988. No closure plan for the Phase I area has been submitted.

7. Groundwater monitoring results from samples taken by the City and the Department indicate that the Facility is impairing the quality of the groundwater under the Site. In accordance with its closure plan, the City has installed and operated an air stripper to remove volatile organic contaminants from a portion of the groundwater flow.

8. The Board adopted new regulations, the Solid Waste Management Regulations (VR 672-20-10) ("SWMR"), which became effective on December 21, 1988. SWMR §2.4.E. makes the

requirements of the SWMR applicable to all facilities not closed before the effective date of those regulations. However, because of the City's efforts in filing and proceeding with the April 4, 1988 closure plan, the Department approved the closure of the Phase II area under the plan as modified in the Department's December 15, 1988 letter.

SECTION C: DETERMINATION AND ORDER

The Board and the City of Colonial Heights recognize that the City is under at a minimum, the following obligations with respect to the facility:

1. The City may not construct, operate, or modify a solid waste management facility in the Commonwealth except in accordance with the Waste Management Act, any applicable regulations, and a permit issued by the Director of DWM.

2. The City must close the Phase I Area of the Facility and provide post-closure care in accordance with the SWMR.

3. The City must close the Phase II Area of the Facility in accordance with the April 4, 1988 Plan as modified by this Order.

Therefore, in order to ensure that the City takes timely and appropriate action to meet its obligations, the Board, through the Director of DWM, hereby ORDERS, and the City agrees to comply with, the Schedule of Compliance in Appendix A of this Order, which is incorporated herein by reference.

SECTION D: ADMINISTRATIVE PROVISIONS

1. The issuance of this Order shall not preclude the Board, the Director of DWM, or DWM from seeking subsequent necessary remediation of the Facility, or from taking any subsequent necessary enforcement action, as is otherwise authorized by law.

2. 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.

3. For purposes of this proceeding, the City admits the jurisdictional allegations herein.

4. The City declares that fair and due process under the Administrative Process Act, Va. Code § 9-6.14:1, et seq. has been received. For the purposes of this proceeding, the City waives the right to request further hearings on any issue of fact or law herein and consent to the terms and issuance of this Order, except that the City may appeal any subsequent final agency action under the Administrative Process Act.

5. The City shall not be responsible for failure to comply with any of the terms and conditions of this Order if such noncompliance is caused by earthquake, flood, or other act of God, fire, war, strike or other occurrences resulting in impossibility of compliance and if the City shows that such occurrences and noncompliance were beyond its reasonable control and were not due to negligence on its part. When circumstances are anticipated to occur, or are occurring, or have occurred that may delay compliance with or cause noncompliance with any requirement of this order, the City shall notify the Director of DWM in writing of the reason(s) for and the projected duration of such delay or noncompliance and the measures taken and to be taken by the City to prevent or minimize such delay or noncompliance and the time table by which such measures will be implemented. Failure to so notify the Director shall constitute a waiver of any claim of inability to comply with a requirement of this Order.

This is an order of the Waste Management Board and the Director of the Department of Waste Management, in accordance with §§ 10.1-1402, -1405, -1408.1, and -1455 of the 1950 Code of Virginia, as amended.

Cynthia V. Bailey
Director
Department of Waste Management

The foregoing instrument was acknowledged before me on Jan. 30, 1991, by Cynthia V. Bailey, Director of the Department of Waste Management, in the City of Richmond, Virginia.

My commission expires: 1 Feb. 1992
Date

Notary Public

James B. McNeer
Mayor
City of Colonial Heights

The foregoing instrument was acknowledged before me on January 28, 1991, by James B. McNeer, Mayor of the City of Colonial Heights, Virginia.

My commission expires: 3-16-92
Date

Notary Public

JEE:46.w5/na

APPENDIX A
SCHEDULE OF COMPLIANCE
CITY OF COLONIAL HEIGHTS UNPERMITTED FACILITY

1. Mandatory and Prohibitory Provisions

a. The City shall not construct, operate, or modify any solid waste management facility within the Commonwealth, except in accordance with the Waste Management Act, with any permit issued in accordance with Va. Code §10.1-1408.1, and with any applicable regulations or orders of the Board.

b. The City shall close the Phase I and Phase II Areas of the Facility in accordance with the Waste Management Act, any permits issued by the Director of DWM, any applicable regulations or Orders of the Board, and any closure plans approved by the Department.

2. Closure and Post-Closure Care of the Phase I Area

a. Within 120 days of the effective date of this Order, the City shall submit to DWM a plat showing the location and extent of known disposal units, both for ash and for unburned solid waste, in the Phase I Area. Also by that date, the City shall submit information known to it as to the amount and type of waste disposed of in the Phase I Area.

b. Within 180 days of the effective date of this Order, the City shall submit to DWM a plan to close the Phase I area of the Landfill. The plan may provide for removal of the waste from disposal units and/or closing the units in place and providing for post-closure care under the requirements of SWMR § 5.1.E. ("the Phase I Closure/Post-Closure Plan").

c. Removal of waste from disposal units in accordance with the approved Phase I Closure/Post-Closure Plan shall take place under an approved schedule, but shall be completed before ~~January~~ July 1, 1993, unless an extension is granted in writing by the Director.

d. For any units that will be closed with waste left in place, the Phase I Closure/Post-Closure Plan shall include the installation of a groundwater monitoring system, the securing of the facility from further disposal, and other closure/post-closure requirements of SWMR § 5.1.E.

e. DWM shall review the Phase I Closure/Post-Closure Plan and offer comments in a timely manner.

f. The City shall respond to DWM comments within forty-five (45) days.

g. DWM shall then have the option of approving, modifying and approving, requesting further modification, or rejecting the Phase I Closure/Post-Closure Plan. Defects in the Phase I Closure/Post-Closure Plan sufficient to cause a rejection of the Plan shall be deemed a violation of this Order. Notice of rejection of the plan shall be made by letter signed by the Director stating reasonable grounds for the rejection and reasonable grounds that further comments or modification are unwarranted.

h. Upon approval the Phase I Closure/Post-Closure Plan shall be implemented in accordance with its terms, but closure in place shall be completed not later than January 1, 1993, and closure by removal shall be completed not later than July 1, 1993.

i. Post-closure care for any unit at which waste remains shall continue for a period of ten (10) years after closure is completed, unless the period of post-closure care is modified by variance, or unless the period of post-closure care is extended to meet the requirements of corrective action.

3. <u>Petition for a Variance from the Closure Requirements for the Phase I Area</u>

a. The proposed Phase I Closure/Post-Closure Plan may reflect and be accompanied by a petition for a variance under SWMR § 9.2 and 9.4., addressing such matters as the City deems appropriate.

b. When DWM offers its initial comments to the Phase I Closure/Post-Closure Plan, the Director shall make a tentative decision to grant or deny any petition under SWMR § 9.4.B.3., if the application for a variance, if any, filed with the Phase I Closure/Post-Closure Plan is complete.

c. The Director shall proceed to grant or deny the petition for a variance, if any, in accordance with the SWMR.

4. <u>Closure, Post-Closure Care of the Phase II Area</u>

a. Ground Water Monitoring

i. Background Well

(1) Within sixty (60) days of the effective date of this Order, the City shall provide a plan for establishing a background monitoring well(s) for the site adequate to assure compliance with SWMR §5.1.D. The plan shall include provisions for assuring access to any background well located on property owned by another party, and the plan may propose cessation of monitoring of existing background wells.

(2) Within sixty (60) days of the approval of the plan for establishing an adequate background monitoring well(s) for the site, the City shall proceed with the plan, in accordance with its terms.

(3) The background well(s) for the Facility shall be installed in accordance with the approved Plan.

(4) The City shall submit boring logs for the new background well(s), an as-built schematic of the new background well(s), and a comparison of the static water level of the new background well(s) to the other monitoring wells within forty-five (45) days of the completion of its construction.

(5) The Department may direct an amendment to the plan for establishing an adequate background monitoring well, including the installation of another well or wells, if it appears upon good evidence that the background well (or wells) installed pursuant to the approved plan has (or have) been affected by the waste disposed of in either the Phase I or Phase II Areas of the Site and that the monitoring of the Site is not in accordance with the standards of SWMR §5.1.D.

ii. Within forty-five (45) days after installing the background monitoring well(s) described in paragraph 3.B.i. of this Schedule of Compliance, the City shall sample the Phase II Area monitoring and background wells as specified in SWMR Sections 5.1.D.4. and 5.1.D.5.a. The sampling shall be repeated at intervals of one and one-half (1 1/2) months until four sets of samples have been gathered. Six (6) months after the initial sampling under this Paragraph, the City shall begin sampling (by taking the fifth set of samples) and analysis in accordance with SWMR Section 5.1.D.5.c., until different monitoring is required under this Order or until the obligation to sample is terminated in accordance with the SWMR.

iii. Within forty-five (45) days of receipt of the analytical results from the fifth sampling described in Paragraph 4.b.ii. of this Schedule of Compliance, the City shall submit to the Department an evaluation in accordance with SWMR Section 5.1.D.5.e.(1).

iv. Thereafter, the City shall comply with the remainder of SWMR Section 5.1.D.5.e., and SWMR Sections 5.1.D.6. through 5.1.D.10, and 5.4. in accordance with their terms, with the following exceptions:

(1) If a Phase II monitoring program is instituted, the City shall sample the monitoring and background wells as specified in SWMR Sections 5.1.D.6.b. within 30 days of instituting the Phase II monitoring program.

(2) The determinations called for SWMR Section 5.1.D.5.e.(6), if needed, shall be done in writing by the Director of DWM rather than by permit amendment and shall become a part of this Order.

v. All sample collection, preservation, and analyses shall be done in accordance with the procedures specified in EPA Document SW-846.

vi. Two copies of results shall be submitted to the Department within thirty (30) days of the City's receipt of analytical results.

b. Surface Water Monitoring

The City shall monitor the waters, if any, on the ground surface of the Phase II Area as follows:

i. Samples shall be collected quarterly at the following locations in accordance with EPA document SW-846: (1) the drainage ditch at the southern extremity of the Phase II Area at a point immediately west of Charles H. Dimmock Parkway; (2) the drainage ditch at the southern extremity of the Phase II Area at its exit point from the Site; (3) the exit point of the Drainage Ditch over the northern end of the Phase II Area (see paragraph 3.d. of this Schedule of Compliance, below); and (4) the point of entering the culvert under Temple Avenue near the northwest corner of the Phase II Area. These sampling locations have been agreed to by representatives of the parties on the Site, and the City shall, within forty-five (45) days of the effective date of this Order, submit a plan sheet of the locations. If there is any discrepancy about the locations, representatives of the parties shall schedule a site visit to confirm the sampling locations and memorialize them on a plan sheet with descriptive notations.

ii. The samples shall be analyzed for the following parameters:

(1) chemical oxygen demand
(2) specific conductance
(3) pH
(4) hardness
(5) total Kjeldahl nitrogen (TKN)
(6) nitrate (as N)
(7) ammonia
(8) temperature
(9) arsenic
(10) iron (soluble)
(11) cadmium
(12) chromium
(13) lead
(14) manganese (soluble)
(15) mercury
(16) selenium
(17) silver

(18) zinc

iii. The City shall report the results of the analysis to the Department within 30 days of receiving the results of analysis. The reports shall include a diagram showing the locations at which samples were taken.

iv. If the results of analysis show that the Facility is making a net addition of contaminants to the surface water, the City shall, upon direction to do so from the Department, prepare a plan to abate the impact of the Facility on surface water. The City shall implement the plan upon approval by the Department in accordance with its terms.

c. Reconstruction of Drainage Ditch

i. Within ninety (90) days of the effective date of this Order, the City shall submit plans to the Department for reconstruction of the drainage ditch between the culverts under Eric Dimmock Drive and Temple Avenue at the northern end of the Phase II area.

ii. The Plan shall propose lining the ditch with asphalt, half-pipe, or other impermeable material. The Plan shall also include provisions for repairing the cap from damage caused by the operation of equipment necessary to the reconstruction of the ditch.

iii. Upon approval of the Plan by the Department, the Plan shall be implemented in accordance with its terms.

d. Abatement of Leachate Seeps

The Phase II Area shall be inspected quarterly for any leachate seepage locations. Any leachate seeps found in this inspection shall be promptly corrected by taking steps to halt the seep or to collect and dispose of the seep. The leachate seep and the manner and effectiveness of the correction shall be reported in writing to the Department.

e. Methane Monitoring and Control

i. The City shall establish methane monitoring wells at least every 100 feet between the Phase II Area and the areas north and west of that portion of the Phase II area south of Temple Avenue. The City shall also establish methane monitoring wells at least every 100 feet along the eastern and western boundaries of that portion of the Phase II Area north of Temple Avenue. Similar wells shall be installed at appropriate locations east or south of the Phase II Area prior to the construction of any structures to be built within 400 feet of the respective boundaries.

ii. The City shall sample the methane monitoring wells at least monthly. If the concentration of methane is a monitoring well equals or exceeds 12.5% of the Lower Explosive Limit ("LEL"), the City shall sample the methane monitoring wells weekly until methane concentrations recede below 12.5% LEL. If the concentration of methane in a monitoring well equals or exceeds 12.5% LEL for four consecutive weeks, the City shall submit a contingency plan setting forth how the City will prevent the escape of methane off-site in the event that the level of methene exceeds 25% LEL. The Department shall review the methane contingency plan and offer comments in a timely manner. Following receipt of comments, the City shall submit a corrected methane contingency plan.

iii. If the level of methane in the monitoring wells exceeds 25% LEL, the City shall implement the methane contingency plan.

iv. Nothing in this Order shall be deemed to prevent the submission of or implementation of a methane contingency plan by the City without methane being detected at a level of 12.5% LEL or greater.

f. Air Stripping

i. Within ninety (90) days of the effective date of this Order, the City shall submit as-built location and design drawings for the current air stripping groundwater treatment system, which drawings shall include all pumping and recharge wells.

ii. Nothing in this Order shall be deemed to prevent the continued operation of the air stripping groundwater treatment system currently in operation at the Facility.

g. Certification of Closure

Within thirty (30) days of completing the closure activities at the Phase II Area under this Order, the City shall provide a certification by a Professional Engineer registered in the Commonwealth of Virginia with appropriate technical data to document the certification of the installation of the groundwater monitoring system, the clay cover, construction of liners for ditches, and other appurtenances as specified in the plans dated June, 1988 and this Order.

h. Deed Notation and Other Notice

Within thirty (30) days of submitting the certification of closure called for in ¶4.h above, the City shall provide documentation that it has filed a deed notice and a plat to the local planning office in accordance with SWMR §5.1.E.5 and 6.

i. Post-Closure Care

The City shall provide post-closure care for the Phase II Area of the Landfill in accordance with the approved plan for a period of ten years or until the termination of corrective action under SWMR §5.4, whichever is later.

5. Corrective Action

If groundwater protection levels are exceeded at the Phase II area or at any Phase I area where materials are closed in place, the City shall be required to undertake a corrective action program in accordance with SWMR § 5.4.

6. Stipulated Civil Charges

The City agrees to pay stipulated civil charges of $5,000 per violation upon a final determination by the Director that the City has violated any of the terms or conditions of this Order; provided however, that no stipulated civil charge shall be imposed for any violation that the City

cures within 30 days of notification of the violation, and provided further, that if stipulated civil charges are to exceed $35,000, the issue of civil charges in excess of that amount shall be submitted to a court of competent jurisdiction for a determination of appropriate civil charges in excess of that amount. Prior to a final determination of stipulated civil charges the Director shall consider written evidence in mitigation, if any, submitted by the City, and may, in his discretion, schedule a meeting with representatives of the City and DWM staff to discuss stipulated civil charges. Imposition of the stipulated civil charge shall not preclude subsequent action for other violations, action by the Department to enforce this Order by injunction, or action to recover penalties or civil charges sufficient to remove any economic benefit realized by the City as a result of non-compliance with this Order.

7. Termination

This Order shall remain in effect as follows:

a. Any obligation imposed under paragraphs 2, 3, or 4 of this Schedule of Compliance will terminate upon confirmation by DWM that the City has complied with all of the stated requirements.

b. Any obligation imposed under paragraphs 1, 5, and 6 of this Schedule of Compliance will continue during the period that this Order remains in effect.

c. This Order shall remain in effect until terminated in writing by the Director of DWM. The City may petition the Director to terminate this Order after the completion of post-closure care or corrective action, if any, whichever is later.

d. Termination of this Order, or of any obligation imposed in this Order, shall not operate to relieve the City from its obligation to comply with any statute, regulation, permit condition, other order, certification, standard, or requirement otherwise applicable.

APPENDIX B

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

PIEDMONT REGIONAL OFFICE
4949-A Cox Road
Glen Allen, Virginia 23060
(804) 527-5020
Fax (804) 527-5106
http://www.deq.state.va.us

Dennis H. Treacy
Director

Gerard Seeley, Jr.
Piedmont Regional Director

AMENDED CONSENT ORDER

WITH

CITY OF COLONIAL HEIGHTS, VIRGINIA

UNPERMITTED SOLID WASTE MANAGEMENT FACILITY

SECTION A: Purpose

The purpose of this amended consent order, issued under the authority of § 10.1-1455 of the Code of Virginia between the Waste Management Board and the City of Colonial Heights, Virginia, is to amend the 1991 Enforcement Order between those parties which provided for closure and post-closure of the unpermitted solid waste management facility operated by the City. This amended consent order provides for post-closure care for the area known as Phase II in the 1991 Enforcement Order.

SECTION B: Definitions

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

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

2. "Board" means the Waste Management Board, a permanent collegial body of the Commonwealth of Virginia as described in Code §§ 10.1-1401 and 10.1-1184.

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

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

5. "Regional Office" or "PRO" means the Piedmont Regional Office of the Department.

6. "Order" means this document, also known as a consent order.

7. "Regulations" or "VSWMR" mean the Virginia Solid Waste Management Regulations 9 VAC 20-80-10 *et seq*.

8. "The City" means the City of Colonial Heights, Virginia, which operated an unpermitted solid waste management facility near the intersection of Charles H. Dimmock Parkway and Temple Avenue.

SECTION C: Findings of Facts and Conclusions of Law

1. For nearly 40 years beginning in 1938, the City owned and operated an unpermitted solid waste management facility situated on approximately 93 acres located in Colonial Heights near the intersection of Charles H. Dimmock Parkway and Temple Avenue.

2. In 1975 the City applied to the Department for an operating permit but abandoned the application process due to issues relating to siting of the facility.

3. The City ceased accepting waste in 1976 and in 1977 the City began negotiations with the Department of Waste Management, predecessor to DEQ. Ultimately, these negotiations culminated in the 1991 Enforcement Order to the City for closure of the facility. (A copy of the 1991 Enforcement Order is Appendix A of this order.)

4. The 1991 Schedule of Compliance prohibited the City from constructing, operating, or modifying any solid waste management facility without a permit and provided that the City close the facility in two phases (Phase I and Phase II) in accordance with the Virginia Waste Management Act, the VSWMR, and any closure/post-closure plans approved by the Department.

5. Phase I was directed at an estimated 66 acres situated in the southern portion of the site. Phase II was directed at an estimated 27 acres situated in the northern portion of the site.

6. In the summer of 1997, the Phase I Southern area was accepted into the Department's Voluntary Remediation Program, therefore, the Phase I Southern

area is no longer subject to the 1991 Enforcement Order or this amended order. The City's obligations, with respect to closure/post-closure of the Phase I Southern area under the 1991 Enforcement Order, are hereby terminated.

7. The City submitted closure plans for the Phase II Northern area in November 1992. The plans included provisions for groundwater monitoring, surface water monitoring and treatment, landfill gas monitoring, and post-closure care as required by the 1991 Order. In March 1994, the City submitted additional revisions addressing issues related to post-closure land use at the Phase II Northern area.

8. The City has implemented all of the requirements of the 1991 Order and the closure plan for the Phase II Northern area. On September 18, 1997, the City submitted the "Closure Certification Report for the Colonial Heights Landfill (North)" certifying that the City has closed the Phase II Northern area in accordance with the closure plan.

9. On May 18, 1998, DEQ staff completed review of the Closure Certification Report and verified that the City has closed the Phase II Northern area in accordance with the requirements of the closure plan and the 1991 Order. The post-closure requirements specified in Appendix B are now in effect for the Phase II Northern area. The post-closure care period runs 10 years from the date of the closure certification report, until September 18, 2007, unless the post-closure period is extended to meet the requirements of corrective action.

SECTION D: Agreement and Order

Accordingly, the Board, by virtue of the authority of § 10.1-1455, orders and the City agrees to provide post-closure care for the Phase II Northern area as specified below:

1. To remedy the violations described above and bring the facility into compliance, the City shall perform the actions described in Appendix B, which is hereby incorporated by reference.

2. The City shall pay a charge of $3,600 as specified in Appendix B, which is hereby incorporated by reference.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend the Order with the consent of the City, for

good cause shown by the City, or on its own motion after notice and opportunity to be heard.

2. Nothing herein shall be construed as altering, modifying, or amending any other term or condition contained in this Order.

3. This Order addresses only those violations specifically identified herein. This Order shall not preclude the Board or 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; and/or (3) taking subsequent action to enforce the terms of this Order. Nothing herein shall affect appropriate enforcement actions by other federal, state, or local regulatory authorities, whether or not arising out of the same or similar facts.

4. For purposes of this Order and subsequent actions with respect to this Order, the City admits the jurisdictional allegations, factual findings, and conclusions of law contained herein.

5. The City consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.

6. The City declares it has received fair and due process under the Administrative Process Act, Code §§ 9-6.14:1 *et seq.*, and the Waste Management Act, and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to 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.

7. Failure by the City to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waiver 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.

8. 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.

9. The City 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 act of God, war, strike, or such other occurrence. The City must show that such circumstances resulting in noncompliance were beyond its control and not due to a lack of good faith or

diligence on its part. The City shall notify the Director of the Regional Office in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of this Order. Such notice shall set forth:

a. the reasons for the delay or noncompliance;

b. the projected duration of 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 Director of the Regional Office within 24 hours of learning of any condition listed above, which the Parties intend to assert will result in the impossibility of compliance, shall constitute waiver of any claim of inability to comply with a requirement of this Order.

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

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

12. This Order shall continue in effect until:

a. The City petitions the Director to terminate the Order after it has completed all requirements of the Order. The Director's determination that the City has satisfied all the requirements of the Order is a "case decision" within the meaning of the Administrative Process Act; or

b. The Director or the Board may terminate this Order in his or its whole discretion upon 30 days' written notice to the City.

Termination of this Order, or of any obligation imposed in this Order, shall not operate to relieve the City from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

13. By its signature below, the City voluntarily agrees to the issuance of this Order.

And it is so ORDERED this 5th day of September, 2000.

(for)
Dennis H. Treacy, Director
Department of Environmental Quality

The terms and conditions of the Order are voluntarily accepted by the City of Colonial Heights, Virginia

Date: 7/26/00

By: J. Chris Kollman III

Title: Mayor

State of Virginia
City/~~County~~ of Colonial Heights

The foregoing instrument was acknowledged before me this 26th day of July, 2000, by J. Chris Kollman, III, on behalf of the City of Colonial Heights.

01/31/01
My Commission Expires

Kimberly P. Rollins
Notary Public

APPENDIX B

CITY OF COLONIAL HEIGHTS, VIRGINIA

UNPERMITTED SOLID WASTE MANAGEMENT FACILITY

Schedule of Compliance

1. Within thirty (30) days of the effective date of the Order, the City shall pay a charge of $3,600. Please note on the instrument that this payment is pursuant to this Order and include the City's Federal Identification Number. Payment shall be by check, certified check, money order, or cashier's check payable to "Treasurer of the Commonwealth of Virginia, Department of Environmental Quality" and must be mailed to:

Receipts Control
Department of Environmental Quality
Post Office Box 10150
Richmond, Virginia 23240

2. Within one hundred twenty (120) days of the effective date of this Order, the City shall submit, for the Department's approval post-closure plans, as provided in the VSWMR, for the Phase II Northern area.

3. Post-closure of the Phase II Northern area shall be conducted until September 18, 2007, as provided in the VSWMR, unless the post-closure period is modified as provided in the VSWMR, or unless the period of post-closure care is extended to meet the requirements of corrective action.

4. The City shall perform any corrective action required under Part V of the VSWMR should the results of the groundwater monitoring performed during the post-closure care period warrant such action.

5. Within one hundred eighty (180) days of the effective date of this order, the City shall establish groundwater protection standards for the continued groundwater monitoring of the Phase II Northern area.

6. Within ninety (90) days of the effective date of this Order, the City shall submit to the Department evidence of financial assurance for the facility. The financial assurance shall be prepared in accordance with the Financial Assurance Regulations of Solid Waste Facilities 9 VAC 20-70-10 *et seq.*, and shall consist of a financial mechanism in the amount of the post-closure cost estimate. The City shall provide DEQ with a revised financial mechanism, within thirty (30) days, if the post-closure costs are adjusted.

7. The City shall conduct gas management activities in accordance with the VSWMR and

shall manage any gas incidents as specified in the VSWMR.

8. If leachate is detected, the City shall conduct leachate management activities as provided in the VSWMR.

9. Within ninety (90) days of completion of post-closure care, the City shall submit to the Director a certification, signed by an independent registered professional engineer, verifying that post-closure care has been completed in accordance with the post-closure plan.

10. The City agrees to provide notice to potential purchasers, via deed notation, perpetual easement, or other instrument designated by the City, of the City's continuing obligation to conduct post-closure activities at the landfill.

11. Unless otherwise specified, all submissions shall be addressed to:

Waste Enforcement
VADEQ
Piedmont Regional Office
4949 A Cox Road
Glen Allen, VA 23060

APPENDIX C
SCHEDULE OF COMPLIANCE

1. The City shall comply with the following schedule of compliance:

   a. The City shall conduct at the Facility quarterly sampling of monitoring wells MW-1, MW-2, MW-3b, MW-4A, MW-5A and MW-6 for Cobalt. If steady state or decreasing trends of cobalt have been detected after conducting 10 consecutive quarterly sampling events in monitoring wells MW-1, MW-2, MW-3b, MW-4A, MW-5A, and MW-6, at the Facility, The City may request, for DEQ approval, discontinuation of groundwater monitoring. If after 10 consecutive quarterly sampling events The City cannot demonstrate steady state or decreasing trends, sampling shall continue until sufficient data is available to demonstrate steady state or decreasing trends. Data collected from the Facility monitoring wells beginning in 2010 may be used to establish the trend dataset.

   b. If cobalt is detected at a concentration that is higher than that detected in the previous sampling events at the Facility, The City may obtain a verification sample within 30 days of receipt of the laboratory report, and shall provide the laboratory results of the verification sample to DEQ within 5 days of receipt of the results.

   c. The City shall sample and analyze the groundwater samples from the Facility in accordance with the requirements of 9 VAC 20-81-250(A)(4) until DEQ approves termination of groundwater monitoring.

   d. The City shall submit an annual groundwater monitoring report for the Facility within the time frames stated in 9 VAC 20-81-250(E)(2)(a), and shall submit an annual groundwater monitoring report for the Facility which meets the requirements stated in 9 VAC 20-81-250(E)(2)(a) until DEQ approves termination of groundwater monitoring.

   e. The City shall revise and update the Landfill Gas Management plan to reflect VSWMR Amendment 8 regulations and current conditions at the facility within 90 days of the effective date of the amended order.

2. DEQ Contact

Unless otherwise specified in this Second Amended Order, The City shall submit all requirements of Appendix C of this Second Amended Order to:

Gina Pisoni
Enforcement Specialist
VA DEQ – Piedmont Regional Office

4949-A Cox Road
Glen Allen, Virginia 23060
804-527-5156
804-527-5106 (fax)
Gina.Pisoni@deq.virginia.gov