COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VPA00845

Effective Date: January 9, 2015
Expiration Date: January 8, 2025

AUTHORIZATION TO MANAGE POLLUTANTS UNDER THE

VIRGINIA POLLUTION ABATEMENT PERMIT

AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the State Water Control Law and the Permit Regulation adopted pursuant thereto, the following owner is authorized to manage pollutants in conformity with the application, plans, specifications and supporting data submitted to the Department of Environmental Quality and other conditions set forth in this permit.

Owner: **Rollins Soil Enhancement, Inc.**
Owner Address: **10558 Kings Highway, King George, VA 22485**
Facility Name: **Rollins Soil Enhancement, Inc. - Westmoreland**

The authorized pollutant management shall be in accordance with this cover page, Part I - Monitoring Requirements and Special Conditions and Part II - Conditions Applicable to All VPA Permits, as set forth herein.

Deputy Regional Director, Piedmont Regional Office

09 January 2015

Date

PART I

During the period beginning with the permit's effective date and lasting until the permit's expiration date, and in accordance with 9VAC25-32-303 et. seq. and 9VAC25-790-10 et seq. and the limitations, conditions and requirements set forth in this permit, and the approved biosolids management plan, the permittee is authorized to manage Exceptional Quality (EQ) biosolids at the Rollins Soil Enhancement, Inc. – Westmoreland, located on Rappahannock Road, Westmoreland County, VA. This permit authorizes the use of EQ biosolids in the production of a blended landscaping product and the marketing and distribution of the final blended product. All samples shall be collected and analyzed in accordance with EPA 40CFR Parts 503 and 136 and the approved Biosolids Management Plan. Analyses shall be conducted by a VELAP accredited environmental laboratory.

Only biosolids from source facilities approved by the DEQ, identified in the BSMP, and treated to meet the Class A pathogen reduction standards in Part I.A.1.b, the Vector Attraction Reduction Options Part I.A.1.c, and the metals limits in Part I.A.1.a shall accepted by the permittee and blended under the authority of this permit for sale or give-away as a soil amendment.

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. EQ BIOSOLIDS -- The permittee shall obtain Notice and Necessary Information (NANI) from the generator certifying that the following biosolids standards have been met:
   a. Metals Limitations

	PC / CPLR LIMITATIONS	CEILING LIMITATIONS	MONITORING REQUIREMENTS	
PARAMETERS (1)	Monthly Average (mg/kg) (2)	Maximum	Frequency	Sample Type
Arsenic	41	75	Part I.A.1.d.❖	Composite
Cadmium	39	85	Part I.A.1.d.❖	Composite
Copper	1,500	4,300	Part I.A.1.d.❖	Composite
Lead	300	840	Part I.A.1.d.❖	Composite
Mercury	17	57	Part I.A.1.d.❖	Composite
Molybdenum	NL (3)	75	Part I.A.1.d.❖	Composite
Nickel	420	420	Part I.A.1.d.❖	Composite
Selenium	100	100	Part I.A.1.d.❖	Composite
Zinc	2,800	7,500	Part I.A.1.d.❖	Composite

NL = No limitations.

(1) All constituents are subject to cumulative pollutant loading rates (CPLR), pollutant concentrations (PC), and ceiling limits. PC biosolids contain the constituents identified above at concentrations below the monthly average specified in Part I.A.1. CPLR biosolids contain the constituents identified above at concentrations above the monthly average and each sample must be below the maximum concentration specified in Part I.A.1.a.
(2) All limits and criteria are expressed on a dry weight basis.
(3) The monthly average concentration for molybdenum is currently under study by USEPA. Research suggests that a monthly average Molybdenum concentration below 40 mg/kg may be appropriate to reduce the risk of copper deficiency in grazing animals.

b. Pathogen Reduction Requirements -- EQ Biosolids that are received by the facility and blended under this permit shall be treated to meet Class A Pathogen Reduction standards prior to delivery to the blending facility. The biosolids shall be monitored and limited in accordance with one of the treatment options selected and used by the biosolids generators as identified below. The permittee will have a system in place to verify that all biosolids accepted by this facility and blended under this permit meet these pathogen reduction standards and treatment requirements:

Treatment Option	Class A Pathogen Reduction Treatment Standards	Monitoring Requirements
Class A Pathogen Reduction Alternative 1	a) Either the density of fecal coliform in the biosolids shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids is used or disposed; at the time the biosolids is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F. And b) The temperature of the sewage sludge that is used or disposed shall me maintained at a specific value for a period of time in accordance with 9VAC25-31-710.A.3.b.1-4. (1) When the percent solids of the sewage sludge is 7.0% or higher, the temperature of the sewage sludge shall be 50°C or higher; the time period shall be 20 minutes or longer; and the temperature and time period shall be determined using equation (1), except when small particles of sewage sludge are heated by either warmed gases or an immiscible liquid. EQUATION (1) $D = 131{,}700{,}000/10^{0.1400t}$ D = time in days t = temperature in degrees Celsius (2) When the percent solids of the sewage sludge is 7.0% or higher and small particles of sewage sludge are heated by either warmed gases or an immiscible liquid, the temperature of the sewage sludge shall be 50°C or higher; the time period shall be 15 seconds or longer; and the temperature and time period shall be determined using equation (1). (3) When the percent solids of the sewage sludge is less than 7.0% and the time period is at least 15 seconds, but less than 30 minutes, the temperature and time period shall be determined using equation (1). (4) When the percent solids of the sewage sludge is less than 7.0%; the temperature of the sewage sludge is 50°C or higher; and the time period is 30 minutes or longer, the temperature and time period shall be determined using equation (2). EQUATION (2) $D = 50{,}070{,}000/10^{0.1400t}$ D = time in days t = temperature in degrees Celsius	Part I.A.1.d., (1)(2)
Class A Pathogen Reduction Alternative 2	a) Either the density of fecal coliform in the biosolids shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids is used or disposed; at the time the biosolids is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F. And b) (1) The pH of the sewage sludge that is used or disposed shall be raised to or above 12 and shall remain above 12 for 72 hours. (2) The temperature of the sewage sludge shall be above 52°C for 12 hours or longer during the period that the pH of the sewage sludge is above 12. (3) At the end of the 72-hour period during which the pH of the sewage sludge is above 12, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%.	Part I.A.1.d., (1)(2)

Class A Pathogen Reduction Alternative **3**	a) Either the density of fecal coliform in the biosolids shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids is used or disposed; at the time the biosolids is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F. And b) (1) The sewage sludge shall be analyzed prior to pathogen treatment to determine whether the sewage sludge contains enteric viruses. (2) When the density of enteric viruses in the sewage sludge prior to pathogen treatment is less than one Plaque-forming Unit per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to enteric viruses until the next monitoring episode for the sewage sludge. (3) When the density of enteric viruses in the sewage sludge prior to pathogen treatment is equal to or greater than one Plaque-forming Unit per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to enteric viruses when the density of enteric viruses in the sewage sludge after pathogen treatment is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the sewage sludge that meets the enteric virus density requirement are documented. (4) After the enteric virus reduction in subdivision 5 b (3) of this subsection is demonstrated for the pathogen treatment process, the sewage sludge continues to be Class A with respect to enteric viruses when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in subdivision 5 b (3) of this subsection. And c) (1) The sewage sludge shall be analyzed prior to pathogen treatment to determine whether the sewage sludge contains viable helminth ova. (2) When the density of viable helminth ova in the sewage sludge prior to pathogen treatment is less than one per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to viable helminth ova until the next monitoring episode for the sewage sludge. (3) When the density of viable helminth ova in the sewage sludge prior to pathogen treatment is equal to or greater than one per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to viable helminth ova when the density of viable helminth ova in the sewage sludge after pathogen treatment is less than one per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the sewage sludge that meets the viable helminth ova density requirement are documented. (4) After the viable helminth ova reduction in subdivision 5 c (3) of this subsection is demonstrated for the pathogen treatment process, the sewage sludge continues to be Class A with respect to viable helminth ova when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in subdivision 5 c (3) of this subsection.	Part I.A.1.d., (1)(2)
Class A Pathogen Reduction Alternative **4:**	a) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F. And a. The density of enteric viruses in the biosolids shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the biosolids is used or disposed; at the time the biosolids is prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements in 9VAC25-31-510 B, C, E, or F, unless otherwise specified by the board. And c) The density of viable helminth ova in the biosolids shall be less than one per four grams of total solids (dry weight basis) at the time the biosolids is used or disposed; at the time the biosolids is prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements in 9VAC25-31-510 B, C, E, or F unless otherwise specified by the board.	Part I.A.1.d., (1)(2)

Class A Pathogen Reduction Alternative **5; Process to Further Reduce Pathogens (PFRP) - Option 1:**	a) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F And b) Composting. Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the sewage sludge is maintained at 55°C or higher for three days. Using the windrow composting method, the temperature of the sewage sludge is maintained at 55°C or higher for 15 days or longer. During the period when the compost is maintained at 55°C or higher, there shall be a minimum of five turnings of the windrow (9VAC25-31-710.E.1).	Part I.A.1.d., (1)(2)
Class A Pathogen Reduction Alternative **5; Process to Further Reduce Pathogens (PFRP) - Option 2:**	a) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F And b) Heat drying. Sewage sludge is dried by direct or indirect contact with hot gases to reduce the moisture content of the sewage sludge to 10.0% or lower. Either the temperature of the sewage sludge particles exceeds 80°C or the wet bulb temperature of the gas in contact with the sewage sludge as the sewage sludge leaves the dryer exceeds 80°C (9VAC25-31-710.E.2).	Part I.A.1.d., (1)(2)
Class A Pathogen Reduction Alternative **5; Process to Further Reduce Pathogens (PFRP) - Option 3:**	a) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F And b) Heat treatment. Liquid sewage sludge is heated to a temperature of 180°C or higher for 30 minutes (9VAC25-31-710.E.3).	Part I.A.1.d., (1)(2)
Class A Pathogen Reduction Alternative **5; Process to Further Reduce Pathogens (PFRP) - Option 4:**	a) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F. And b) Thermophilic aerobic digestion. Liquid sewage sludge is agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the sewage sludge is 10 days at 55°C to 60°C (9VAC25-31-710.E.4).	Part I.A.1.d., (1)(2)
Class A Pathogen Reduction Alternative **5; Process to Further Reduce Pathogens (PFRP) - Option 5:**	a) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F And b) Beta ray irradiation. Sewage sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20°C) (9VAC25-31-710.E.5).	Part I.A.1.d., (1)(2)

Class A Pathogen Reduction Alternative **5; Process to Further Reduce Pathogens (PFRP) - Option 6:**	a) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F And b) Gamma ray irradiation. Sewage sludge is irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at dosages of at least 1.0 megarad at room temperature (ca. 20°C) (9VAC25-31-710.E.6).	Part I.A.1.d., (1)(2)
Class A Pathogen Reduction Alternative **5; Process to Further Reduce Pathogens (PFRP) - Option 7:**	a) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F And b) Pasteurization. The temperature of the sewage sludge is maintained at 70°C or higher for 30 minutes or longer (9VAC25-31-710.E.7).	Part I.A.1.d., (1)(2)
Class A Pathogen Reduction Alternative **6;**	a) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in 9VAC25-31-510 B, C, E or F And b) Biosolids that is used or disposed shall be treated in a process that is equivalent to a process to further reduce pathogens as determined by the Board.	Part I.A.1.d., (1)(2)

(1) Between sampling events, operating records must demonstrate that the Wastewater Treatment Plant (WWTP) is operating at a performance level known to meet pathogen reduction standards.
(2) Process monitoring must be sufficient to demonstrate compliance with PFRP treatment requirements.

c. Vector Attraction Reduction Requirements -- EQ Biosolids that are received by the facility and blended under this permit shall be treated to meet VAR standards prior to delivery to the blending facility. The biosolids shall be monitored and limited in accordance with one of the treatment option selected and used by the biosolids generators as identified below. The permittee will have a system in place to verify that all biosolids accepted by this facility and blended under this permit meet these vector attraction standards and treatment requirements:

VAR Option	VECTOR ATTRACTION REDUCTION TREATMENT STANDARD	Monitoring Requirements
1	38% Reduction of volatile solids by digestion (9VAC25-31-720.B.1).	Part I.A.1.d., (1)(2)
2	When 38% reduction is not achieved by anaerobic digestion, 40 day bench study at temperatures between 30°C and 37°C to demonstrate further reduction of volatile solids <17% (9VAC25-31-720.B.2).	Part I.A.1.d., (1)(2)
3	When 38% reduction is not achieved by aerobic digestion, 30 day bench study at 20°C to demonstrate further reduction of volatile solids <15% (9VAC25-31-720.B.3).	Part I.A.1.d., (1)(2)
4	Specific Oxygen Uptake Rate of <= 1.5 mg O_2/hour/gram total solids at 20°C (aerobically processes sludge) (9VAC25-31-720.B.4.)	Part I.A.1.d., (1)(2)
5	14 day aerobic process, temperatures above 40°C with an average temperature of >45°C (9VAC25-31-720.B.5).	(2)
6	Sufficient alkali is added to the sewage sludge to raise the pH of the sewage sludge to 12 or higher, and without the addition of more alkali, maintain the pH at 12 S.U. for two hours and then at 11.5 S.U. or higher for an additional 22 hours (9VAC25-31-720.B.6).	(2)

7	Where biosolids do not contain unstabilized solids from primary wastewater treatment, the percent solids of the biosolids shall be ≥ 75% (9VAC25-31-720.B.7).	Part I.A.1.d., (1)(2)
8	Where biosolids contain unstabilized solids from primary wastewater treatment, the percent solids of the biosolids shall be ≥ 90% (9VAC25-31-720.B.8.).	Part I.A.1.d., (1)(2)

(1) Between sampling events, operating records must demonstrate that the Wastewater Treatment Plant (WWTP) is operating at a performance level known to meet VAR standards.
(2) Process monitoring must be sufficient to demonstrate compliance with VAR treatment requirements.

d. MONITORING FREQUENCY -- Frequency of sampling biosolids from each generator is based on the amount of biosolids produced by that generator for distribution as a fertilizer or soil amendment or provided to a person permitted for land application and as specified below:❖

Amount of biosolids (dry tons per 365-day period)	Frequency
Greater than zero but less than 320	Once per year
Equal to or greater than 320 but less than 1,653	Once per quarter (four times per year)
Equal to or greater than 1,653 but less than 16,534	Once per 60 days (six times per year)
Equal to or greater than 16,534	Once per month (12 times per year)

Monitoring frequency shall be defined as the following:
Once per month = sampling shall be conducted once per calendar month.
Once per 60 days = sampling shall be conducted during the periods of 1/1 – 2/28; 3/1 – 4/30; 5/1 – 6/30: 7/1 – 8/31; 9/1 – 10/31; 11/1 – 12/31.
Once per quarter = sampling shall be conducted during the periods of 1/1 – 3/31; 4/1 – 6/30; 7/1 – 9/30; 10/1 – 12/31.
Once per year = sampling shall be conducted once per calendar year

❖ For the generators of EQ biosolids which have reduced monitoring frequency for metals in their permit, the permittee shall request from the generator and provide to the DEQ Piedmont Regional Office (DEQ-PRO), documentation of the authorization for reduced monitoring. Upon approval from the DEQ-PRO, the blender may accept monitoring at the frequency authorized by the generator's VPDES Permit to satisfy the monitoring requirements in Part I.A.1.a. of this permit.

2. EQ BIOSOLIDS – BLENDED PRODUCT: The EQ biosolids blended products marketed and distributed under this permit shall contain pollutant concentrations below the PC limits (monthly average) in Part I.A.2.b. if sold or given way in bulk; EQ biosolids products sold or given away in a bag or other container shall meet PC limits (monthly average) in Part I.A.2.b. or the Annual Pollutant Loading Rate in Part I.A.2.c. Each sample must contain concentrations of each metal below the ceiling limit (maximum concentration) specified in Part I.A.2.b.

   a. Sewage Sludge Annual Production Monitoring - The permittee shall report the annual total amount of sludge received (in dry metric tons) from each generator and annual amount of EQ biosolids product (in dry metric tons) distributed for land application.

   b. Metals Limitations – Pollutants in the EQ biosolids products that are marketed and distributed under the authority of this permit shall be monitored and limited as specified below.

	POLLUTANT CONCENTRATION LIMITATIONS	CEILING LIMITATIONS	MONITORING REQUIREMENTS	
PARAMETERS	Monthly Average (mg/kg) (1)	Maximum (mg/kg) (1)	Frequency	Sample Type
Total Arsenic	41	75	Part I.A.2.e.	Composite
Total Cadmium	39	85	Part I.A.2.e.	Composite
Total Copper	1,500	4,300	Part I.A.2.e.	Composite
Total Lead	300	840	Part I.A.2.e.	Composite
Total Mercury	17	57	Part I.A.2.e.	Composite
Total Molybdenum	NL(2)	75	Part I.A.2.e.	Composite
Total Nickel	420	420	Part I.A.2.e.	Composite
Total Selenium	100	100	Part I.A.2.e.	Composite
Total Zinc	2,800	7,500	Part I.A.2.e.	Composite

NL = No limitations, monitor and report.

(1) All limits and criteria are expressed on a dry weight basis.
(2) The monthly average concentration for molybdenum is currently under study by USEPA. Research suggests that a monthly average Molybdenum concentration below 40 mg/kg may be appropriate to reduce the risk of copper deficiency in grazing animals

c. Annual Pollutant Loading Rates (APLR) – For EQ biosolids blended products sold or given away in a bag or other container* either the concentration of each pollutant in the biosolids shall not exceed the monthly concentration for the pollutant in Part I.A.2.b. or the Annual Whole Sludge Application Rate (AWSAR) ❖ must be determined for the biosolids such that the product of the concentration of each pollutant in the biosolids and the AWSAR for the biosolids shall not cause the APLR for the pollutant below to be exceeded.[a]

PARAMETERS	LIMITATIONS Maximum APLR [a]		MONITORING REQUIREMENTS	
	(kg/ha) [b]	(Lbs/Ac) [b]	Frequency	Sample Type
Total Arsenic	2.0	1.8	Part I.A.2.e.	Calculated
Total Cadmium	1.9	1.7	Part I.A.2.e.	Calculated
Total Copper	75	67	Part I.A.2.e.	Calculated
Total Lead	15	13	Part I.A.2.e.	Calculated
Total Mercury	0.85	0.76	Part I.A.2.e.	Calculated
Total Molybdenum	NL	NL	Part I.A.2.e.	Calculated
Total Nickel	21	19	Part I.A.2.e.	Calculated
Total Selenium	5.0	4.6	Part I.A.2.e.	Calculated
Total Zinc	140	125	Part I.A.2.e.	Calculated

NL = No Limit, monitor and report

(a) APLR = Concentration X AWSAR X 0.001; procedure for determining AWSAR is below.❖
(b) All limits and criteria are expressed on a dry weight basis.

❖ Determining AWSAR

AWSAR = APLR/(C x 0.001)

Where:

AWSAR = Annual whole sludge application rate in metric tons per hectare per 365-day period (dry weight basis)

APLR = Annual pollutant loading rate in kilograms per hectare per 365-day period from Part I.A.2.c. above

C = Pollutant concentration in milligrams per kilogram of total solids (dry weight basis) from biosolids sample collected in accordance with Part I.A.2.b.

0.001 = A conversion factor

Calculate the AWSAR for each pollutant in Part I.A.2.b. The lowest AWSAR calculated shall be used to calculate the APLR for the biosolids.

* "Other container" means either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less. This includes the bed of a pickup truck

d. Biosolids Characteristics – EQ biosolids blended products that are distributed and marketed under the authority of this permit shall be monitored and limited as specified below:

PARAMETERS [a]	LIMITATIONS		MONITORING REQUIREMENTS	
	Monthly Average	Minimum and Maximum	Frequency	Sample Type
Percent Solids (%)	NL	NA	Part I.A.2.e.	Composite
Volatile Solids (%)	NL	NA	Part I.A.2.e.	Composite
Total Kjeldahl Nitrogen (mg/kg)	NL	NA	Part I.A.2.e.	Composite
Ammonium Nitrogen (mg/kg)	NL	NA	Part I.A.2.e.	Composite
Total Phosphorus (mg/kg)	NL	NA	Part I.A.2.e.	Composite
Total Potassium (mg/kg)	NL	NA	Part I.A.2.e.	Composite
pH (S.U.)	NA	NL	Part I.A.2.e.	Composite
Alkalinity as $CaCO_3$ (mg/kg)	NL	NA	Part I.A.2.e.	Composite
Polychlorinated biphenols (PCBs) (mg/kg)	NL	NL	Annually	Composite
Aldrin/dieldrin (total) (mg/kg)	NL	NL	Annually	Composite
Benzo (a) pyrene (mg/kg)	NL	NL	Annually	Composite
Chlordane (mg/kg)	NL	NL	Annually	Composite
4 4' DDT/DDE/DDD (total) (mg/kg) [b]	NL	NL	Annually	Composite
Dimethyl nitrosamine (mg/kg)	NL	NL	Annually	Composite
Heptachlor (mg/kg)	NL	NL	Annually	Composite
Hexachlorobenzene (mg/kg)	NL	NL	Annually	Composite
Hexachlorobutadiene (mg/kg)	NL	NL	Annually	Composite
Lindane (mg/kg)	NL	NL	Annually	Composite
Toxaphene (mg/kg)	NL	NL	Annually	Composite
Trichloroethylene (mg/kg)	NL	NL	Annually	Composite
Aluminum (mg/kg)	NL	NL	Annually	Composite
Boron, water soluble (mg/kg)	NL	NL	Annually	Composite
Calcium (mg/kg)	NL	NL	Annually	Composite
Chlorides (mg/kg)	NL	NL	Annually	Composite
Manganese (mg/kg)	NL	NL	Annually	Composite
Total Sulfur (mg/kg)	NL	NL	Annually	Composite

(a) All parameters reported as mg/kg are expressed on a dry weight basis.
(b) 4 4' DDT = 2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane
4 4' DDE = 1,1-Bis (p-chlorophenyl)-2,2—dichloroethylene;
4 4' DDD = 1,1-Bis (p-chlorophenyl)--2,2--dichloroethane

NL = No Limit, monitor and report
NA = Not applicable

e. Frequency of sampling the EQ biosolids blended product produced by the facility is based on the amount of biosolids blended product distributed as a fertilizer or soil amendment as specified below:

Amount of biosolids product (dry tons per 365-day period)	**Frequency**
Greater than zero but less than 320	Once per year
Equal to or greater than 320 but less than 1,653	Once per quarter (four times per year)
Equal to or greater than 1,653 but less than 16,534	Once per 60 days (six times per year)
Equal to or greater than 16,534	Once per month (12 times per year)

Monitoring frequency shall be defined as the following:
Once per month = sampling shall be conducted once per calendar month.
Once per 60 days = sampling shall be conducted during the periods of 1/1 – 2/28; 3/1 – 4/30; 5/1 – 6/30: 7/1 – 8/31; 9/1 – 10/31; 11/1 – 12/31.
Once per quarter = sampling shall be conducted during the periods of 1/1 – 3/31; 4/1 – 6/30; 7/1 – 9/30; 10/1 – 12/31.
Once per year = sampling shall be conducted once per calendar year.

B. REPORTING AND RECORDKEEPING REQUIREMENTS

1. Monthly Reporting – The permittee shall submit the EQ Biosolids – Blended Product monitoring data, the generator notice and necessary information (NANI), and monthly distribution report to the Department of Environmental Quality (DEQ) –PRO Regional Office and a copy of the report to the DEQ – Office of Land Application Programs (OLAP) by the 15th day of each month (as evidenced by the transmission date or postmark), for blending and distribution activities that occurred in the previous calendar month. If the report is submitted electronically, then the sender must include the attestation statement in Part I.B.1.d that the transmitted documents are being submitted under his/her signature.

   If no EQ biosolids are received by the facility and no EQ Biosolids – Blended Product is sold by the facility under this permit during a calendar month, a report shall be submitted stating that no biosolids were received and no biosolids products were distributed.

   a. The Report shall include the following Monitoring Data.

      (1) EQ Biosolids - Blended Product Monitoring Data – The following data shall be submitted on the 15th of the month following the month in which the monitoring took place:

         (a) Part I.A.2.b, EQ Biosolids – Blended Product – Metals Limitations;

         (b) Part I.A.2.c, EQ Biosolids – Blended Product – APLR, if applicable;

         (c) Part I.A.2.d, EQ Biosolids – Blended Product – Biosolids Characteristics;

      (2) Monthly average shall be reported as the average of the results of all samples collected within a calendar month and analyzed using an approved method, in accordance with Part II.C.3-4 of this permit. For monitoring periods which include multiple months, if one sample is collected during the monitoring period, that result shall be reported as the monthly average. If samples are collected in different months during the monitoring period, a monthly average shall be calculated for each month in which samples were collected during the monitoring period and the highest monthly average reported. Individual results and calculations shall be submitted with the report; and

      (3) The maximum concentration shall be reported as the highest single result from all samples collected and analyzed during a monitoring period.

   b. Generator NANI – In accordance with 9VAC25-32-313.G and 9VAC25-31-530.F, when the permittee receives biosolids from a generator, the permittee shall obtain a NANI from the generator and submit the NANIs received with the next monthly report, but no later than 45 days after the last day of the month in which biosolids were received. The NANI shall be on the form included with this permit and include at minimum:

      (1) A statement that Class A pathogen requirements in 9VAC25-32-675.A were met and the alternative used;

      (2) A statement that one of the VAR requirements in 9VAC25-32-685.B.1 through B.8 was met and the alternative used;

      (3) A statement that PC metals limits were met; and

      (4) The following certification statement:

         I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

   c. Monthly Blending and Distribution Activity – The following items shall be submitted for all biosolids received and blended during the previous month:

      (1) Name of Permittee and VPA permit number;

(2) Dates of activities;

(3) The amount of biosolids received at the facility, in dry tons and wet tons, by source facility name and Virginia Pollution Discharge Elimination System (VPDES) permit number.

(4) The amount of biosolids, in wet tons, used in the blended product;

(5) The amount of blended product produced, in wet tons;

(6) The amount of blended product distributed in bulk, in wet tons;;

(7) The amount of blended product distributed in bag or other container, in wet tons;

(8) The name of a responsible official or authorized representative of the permittee and a statement signed and dated by that responsible official or authorized representative indicating that the information submitted has been verified by that responsible official or authorized representative as correctly reported, in accordance with the Part II.K.

d. Electronic Submittal Attestation Statement – When submitting a report via email, the following statement shall be included in the email.

I, representative official's or authorized representative's name, hereby declare that I am submitting the attached documents under my signature for the purposes of compliance with the reporting requirements of VPA Permit number(s) VPA0XXX. With the transmission of this email, I attest that the above statement is true and valid to the best of my knowledge.

2. **Annual Report:** The permittee shall submit an Annual Report to the DEQ –PRO Regional Office and a copy of the report to the DEQ –OLAP by February 19th of each year (as evidenced by the transmission date or postmark), for the previous calendar year's activity. If the report is submitted electronically, then the sender must include the statement in Part I.B.1.d. attesting that the transmitted documents are being submitted under his/her signature.

The report shall include at minimum:

a. Name of Permittee and VPA permit number;

b. Dates of activities;

c. Total amount of biosolids received at the facility, in dry tons and wet tons, by source facility name and Virginia Pollution Discharge Elimination System (VPDES) permit number.

d. Total amount of biosolids, in wet tons, used in the blended product;

e. Total amount of blended product produced, in wet tons;

f. Total amount of blended product distributed in bulk, in wet tons;

g. The amount of blended product distributed in bag or other container, in wet tons;

h. The name of a responsible official or authorized representative of the permittee and a statement signed and dated by that responsible official or authorized representative indicating that the information submitted has been verified by that responsible official or authorized representative as correctly reported, in accordance with the Part II.K.

i. Documentation of current registration with VDACS.

j. Name of responsible representative of permittee and a statement signed and dated by that representative indicating that the information submitted has been verified by that representative as correctly reported in accordance with the Part II.K;

3. **Record Keeping:** The permittee is required to retain the following information for at least five years:

a. Manifest System – The permittee shall develop, implement and maintain a manifest system to track biosolids received at and removed from the storage facility, as described in the Operations and Maintenance (O&M) Manual

(1) Documentation will include at minimum:

(a) For Each source received:

i. The source facility name, source facility permit number and treatment type, as identified on the DEQ Source List;

ii. Wet tons received; and

iii. Date received;

(b) For each source blended;

i. The source facility name, source facility permit number and treatment type, as identified on the DEQ Source List;

ii. Wet tons used; and

iii. Date blended.

(2) When biosolids sources are comingled for blending, manifest records shall represent the proportions of each source used.

(3) The records shall be maintained at the facility and available for inspection during operations as part of the overall daily recordkeeping for the project.

b. The permittee is required to retain the following information for at least five years:

(1) Monitoring records and the concentrations of each pollutant in Part I.A.

(2) The NANIs required in Part I.B.1.b.

(3) Reports required in Part I.B.1. and I.B.2., including the certification statements;

(4) A description of how the management practices specified in the approved Biosolids Management Plan and/or this permit are met;

(5) For biosolids blended products sold or given away in a bag or other container, which have a metals monthly average concentration above the PC limit and are therefore limited by the AWSAR, the following information shall be developed and maintained:

(a) The annual whole sludge application rate for the biosolids that does not cause the annual pollutant loading rates in Part I.A.2.b to be exceeded;

(b) The concentration of each pollutant listed in Part I.A.2.a in the biosolids;

(6) The manifest required by Part I.B.3.a.;

(7) The Nutrient Management Plans (NMP) and records of land application and timing for recipients of the EQ biosolids blended product who use the product at an agricultural operation; and

(8) A copy of reports required by the VDACS Fertilizer Registration under §§ 3.2-3609 and 3.2-3610 of the Code of Virginia;

C. BLENDING OPERATION SITE REQUIREMENTS

1. Discharge Prohibition --

a. All pollutant management activities covered under this permit shall maintain no point source discharge of pollutants to surface waters except in the case of a storm event greater than the 25-year, 24-hour storm. The operation of the facilities of the owner permitted herein shall not contravene the Water Quality Standards, as adopted and amended by the Board, or any provision of the Water Control Law.

b. Site management practices shall be developed and implemented so that any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized

2. Setback Distances -- Blending operations and storage of the biosolids and final product shall maintain minimum buffers as stipulated in the O&M manual:

Occupied dwelling	200'
Odor sensitive receptors	400'
Water supply Wells or springs	100'
Surface waters without a vegetated buffer	100'
Surface waters with a vegetated buffer	35'
Property lines	100'
Property lines of publicly accessible sites	200'

3. All vehicles that transport biosolids shall be sufficiently sealed to prevent leaking and spillage of biosolids.

4. Landowner Consent - A valid landowner consent form shall be maintained for the Rollins Soil Enhancement, Inc. - Westmoreland site at 10558 Kings Highway, King George, VA 22485. The permittee shall immediately notify the PRO Regional Office of any change in landowner agreement. The permittee shall provide the owner or leaseholder of the land on which the blending operation takes place notice and necessary information to comply with the requirements in this permit. Forms for providing this notice and information are included in the instructions for application filed by the permittee.

5. Closure Requirements --
   a. In the event the permittee's agreement to blend biosolids at the Rollins Soil Enhancement, Inc. - Westmoreland facility is terminated for any reason, the permittee shall notify DEQ of its plan to remove unblended biosolids, blended product, or any residuals from the blending operation off-site.
   b. Inspection - The department shall inspect all facilities at the time of closure to confirm that the closing is complete and adequate. It shall notify the owner of a closed facility, in writing, if the closure is satisfactory, and shall require any necessary construction or such other steps as may be necessary to bring unsatisfactory sites into compliance with this permit.

D. DISTRIBUTION AND MARKETING OF EQ BIOSOLIDS BLENDED PRODUCT:

1. This permit authorizes Rollins Soil Enhancement, Inc. - Westmoreland to prepare a blended product using EQ biosolids at the Rollins Soil Enhancement, Inc. - Westmoreland facility located on Rappahannock Road in Westmoreland County, Virginia. EQ biosolids may be blended with mulch and other clean wood products, including ground, shredded or chipped woody waste and other materials that are routinely distributed for the purposes of landscaping such as vegetative compost and topsoil. Additives/ materials to enhance a finished product for specialty markets will be utilized during product blending to incorporate materials to address specific requests. Anticipated materials include, but are not limited to, the addition of sand/ perlite/ vermiculite/ lime/ micro- & macronutrients/ gypsum/ coal combustion byproduct gypsum/ wood ash and water treatment residuals. Additives may be incorporated upon request to produce specialty blended soil amendment and/ or horticultural planting materials. This permit also authorizes Rollins Soil Enhancement, Inc. -Westmoreland to market and distribute the final blended product containing EQ biosolids for sale or give-away in bulk, bag or other container to landscapers, wholesalers, retailers or the general public.
2. **Exceptional Quality Biosolids:**
   a. Biosolids provided to the Permittee for blending:
      (1) Only exceptional quality biosolids from sources approved by the DEQ and identified in the Biosolids Management Plan (BSMP) may be use to produce the final blended product for distribution or

marketing in Virginia.

(2) Only biosolids that meet the following criteria shall be blended under this permit:

(a) Metals concentrations are below the pollutant concentrations and ceiling limits in Part I.A.2.;

(b) Class A pathogen reduction in Part I.A.1.b. is demonstrated;

(c) One of the first 8 vector attraction reduction methods in Part I.A.1.c. is demonstrated;

b. Final EQ biosolids blended product for distribution and marketing:

(1) Only exceptional quality biosolids products from sources approved by the DEQ and identified in the Biosolids Management Plan (BSMP) may be distributed or marketed in Virginia.

(2) Only biosolids products that meet the following criteria shall be sold or distributed under this permit:

(a) The biosolids used in blending meet the criteria above in Part I.C.2.a. and certification is provided by the generator;

(b) Metals concentrations in the final EQ biosolids blended product are below the PC or APLR limits, and ceiling limits in Part I.A.2.;

3. **Addition of sources** -- For the addition of biosolids sources to be included in the blending process not identified in the Permit Application, the permittee shall submit a biosolids characterization and non-hazardous waste declaration, as outlined in the VPA Permit Application Form D, Parts D-II 6-8, D-IV and D-V, to DEQ - Office of Land Application Programs for authorization. Distribution and Marketing of biosolids of the final biosolids product made from new sources shall not commence until authorization is received from DEQ.

4. **Registration with the Virginia Department of Agriculture and Consumer Services (VDACS).** Exceptional quality biosolids marketed or distributed as fertilizers or soil conditioners must be registered or licensed with the VDACS. The permit applicant shall maintain the VDACS registration or license for the duration of this permit.

5. **Biosolids Management:**

a. Exceptional quality biosolids products may be marketed or distributed in bulk, bag or other container. (Other container is an open or closed receptacle with a load capacity of one metric ton or less, such as a box, bucket, carton, vehicle or trailer.)

b. EQ biosolids blended products may be distributed in bulk for the purpose of land application at agricultural operations with the following conditions:.

(1) EQ biosolids blended products shall be land applied in accordance with a NMP prepared by a certified nutrient management planner as stipulated in regulations promulgated pursuant to § 10.1-104.2 of the Code of Virginia

(a) If the NMP is prepared by the permit holder:

i. When EQ biosolids blended products are land applied by the permit holder, the permit holder shall provide a copy of the NMP to the farm operator of the site and the Department of Conservation and Recreation (DCR) within 30 days after land application at the site has commenced; or

ii. When EQ biosolids blended products are land applied by the recipient, the permit holder shall provide a copy of the NMP to the farm operator of the site at the time of delivery of biosolids to the recipient. The permit holder shall provide a copy of the NMP to the DCR within 30 days after land application at the site has commenced.

(b) If the NMP is prepared by the recipient of EQ biosolids:

i. When EQ biosolids blended products are land applied by the permit holder, the permit holder shall obtain a copy of the NMP from the recipient prior to land application at the site. The permit holder shall provide a copy of the NMP to the DCR within 30 days after land application at the site has commenced; or

ii. When EQ biosolids blended products are land applied by the recipient, the permit holder shall obtain a copy of the NMP from the recipient at the time of delivery of biosolids to the

recipient The permit holder shall provide a copy of the NMP to the DCR within 30 days after land application at the site has commenced.

(2) When EQ biosolids blended products are land applied by the recipient of the biosolids, the permit holder shall obtain a copy of records of land application and timing.

6. **Product Labeling:** Information shall be provided to users of marketed or distributed biosolids in the form of a label affixed to a bag or a brochure, as required by the biosolids management plan. The information shall include the following:
   a. The name and address of the preparer of the biosolids;
   b. When biosolids that are sold or given away in a bag or other container exceed the pollutant concentrations in Part I.A.2.b., include the annual whole sludge application rate for the biosolids that does not cause the annual pollutant loading rates in Part I.A.2.c. to be exceeded.
   c. A statement explaining that application of the biosolids to the land is prohibited except in accordance with the instructions on the label or information sheet; and
   d. Information required by regulations promulgated by the Virginia Department of Agriculture and Consumer Services under § 3.2-3601 and the labeling provisions of § 3.2-3611 of the Code of Virginia.
7. **Biosolids Management Plan:**

   The permittee shall conduct all biosolids use or disposal activities, including the blending process, and the stockpiling of EQ biosolids feedstock and EQ biosolids blended product, in accordance with the BSMP approved with the issuance of this permit. The BSMP includes all materials submitted at the time of permit application and the materials submitted for any future permit modifications or addition of sources. Any proposed changes in the biosolids use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ-PRO Regional Office approval 90 days prior to the effective date of the changes. Upon approval, the revised BSMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.

E. OTHER SPECIAL CONDITIONS

1. **Biosolids Reopener:** The Board will modify or revoke and reissue this permit as appropriate and necessary to incorporate changes to any applicable standard or requirement for the use or disposal of biosolids, sewage sludge, industrial wastewater sludge, or septage promulgated under Section 405(d) of the Clean Water Act, State Water Control Law, or the VPA Permit Regulation (9VAC25-31 or 9VAC25-32).
2. The permit holder shall promptly report offsite spills that occur within the State of Virginia to the department, the chief executive officer or designee for the local government and the owner of the facility generating the biosolids. The report shall be made verbally as soon as possible, but no later than 24 hours after the discovery of the spill. After business hours notification may be provided by voicemail, facsimile or email.

   A written report, which shall include a description of measures taken in response to the spill, shall be submitted by the permit holder to the department, the chief executive officer or designee for the local government, and the owner of the facility generating the biosolids within five working days of the spill. The report may be sent by first class mail, facsimile or email, or it may be hand delivered.

CONDITIONS APPLICABLE TO ALL VPA PERMITS
PART II

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
2. Monitoring shall be conducted according to procedures listed under Title 40 Code of Federal Regulations Part 136, unless other procedures have been specified in this permit.
3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
4. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories except for the following:
   a. Field sample testing and measurements performed at the site where the sample is taken, are not subject to the requirements of 1VAC30-45 or 1VAC30-46; and
   b. Tests, analyses, measurements or monitoring, using protocols established pursuant to §10.1-104.2 to determine soil fertility, animal manure nutrient content, or plant tissue nutrient uptake for the purposes of nutrient management.

B. Records.

1. Records of monitoring information shall include:
   a. The date, exact place, and time of sampling or measurements;
   b. The name of the individual(s) who performed the sampling or measurements;
   c. The date(s) and time(s) analyses were performed;
   d. The name of the individual(s) who performed the analyses;
   e. The analytical techniques or methods used, with supporting information such as observations, readings, calculations and bench data; and
   f. The results of such analyses.
2. The permittee shall retain records:
   a. Of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years or in the case of activities regulated under Part IX of the Virginia Pollution Abatement Permit Regulation (9VAC25-32-10 et seq.), at least five years from the date of the sample, measurement, report or application. This period of retention may be extended by request of the Board at any time.
   b. Related to biosolids data and information specified in agreements between generator, owner, agents, landowners and farmers. These records shall be described and maintained for a minimum period of five years or the duration of the permit or subsequent revisions if longer than five years.

C. Reporting Monitoring Results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after the monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Mailing Address:	Physical Address	Electronic Submission
DEQ- PRO Regional Office	DEQ – Piedmont Regional Office 4949 – A Cox Road Glen Allen, VA 23060	anita.tuttle@deq.virginia.gov (804)527-5039 Bryan.Cauthorn@deq.virginia.gov (804)698-4592

2. Monitoring results shall be reported on forms provided or specified by the Department.
3. If the permittee monitors the pollutant management activity, at a sampling location specified in this permit, for any pollutant more frequently than required by the permit using approved analytical methods, the permittee shall report the results of this monitoring on the monitoring report.
4. If the permittee monitors the pollutant management activity, at a sampling location specified in this permit, for any pollutant that is not required to be monitored by the permit, and uses approved analytical methods, the permittee shall report the results with the monitoring report.
5. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean

unless otherwise specified in this permit.

D. Duty to Provide Information.
The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by the permittee. Plans, specifications, maps, conceptual reports and other relevant information shall be submitted as requested by the Board prior to commencing construction.

E. Compliance Schedule Reports.
Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges.
Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:
1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges.
Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:
1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges.
If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:
1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance
The permittee shall report any noncompliance which may adversely affect state waters or may endanger public

health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
   a. Any unanticipated bypass; and
   b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
   a. A description of the noncompliance and its cause;
   b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
   c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.

NOTE: The immediate (within 24 hours) reports required in Parts II F, G and H may be made to the Department's Piedmont Regional Office at (804) 527-5020 (voice) or (804) 527-5106 (fax). For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes.
   1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the design or operation of the pollutant management activity.
   2. The permittee shall give at least 10 days advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements.
   1. Applications. All permit applications shall be signed as follows:
      a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
      b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
      c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
   2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
      a. The authorization is made in writing by a person described in Part II K 1;
      b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
      c. The written authorization is submitted to the Department.
   3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Parts II K 1 or 2 shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply.
The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Compliance with a permit during its term constitutes compliance, for purposes of enforcement, with the State Water Control Law.

M. Duty to Reapply.
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit.
This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law.
Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability.
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance.
The permittee shall be responsible for the proper operation and maintenance of all treatment works, systems and controls which are installed or used to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures.

R. Disposal of solids or sludges.
Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate.
The permittee shall take all reasonable steps to minimize or prevent any pollutant management activity in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense.
It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. Prohibition - Bypass means intentional diversion of waste streams from any portion of a treatment works. A bypass of the treatment works is prohibited except as provided herein.

2. Anticipated Bypass - If the permittee knows in advance of the need for a bypass, he shall notify the Department promptly at least 10 days prior to the bypass. After considering its adverse effects the Board may approve an anticipated bypass if:
   a. The bypass will be unavoidable to prevent loss of human life, personal injury, or severe property damage ("Severe Property Damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production); and
   b. There are no feasible alternatives to bypass such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. However, if bypass occurs during normal periods of equipment downtime or preventive maintenance and in the exercise of reasonable engineering judgment the permittee could have installed adequate backup equipment to prevent such bypass, this exclusion shall not apply as a defense.
3. Unplanned Bypass - If an unplanned bypass occurs, the permittee shall notify the Department as soon as possible, but in no case later than 24 hours, and shall take steps to halt the bypass as early as possible. This notification will be a condition for defense to an enforcement action that an unplanned bypass met the conditions in paragraphs U 2 a and b and in light of the information reasonably available to the permittee at the time of the bypass.

V. Upset.

A permittee may claim an upset as an affirmative defense to an action brought for noncompliance. In any enforcement proceedings a permittee shall have the burden of proof to establish the occurrence of any upset. In order to establish an affirmative defense of upset, the permittee shall present properly signed, contemporaneous operating logs or other relevant evidence that shows:

1. That an upset occurred and that the cause can be identified;
2. That the permitted facility was at the time being operated efficiently and in compliance with proper operation and maintenance procedures;
3. That the 24-hour reporting requirements to the Department were met; and
4. That the permittee took all reasonable steps to minimize or correct any adverse impact on state waters resulting from noncompliance with the permit.

W. Inspection and Entry.

Upon presentation of credentials, any duly authorized agent of the Board may, at reasonable times and under reasonable circumstances:

1. Enter upon any permittee's property, public or private and have access to records required by this permit;
2. Have access to, inspect and copy any records that must be kept as part of permit conditions;
3. Inspect any facility's equipment (including monitoring and control equipment) practices or operations regulated or required under the permit; and
4. Sample or monitor any substances or parameters at any locations for the purpose of assuring permit compliance or as otherwise authorized by the State Water Control Law.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is involved in managing pollutants. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions.

Permits may be modified, revoked and reissued, or terminated for cause upon the request of the permittee or interested persons, or upon the Board's initiative. If a permittee files a request for a permit modification, revocation, or termination, or files a notification of planned changes, or anticipated noncompliance, the permit terms and conditions shall remain effective until the request is acted upon by the Board. This provision shall not be used to extend the expiration date of the effective VPA permit.

Y. Transfer of Permits.

1. Permits are not transferable to any person except after notice to the Department. The Board may require modification or revocation and reissuance of the permit to change the name of the permittee and to incorporate such other requirements as may be necessary. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified to reflect the transfer or has been revoked and reissued to the new owner or operator.
2. As an alternative to transfers under Part II Y 1, this permit shall be automatically transferred to a new permittee if:
   a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
   b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
   c. The Board does not, within the 30-day time period, notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit.

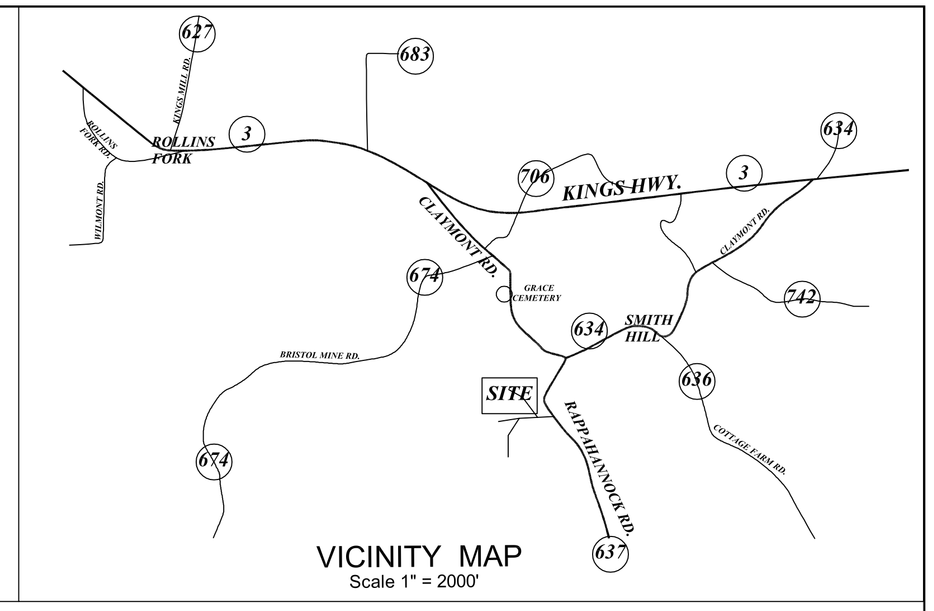
Z. Severability.

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

NRCS - Soil Map with Proposed Facilities Overlay
Scale 1" = 200'

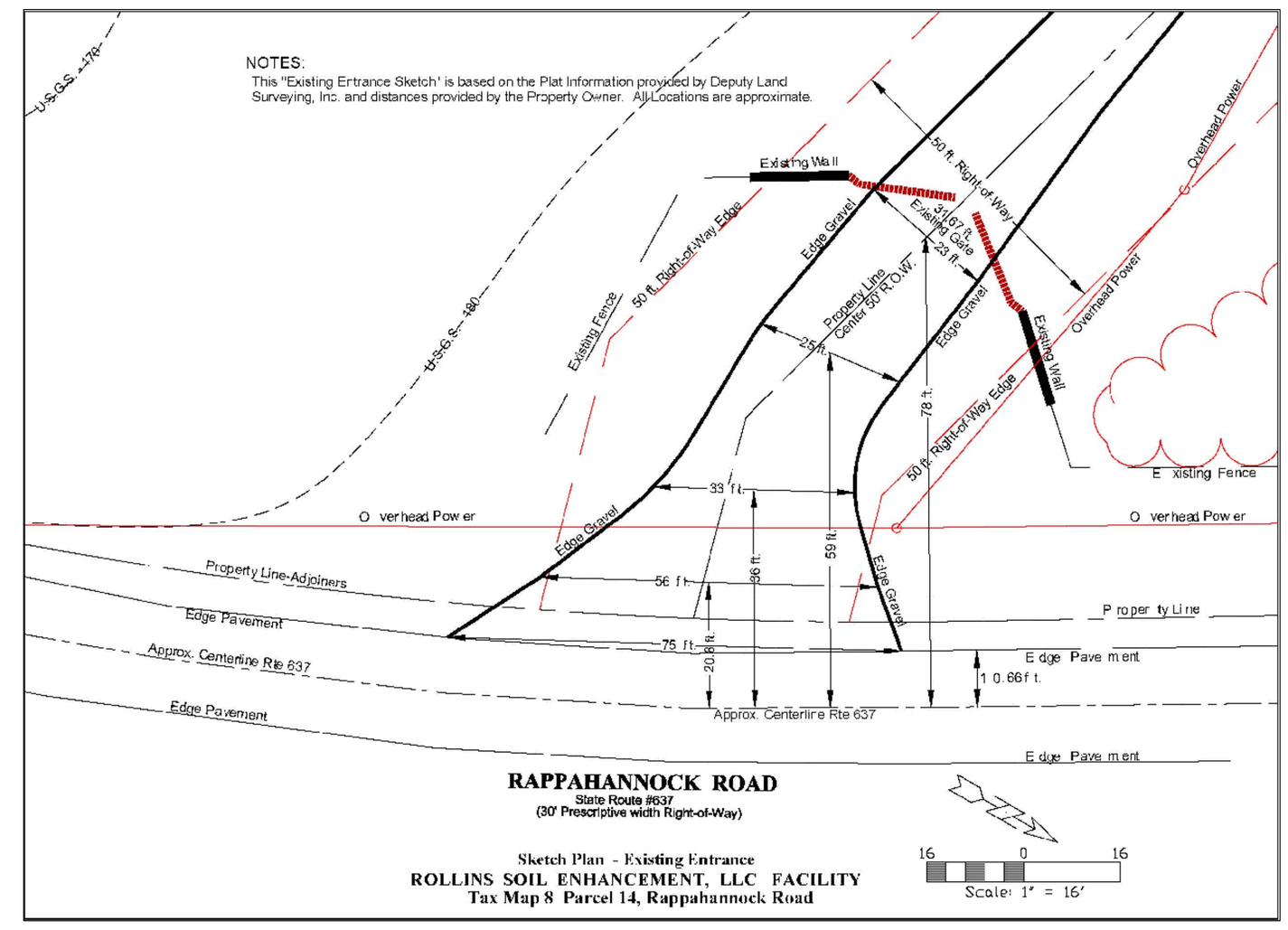
GENERAL NOTES:

1. Site development shown on this plan is for Parcel 14 Tax Map 8 Residue of PORTEUS VI as shown on Plat by Deputy Land Surveying.
2. All work practices, equipment and procedures shall conform to latest applicable Local, State, and Federal safety standards.
3. All fill and backfill shall be compacted in 8 inch max. lifts to 95% Maximum Dry Density-Standard Proctor (MDD) Building pad and foundation areas shall meet geotechnical and architectural specifications by others
4. Earthwork is not represented as balanced. Soil suitability and allowance for borrow or disposal shall be determined by the Owner/Site Work Contractor during preconstruction phase of the project.
5. The Contractor shall do such overland grading as is necessary to preclude ponding of water in or adjacent to the roadways.
6. Organic material shall be stripped and stockpiled or disposed of prior to achieving grade. This material shall not be used as embankment in areas to be used as travelways or under buildings.
7. This plan does not purport to show all existing utility line locations. The Owner/contractor shall take all and whatever steps necessary to locate and protect all existing utilities sufficiently in advance of construction to ensure that the plan can be executed.
8. Owner/contractor shall notify Miss Utility @ 811 or 1-800-552-7001 a minimum of 72 hours prior to anticipated commencement of earth disturbing activities to verify underground utility locations.
9. Owner required extension or relocation of utilities should be negotiated in advance of construction to allow for proper sequencing of work. Where possible, underground utilities shall be installed in conduit. See plans by others for power distribution, communication cable and security wiring to buildings.
10. Erosion and Sediment Control measures shall be provided and maintained in accordance with the Virginia Erosion and Sediment Control Handbook, as specified herein.
11. Grading around buildings is subject to minor adjustment to accommodate changes in floor slab grade and entrance door placement. These adjustments to final and/or floor slabs shall be field engineered by the owner/developer based on final selection of building type and mix of storage unit sizes. Field adjustments shall be consistent with the drainage design, honor all drainage areas, and inlet placement.
12. On site storm sewer shall be corrugated plastic pipe (CPP) meeting AASHTO M 294M-98 Type C double wall pipe with smooth interior or equal.
13. Landscape plantings shall be completed in accordance with the plan.



VICINITY MAP
Scale 1" = 2000'

APPROVAL BLOCK



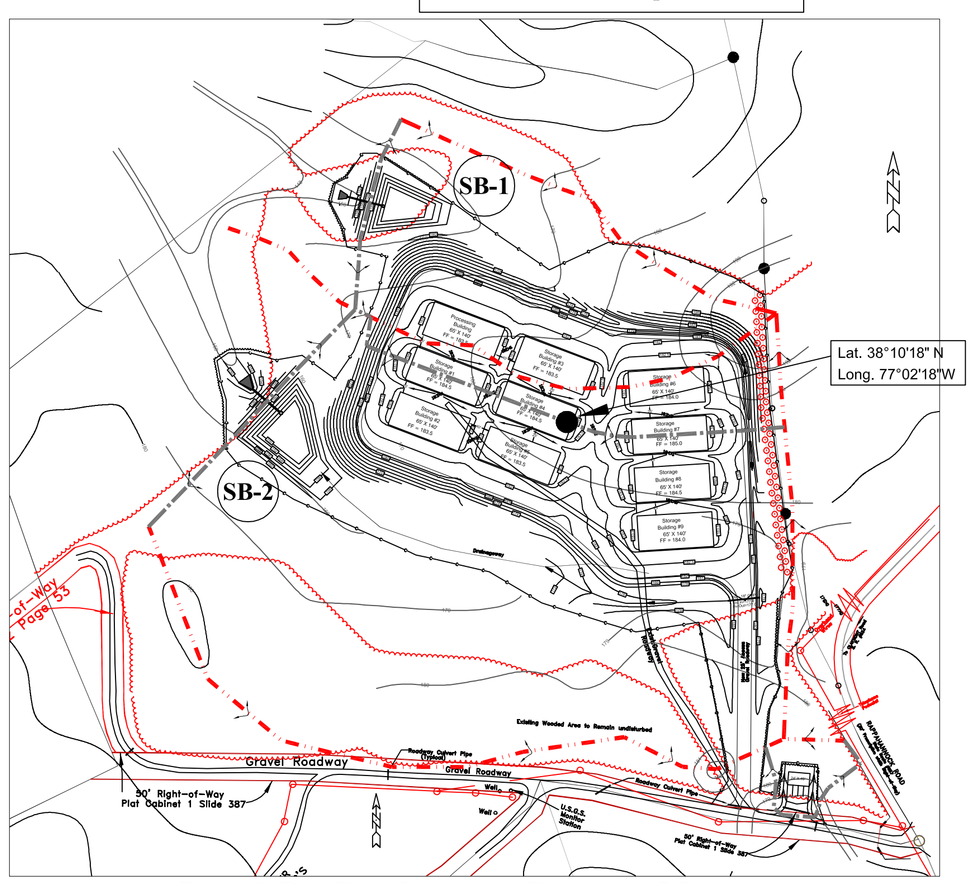
NRCS - Soil Legend -Westmoreland County

MAP SYMBOL	SOIL NAME	HYDROLOGIC GROUP
17E	Rumford soils, 15 to 50% slopes	B
22A	Tetotum loam, 0 to 2% slopes	C
23B	Turbeville loam, 2 to 6% slopes	C
23C	Turbeville loam, 6 to 10% slopes	C

SILT BASIN # 1	**DApre = 5.3 ac** **DApost = 6.3 ac**
SILT BASIN # 2	**DApre = 18.2 ac** **DApost = 16.8 ac**

LEGEND-Erosion & Sediment Control

- 179 — PROPOSED GRADE
- 180 — EXISTING GRADE
- C — C — C — LIMITS OF LAND DISTURBANCE
- CE — TEMPORARY CONSTRUCTION ENTRANCE - STD. 3.02
- CRS — CONSTRUCTION ROAD STABILIZATION - STD. 3.03
- X — X — X SF — SILT FENCE- STD. 3.05
- DV — DIVERSION - STD. 3.12
- DD — DIVERSION - STD. 3.09
- ST — SILT TRAP - STD. 3.13
- OP — OUTLET PROTECTION- STD. 3.18
- TS — TEMPORARY SEEDING - STD. 3.31
- PS — PERMANENT SEEDING - STD. 3.32D
- PRE - DRAINAGE DIVIDES
- POST - DRAINAGE DIVIDES
- RR — RIPRAP - STD. 3.19
- SB — TEMPORARY SEDIMENT BASIN - STD. 3.14



Post & Pre Development Drainage Map
Scale 1" = 200'

ANALYSIS-PROJECTED TRAFFIC

Owner/Developer represents:

1. **That expected traffic will be 4 to 6 large trucks per day.**
2. **Car and pickup truck visits is projected to be less than 10/day plus up to 20 citizen visits/day to bring brush and yard debris.**
3. **Total vehicle count per day would be up to 36/day. For average operating day of 8 hrs, the vehicles/hour would be 4.5.**
4. **The above use is less than the projected vehicle trips/day if all parcels had houses with agricultural businesses such as the nursery that previously operated on the site.**

COMMONWEALTH OF VIRGINIA
IRWIN WAYNE STANTON
CERTIFICATE No.
06027
10/14/2013
CERTIFIED PROFESSIONAL ENGINEER

PLAN SHEET INDEX

SHEET 1 - SOIL & DRAINAGE MAPs, VICINITY MAP, E & S LEGEND & NOTES
SHEET 2 - SITE PLAN WITH E & S CONTROL
SHEET 3 - EROSION & SEDIMENT CONTROL NARRATIVE & DETAILS
SHEET 4 - DETAILS - SEDIMENT BASINS & SWMF

OWNER/DEVELOPER- ROLLINS SOIL ENHANCEMENT, LLC
Attn: Rodney Rollins
10558 Kings Highway
King George, VA 22485
540-775-2442
CONTACT PERSON - RODNEY ROLLINS 540-775-2442

DRAWN BY:	APPROVED BY:	REVISIONS	ENGINEER:
DATE: September 3, 2013	PROJ. NO.	10/14/2013 - Add Detail Sheets, Entrance Sketch, etc.	CULPEPER ENGINEERING, P.C. 3251 Germanna HWY, P.O. Box 733, Locust Grove, VA 22508 Phone (540) 423-9706 FAX (540) 423-1534
DWG. NO.:	DWG.		

PROJECT
SITE PLAN FOR PROPOSED
ROLLINS SOIL ENHANCEMENT, LLC FACILITY
Tax Map 8 Parcel 14, Rappahannock Road
Washington Magisterial District
Westmoreland County, Virginia

SHT. NAME
SOIL MAP, VICINITY MAP, DRAINAGE MAP, E & S LEGEND & NOTES

Sheet 1 of 4
CEPC Job # 2923

VPA PERMIT PROGRAM FACT SHEET

This document gives pertinent information concerning the VPA permit listed below. This permit is for ***the distribution and marketing of Exceptional Quality Biosolids in the state of Virginia.***

1.	Permit Name and Address	Legal Name of Owner and Address
	Rollins Soil Enhancement, Inc. Westmoreland	**Rollins Soil Enhancement, Inc., 10558 Kings Highway, King George, VA 22485**
2.	VPA Permit No.:	***VPA00845***
3.	SIC Code(s):	***2873 – Nitrogenous Fertilizers (Manufacturing of natural (organic) fertilizers, except compost)***
4.	Facility Contact President Rodney Rollins	
5.	Permit Application Information	
	Application submitted by:	Rollins Soil Enhancement, Inc.
	Address (if different than owner's address):	Rappahannock Road, Westmoreland County
	Application receipt date:	4/17/2014
	Additional information requested:	4/30/2014
	Additional information received:	5/7/2014
	Application complete date	5/13/2014
	Additional information received:	
	Additional information requested:	
	Additional information received:	
	Application complete date	

6. Permit Processing Information:

DEQ Regional Office:		Piedmont Regional Office
Site Inspection performed by:		Charlie Swanson and Anita Tuttle
Date of site inspection :		6/25/2013
Date of public meeting for permit application*:		
Permit drafted by:		Anita Tuttle
Date permit drafted:		10/28/2014
Draft permit reviewed by:		Kyle Winter
Date draft permit reviewed:		10/28/2014
Dates of draft permit public comment period	From:	11/20/2014
	To:	12/22/2014

* A public meeting is only required for certain applications to authorize land application of biosolids, treated municipal wastewater and stabilized septage.

7. Permit Characterization

Permit Action	Facility	Permit Type
☒ Issuance	☐ Existing facility	☒ Biosolids distribution, marketing, composting and storage
☐ Reissuance	☒ Proposed facility	☐ Frequent
☐ Revocation and reissuance	☐ Treatment Works	☐ Infrequent
☐ Owner modification	☐ N/A	☐ Land application/storage of animal waste
☐ Board initiated modification	**Type of Facility/Permit**	☐ Land treatment of wastewater
☐ Interim authorization	☐ Municipal	☐ Industrial
☐ Enforcement action	☒ Industrial	☐ Municipal
	Ownership	☐ Land application of industrial sludge
	☐ Public	☐ Land application of water plant residuals
	☒ Private	☐ Land application of septage
	☐ Federal	☐ Water reclamation and reuse
	☐ State	☐ Pump and haul*
	☐ Animal feeding operation/poultry waste management	☐ Routine Storage of Biosolids
		☒ Other: EQ Biosolids Blending Operation
	☐ Reclamation system or satellite reclamation system	☐ Other:_____
	☐ Reclaimed water distribution system	

* Pump and haul of wastewater other than sewage. Pump and haul of sewage is regulated by the Virginia Department of Health in accordance with the Sewage Handling and Disposal Regulations (12VAC5-610).

8. Annual permit maintenance fee: $100

9. Licensed Operator Requirements: N/A

10. Reliability Class: N/A

11. Pollution Management Activity Description. The facility will use only EQ biosolids for the blending operation; all other products must meet EQ biosolids standards prior to distribution and marketing.

12. Location Description. See Appendix A

13. Bases for Limits and Monitoring Requirements and Special Conditions.
This permit is written for the blending of EQ biosolids. In addition to requirements for distribution and marketing of EQ biosolids, the permit incorporates requirements for managing biosolids in various circumstances including staging and storage. Setbacks have also been included to be implemented at the site of the operation.
    A. Part I.A Limits and Monitoring Requirements. See Appendix B

    B. Part I.B through Part I.D - Special Conditions; and Part II – Conditions Applicable to All VPA Permits. See Appendix C.

14. Compliance Schedules. There is no compliance schedule associated with this permit.

15. Changes to the Permit. This is a new VPA Permit.

16. Attachments. List any attachments associated with this permit.

17. Public Notice Information per 9VAC25-32-140: All pertinent information is on file, and may be inspected and copied by contacting the DEQ-PRO at:

Mailing Address:	Physical Address	Electronic Submission
DEQ – Piedmont Regional Office 4949 – A Cox Road Glen Allen, VA 23060	DEQ – Piedmont Regional Office 4949 – A Cox Road Glen Allen, VA 23060	anita.tuttle@deq.virginia.gov Fax: (804) 527-5106

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requester's interests would be directly and adversely affected by the proposed permit action. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given.

COMMENTS RECEIVED

DEQ staff received a petition from Carla Jordan on 12/16/2014 that was signed by 45 residents of Westmoreland County, another petition from same on 12/22/2014 signed by an additional 84 residents of Westmoreland County, constituting two requests for public hearing; and four other comments.

APPENDIX A
BIOSOLIDS PRODUCTION FACILITIES

See Attachment A

APPENDIX B

BASES FOR LIMITATIONS AND MONITORING REQUIREMENTS

Monitoring Type: Biosolids Monitoring –
Monitoring Location: Final EQ Biosolids after all treatment by the generator, prior to delivery to the permitted blender

Only biosolids from source facilities approved by the DEQ, identified in the BSMP, and treated to meet the Class A pathogen reduction standards in Part I.A.1.b, the Vector Attraction Reduction Options Part I.A.1.c, and the metals limits in Part I.A.1.a shall accepted by the permittee and blended under the authority of this permit for sale or give-away as a soil amendment. [Bases 1,2,3]

Bases for Residuals Limitations
1. 9VAC25-32-357.B.2 & B.3
2. 9VAC25-32-357.D.2 & B.3
3. 9VAC25-32-356.B.3 & B.4

Part I.A.1.a Metals Limitations -- EQ BIOSOLIDS – – The permittee shall obtain Notice and Necessary Information (NANI) from the generator certifying that the following biosolids standards have been met: [Basis 1]

PARAMETER [a.]	BASIS FOR LIMITS	LIMITATIONS		MONITORING REQUIREMENTS	
		Monthly Average	Maximum	Frequency	Sample Type
Total Arsenic (mg/kg)	2,3,4,5	41	75	Part I.A.3	Composite
Total Cadmium (mg/kg)	2,3,4,5	39	85	Part I.A.3	Composite
Total Copper (mg/kg)	2,3,4,5	1,500	4,300	Part I.A.3	Composite
Total Lead (mg/kg)	2,3,4,5	300	840	Part I.A.3	Composite
Total Mercury (mg/kg)	2,3,4,5	17	57	Part I.A.3	Composite
Total Molybdenum (mg/kg)	2,3,4,5	NA	75	Part I.A.3	Composite
Total Nickel (mg/kg)	2,3,4,5	420	420	Part I.A.3	Composite
Total Selenium (mg/kg)	2,3,4,5	100	100	Part I.A.3	Composite
Total Zinc (mg/kg)	2,3,4,5	2,800	7,500	Part I.A.3	Composite

NL = No Limitation, monitor and report

a. All limits and criteria are expressed on a dry weight basis. [Basis 2]
b. The monthly average concentration for molybdenum is currently under study by USEPA. Research suggests that a monthly average Molybdenum concentration below 40 mg/kg may be appropriate to reduce the risk of copper deficiency in grazing animals. [Basis 4]

Bases for Residuals Limitations
1. 9VAC25-32-313.H
2. 9VAC25-32-356.C
3. 9VAC25-32-356, Table 2
4. 9VAC25-32-356, Table 4
5. 9VAC25-32-358, Table 1

Monitoring Type: Biosolids Monitoring –
Monitoring Location: Final EQ Biosolids after all treatment by the generator, prior to delivery to the permitted blender

Part I.A.1.b. Pathogen Reduction Requirements – – EQ Biosolids that are received by the facility and blended under this permit shall be treated to meet Class A Pathogen Reduction standards prior to delivery to the blending facility. The biosolids shall be monitored and limited in accordance with one of the treatment options selected and used by the biosolids generators as identified below. The permittee will have a system in place to verify that all biosolids accepted by this facility and blended under this permit meet these pathogen reduction standards and treatment requirements: [Bases 1, 2]

BASIS FOR LIMITS	CLASS A PATHOGEN REDUCTION TREATMENT OPTION	MONITORING REQUIREMENTS
2,3,4,5	Class A Pathogen Reduction Alternative **1**	Part I.A.1.d., (1)(2)
2,3,4,5	Class A Pathogen Reduction Alternative **2**	Part I.A.1.d., (1)(2)
2,3,4,5	Class A Pathogen Reduction Alternative **3**	Part I.A.1.d., (1)(2)
2,3,4,5	Class A Pathogen Reduction Alternative **4:**	Part I.A.1.d., (1)(2)
2,3,4,5,6	Class A Pathogen Reduction Alternative **5; Process to Further Reduce Pathogens (PFRP) - Option 1:** Composting	Part I.A.1.d., (1)(2)
2,3,4,5,6	Class A Pathogen Reduction Alternative **5; PFRP - Option 2:** Heat Drying	Part I.A.1.d., (1)(2)
2,3,4,5,6	Class A Pathogen Reduction Alternative **5; PFRP - Option 3:** Heat Treatment	Part I.A.1.d., (1)(2)
2,3,4,5,6	Class A Pathogen Reduction Alternative **5; PFRP - Option 4:** Thermophilic Aerobic Digestion	Part I.A.1.d., (1)(2)
2,3,4,5,6	Class A Pathogen Reduction Alternative **5; PFRP - Option 5:** Beta Ray Irradiation	Part I.A.1.d., (1)(2)
2,3,4,5,6	Class A Pathogen Reduction Alternative **5; PFRP - Option 6:** Gamma Ray Irradiation	Part I.A.1.d., (1)(2)
2,3,4,5,6	Class A Pathogen Reduction Alternative **5; PFRP - Option 7:** Pasteurization	Part I.A.1.d., (1)(2)
2,3,4,5	Class A Pathogen Reduction Alternative **6;**	Part I.A.1.d., (1)(2)

NA = Not applicable

(1) Between sampling events, operating records must demonstrate that the Wastewater Treatment Plant (WWTP) is operating at a performance level known to meet pathogen reduction and VAR standards. [Bases 2 & 5]
(2) Process monitoring must be sufficient to demonstrate compliance with PSRP treatment requirements. [Bases 2,3,5 and 6]

Bases for Residuals Limitations
1. 9VAC25-32-570.A
2. 9VAC25-32-357.A & B & D
3. 9VAC25-32-675.A
4. 9VAC25-32-358.A.1, Table 1
5. Environmental Regulations and Technology - Control of Pathogens and Vector Attraction Reduction in Sewage Sludge (EPA/625/R-92/013)
6. 9VAC25-32-675.E

Monitoring Type: Biosolids Monitoring –
Monitoring Location: Final EQ Biosolids after all treatment by the generator, prior to delivery to the permitted blender

Part I.A.1.c. Vector Attraction Reduction Requirements – – EQ Biosolids that are received by the facility and blended under this permit shall be treated to meet VAR standards prior to delivery to the blending facility. The biosolids shall be monitored and limited in accordance with one of the treatment option selected and used by the biosolids generators as identified below. The permittee will have a system in place to verify that all biosolids accepted by this facility and blended under this permit meet these vector attraction standards and treatment requirements: [Bases 1, 2]

BASES	VAR OPTION	VECTOR ATTRACTION REDUCTION TREATMENT STANDARD	MONITORING REQUIREMENTS
2,3,4,5,6	1	38% Reduction of volatile solids by digestion (9VAC25-31-720.B.1).	Part I.A.1.d., (1)(2)
2,3,4,5,6	2	When 38% reduction is not achieved by anaerobic digestion, 40 day bench study at temperatures between 30°C and 37°C to demonstrate further reduction of volatile solids <17% (9VAC25-31-720.B.2).	Part I.A.1.d., (1)(2)
2,3,4,5,6	3	When 38% reduction is not achieved by aerobic digestion, 30 day bench study at 20°C to demonstrate further reduction of volatile solids <15% (9VAC25-31-720.B.3).	Part I.A.1.d., (1)(2)
2,3,4,5,6	4	Specific Oxygen Uptake Rate of <= 1.5 mg O_2/hour/gram total solids at 20°C (aerobically processes sludge) (9VAC25-31-720.B.4.)	Part I.A.1.d., (1)(2)
2,3,4,5,6	5	14 day aerobic process, temperatures above 40°C with an average temperature of >45°C (9VAC25-31-720.B.5).	(2)
2,3,4,5,6	6	Sufficient alkali is added to the sewage sludge to raise the pH of the sewage sludge to 12 or higher, and without the addition of more alkali, maintain the pH at 12 S.U. for two hours and then at 11.5 S.U. or higher for an additional 22 hours (9VAC25-31-720.B.6).	(2)
2,3,4,5,6	7	Where biosolids do not contain unstabilized solids from primary wastewater treatment, the percent solids of the biosolids shall be ≥ 75% (9VAC25-31-720.B.7).	Part I.A.1.d., (1)(2)
2,3,4,5,6	8	Where biosolids contain unstabilized solids from primary wastewater treatment, the percent solids of the biosolids shall be ≥ 90% (9VAC25-31-720.B.8.).	Part I.A.1.d., (1)(2)

(1) Between sampling events, operating records must demonstrate that the Wastewater Treatment Plant (WWTP) is operating at a performance level known to meet VAR standards. [Bases 2 & 5]
(2) Process monitoring must be sufficient to demonstrate compliance with VAR treatment requirements. [Bases 2, 3, 5 &6]

Bases for Residuals Limitations
1. 9VAC25-32-570.A
2. 9VAC25-32-357.A & B & D
3. 9VAC25-32-685.A.1.-3.
4. 9VAC25-32-685.B.
5. 9VAC25-32-358.A.1, Table 1
6. Environmental Regulations and Technology - Control of Pathogens and Vector Attraction Reduction in Sewage Sludge (EPA/625/R-92/013)

Monitoring Type: Biosolids Monitoring –
Monitoring Location: Final EQ Biosolids after all treatment by the generator, prior to delivery to the permitted blender

Part I.A.1.d. Frequency of sampling biosolids from each generator is based on the amount of biosolids produced by that generator for distribution as a fertilizer or soil amendment or provided to a person permitted for land application and as specified below:❖[Basis 1]

Amount of biosolids (dry tons per 365-day period)	**Frequency**
Greater than zero but less than 320	Once per year
Equal to or greater than 320 but less than 1,653	Once per quarter (four times per year)
Equal to or greater than 1,653 but less than 16,534	Once per 60 days (six times per year)
Equal to or greater than 16,534	Once per month (12 times per year)

Monitoring frequency shall be defined as the following:
Once per month = sampling shall be conducted once per calendar month.
Once per 60 days = sampling shall be conducted during the periods of 1/1 – 2/28; 3/1 – 4/30; 5/1 – 6/30: 7/1 – 8/31; 9/1 – 10/31; 11/1 – 12/31.
Once per quarter = sampling shall be conducted during the periods of 1/1 – 3/31; 4/1 – 6/30; 7/1 – 9/30; 10/1 – 12/31.
Once per year = sampling shall be conducted once per calendar year

❖ For the generators of EQ biosolids which have reduced monitoring frequency for metals in their permit, the permittee shall request from the generator and provide to the DEQ Northern Regional Office (DEQ-NRO), documentation of the authorization for reduced monitoring. Upon approval from the DEQ-NRO, the blender may accept monitoring at the frequency authorized by the generator's VPDES Permit to satisfy the monitoring requirements in Part I.A.1.a. of this permit. [Basis 2]

Bases for Residuals Limitations
1. 9VAC25-32-358.A.1, Table 1
2. 9VAC25-32-358.A.2

Monitoring Type: EQ Biosolids - Blended Product Monitoring –
Monitoring Location: Biosolids Blended Product after all treatment, prior to distribution

Part I.A.2.a Sewage Sludge Annual Production Monitoring. [Basis 1,2]

Bases for Residuals Limitations
1. 9VAC25-32-100.B.3
2. 9VAC25-32-570.F

Part I.A.2.b Metals Limitations

PARAMETER [a.]	BASIS FOR LIMITS	LIMITATIONS		MONITORING REQUIREMENTS	
		Monthly Average	Maximum	Frequency	Sample Type
Total Arsenic (mg/kg)	1,2,3,4	41	75	Part I.A.3	Composite
Total Cadmium (mg/kg)	1,2,3,4	39	85	Part I.A.3	Composite
Total Copper (mg/kg)	1,2,3,4	1,500	4,300	Part I.A.3	Composite
Total Lead (mg/kg)	1,2,3,4	300	840	Part I.A.3	Composite
Total Mercury (mg/kg)	1,2,3,4	17	57	Part I.A.3	Composite
Total Molybdenum (mg/kg)	1,2,3,4	NA	75	Part I.A.3	Composite
Total Nickel (mg/kg)	1,2,3,4	420	420	Part I.A.3	Composite
Total Selenium (mg/kg)	1,2,3,4	100	100	Part I.A.3	Composite
Total Zinc (mg/kg)	1,2,3,4	2,800	7,500	Part I.A.3	Composite

NL = No Limitation, monitor and report

c. All limits and criteria are expressed on a dry weight basis. [Basis 1]
d. The monthly average concentration for molybdenum is currently under study by USEPA. Research suggests that a monthly average Molybdenum concentration below 40 mg/kg may be appropriate to reduce the risk of copper deficiency in grazing animals. [Basis 3]

Bases for Residuals Limitations
1. 9VAC25-32-356
2. 9VAC25-32-356, Table 2
3. 9VAC25-32-356, Table 4
4. 9VAC25-32-358, Table 1

Monitoring Type: EQ Biosolids - Blended Product Monitoring – (applicable only to EQ Biosolids subject to Annual Pollutant Loading Rates (APLRs)) [Basis 1]
Monitoring Location: Calculated for Biosolids Blended Product sold or given away in bag or other container - after all treatment, prior to distribution

Part I.A.2.c Annual Pollutant Loading Rates (APLR) – For EQ biosolids blended products sold or given away in a bag or other container* either the concentration of each pollutant in the biosolids shall not exceed the monthly concentration for the pollutant in Part I.A.2.b. or the Annual Whole Sludge Application Rate (AWSAR) ❖ must be determined for the biosolids such that the product of the concentration of each pollutant in the biosolids and the AWSAR for the biosolids shall not cause the APLR for the pollutant below to be exceeded.[(a)] [Basis 1]

PARAMETER	BASIS FOR LIMITS	LIMITATIONS		MONITORING REQUIREMENTS	
		APLR*		Frequency	Sample Type
		(kg/ha)	(lb/A)		
Total Arsenic	2	2.0	1.8	Part I.A.6.	Calculated
Total Cadmium	2	1.9	1.7	Part I.A.6.	Calculated
Total Copper	2	75	67	Part I.A.6.	Calculated
Total Lead	2	15	13	Part I.A.6.	Calculated
Total Mercury	2	0.85	0.76	Part I.A.6.	Calculated
Total Molybdenum	2	NL	NL	Part I.A.6.	Calculated
Total Nickel	2	21	19	Part I.A.6.	Calculated
Total Selenium	2	5	4.6	Part I.A.6.	Calculated
Total Zinc	2	140	125	Part I.A.6.	Calculated

NL = No Limitations, monitor and report.

(1) APLR = Concentration X AWSAR X 0.001; procedure for determining AWSAR is below.* [Basis 3]
(2) All limits and criteria are expressed on a dry weight basis. [Basis 4]

[Basis 3]
AWSAR = APLR/(C x 0.001)
Where:
AWSAR = Annual whole sludge application rate in metric tons per hectare per 365-day period (dry weight basis)
APLR = Annual pollutant loading rate in kilograms per hectare per 365-day period from Part I.A.3. above
C = Pollutant concentration in milligrams per kilogram of total solids (dry weight basis) from biosolids sample collected in accordance with Part I.A.1.a.
0.001 = A conversion factor

Calculate the AWSAR for each pollutant in Part I.A.1.a. The lowest AWSAR calculated shall be used to calculate the APLR for the biosolids.

* “Other container" means either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less. This includes the bed of a pickup truck. [Basis 5]

Bases for Residuals Limitations
1. 9VAC25-32-356.B.4.
2. 9VAC25-32-356, Table 5
3. 9VAC25-32-356.D., including Equations 1 & 2
4. 9VAC25-32-356 Table 4.
5. 9VAC25-32-10

Monitoring Type: EQ Biosolids - Blended Product Monitoring –
Monitoring Location: Biosolids Blended Product after all treatment, prior to distribution

Part I.A.2.d. Biosolids Characteristics – – EQ biosolids blended products that are distributed and marketed under the authority of this permit shall be monitored and limited as specified below:

BASIS FOR LIMITS	PARAMETERS [(a)]	LIMITATIONS		MONITORING REQUIREMENTS	
		Monthly Average	Maximum	Frequency	Sample Type
1,2	Percent Solids (%)	NL	NA	Part I.A.6.	Composite
1,2	Volatile Solids (%)	NL	NA	Part I.A.6.	Composite
1,2	Total Kjeldahl Nitrogen (mg/kg)	NL	NA	Part I.A.6.	Composite
1,2	Ammonium Nitrogen (mg/kg)	NL	NA	Part I.A.6.	Composite
1,2	Total Phosphorus (mg/kg)	NL	NA	Part I.A.6.	Composite
1,2	Total Potassium (mg/kg)	NL	NA	Part I.A.6.	Composite
1,2	pH (S.U.)	NA	NL	Part I.A.6.	Composite
1,2	Alkalinity as $CaCO_3$ (mg/kg)	NL	NA	Part I.A.6.	Composite
3	Polychlorinated biphenols (PCBs) (mg/kg)	NL	49	Annually	Composite
4,5	Aldrin/dieldrin (total) (mg/kg)	NL	NL	Annually	Composite
4,5	Benzo (a) pyrene (mg/kg)	NL	NL	Annually	Composite
4,5	Chlordane (mg/kg)	NL	NL	Annually	Composite
4,5	4 4’ DDT/DDE/DDD (total) (mg/kg) [(b)]	NL	NL	Annually	Composite
4,5	Dimethyl nitrosamine (mg/kg)	NL	NL	Annually	Composite
4,5	Heptachlor (mg/kg)	NL	NL	Annually	Composite
4,5	Hexachlorobenzene (mg/kg)	NL	NL	Annually	Composite
4,5	Hexachlorobutadiene (mg/kg)	NL	NL	Annually	Composite
4,5	Lindane (mg/kg)	NL	NL	Annually	Composite
4,5	Toxaphene (mg/kg)	NL	NL	Annually	Composite
4,5	Trichloroethylene (mg/kg)	NL	NL	Annually	Composite
4,5	Aluminum (mg/kg)	NL	NL	Annually	Composite
4,5	Boron, water soluble (mg/kg)	NL	NL	Annually	Composite
4,5	Calcium (mg/kg)	NL	NL	Annually	Composite
4,5	Chorides (mg/kg)	NL	NL	Annually	Composite
4,5	Manganese (mg/kg)	NL	NL	Annually	Composite
4,5	Total Sulfur (mg/kg)	NL	NL	Annually	Composite

NL = No Limit, monitor and report
NA = Not applicable

a. All parameters reported as mg/kg are expressed on a dry weight basis. [Basis 1]
b. 4 4’ DDT = 2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane
4 4’ DDE = 1,1-Bis (p-chlorophenyl)-2,2—dichloroethylene;
4 4’ DDD = 1,1-Bis (p-chlorophenyl)--2,2--dichloroethane

Bases for Residuals Limitations
1. 9VAC25-32-356.A
2. 9VAC25-32-358.A.1, Table 1
3. 9VAC25-32-317.E.
4. 9VAC25-32-400.D. & E.
5. 9VAC25-32-570.A.6.

Appendix A

Monitoring Type: Frequency of Monitoring - Biosolids
Monitoring Location:

3. Frequency of Monitoring
   Frequency of sampling the EQ biosolids blended product produced by the facility is based on the amount of biosolids blended product distributed as a fertilizer or soil amendment as specified below [Basis 1]

Amount of biosolids[1] (dry tons per 365-day period)	Frequency
Greater than zero but less than 320	Once per year
Equal to or greater than 320 but less than 1,653	Once per quarter (four times per year)
Equal to or greater than 1,653 but less than 16,535	Once per 60 days (six times per year)
Equal to or greater than 16,535	Per month (12 times per year)
Note: [1] Either the amount of bulk biosolids applied to the land or the amount of sewage sludge received by a person who prepares biosolids that is sold or given away in a bag or other container for application to the land (dry weight basis).	

Monitoring frequency shall be defined as the following:
Once per month = sampling shall be conducted once per calendar month.
Once per 60 days = sampling shall be conducted during the periods of 1/1 – 2/28; 3/1 – 4/30; 5/1 – 6/30: 7/1 – 8/31; 9/1 – 10/31; 11/1 – 12/31.
Once per quarter = sampling shall be conducted during the periods of 1/1 – 3/31; 4/1 – 6/30; 7/1 – 9/30; 10/1 – 12/31.
Once per year = sampling shall be conducted once per calendar year

Bases for Effluent Limitations
1. 9VAC25-32-358.A., B., Table 1.

APPENDIX B

BASES FOR SPECIAL CONDITIONS

Tabulated below are the special condition sections of the permit, with the bases for each of the permit special conditions.

Special Condition	Description and Basis for Special Condition
Part I.B.1.	**Monthly Reporting:** 9VAC25-32-360-A requires submittal of a report by the 15th of the month following the month in which land application occurred. 9VAC25-32-100.B.2 provides for DEQ to establish the reporting frequency based on the pollutant management activity.
Part I.B.1.a.	**Biosolids Monitoring Data:** 9VAC25-32-80.I states that monitoring results shall be reported at the intervals specified in the applicable VPA permit in a format acceptable to the board. 9VAC25-32-100.B.1. – 2. provides for the VPA permit to require monitoring at a frequency sufficient to yield data representative of the activity and report at a frequency based on the pollutant management activity. 9VAC25-32-100.B.3. states that VPA permits may include Mass or other measurements for each pollutant of concern, as well as volume and other measures as appropriate.
Part I.B.1.b	**Generator NANI**: 9VAC25-32-313.G requires the generator of biosolids who provides biosolids to a land applier, to give notice and necessary information to the land applier.
Part I.B.1.c	**Monthly Activity Report:** 9VAC25-32-360-A requires submittal of a report by the 15th of the month following the month in which land application occurred. 9VAC25-32-100.B.1. – 2. provides for the VPA permit to require monitoring at a frequency sufficient to yield data representative of the activity and report at a frequency based on the pollutant management activity. 9VAC25-32-100.B.3. states that VPA permits may include Mass or other measurements for each pollutant of concern, as well as volume and other measures as appropriate.
Part I.B.1.d	**Electronic Submittal Attestation Statement:** § 59.1-479 – 498, the Uniform Electronic Transactions Act provides for submission of paperwork electronically and the use of electronic signatures. No laws or regulations require hard copy submittal of original signatures in the VPA program.
Part I.B.2.	**Annual Report:** 9VAC25-32-360-B requires the submittal of an annual report postmarked by February 19 for the previous year. 9VAC25-32-100.B.3. provides for the VPA permit to require monitoring the volume of biosolids and other measurements as appropriate; 9VAC25-32.570.F specifically requires total amount of biosolids distributed in bag or other container; in bulk, amount distributed from each source. 9VAC25-32-570.A.1 requires that the EQ biosolids are registered with the Virginia Department of Agriculture and Consumer Services and that the registration be maintained. VDACS requires annual registration. 9VAC25-32-80.L requires signature and certification in accordance with 9VAC25-32-70.
Part I.B. 3.	**Biosolids Record Keeping:** 9VAC25-32-80.H.2 specifies that all records of biosolids activities, monitoring and reporting shall be maintained for at least 5 years. 9VAC25-32-359.A.1. provides specific recordkeeping requirements for the generator of EQ biosolids.

Part I.C.1.	**Discharge Prohibition:** 9VAC25-32-30.A States that all pollutant management activities covered under a VPA permit shall maintain no point source discharge of pollutants to surface waters except in the case of a storm event greater than the 25-year, 24-hour storm. 9VAC25-32-30.B states that except in compliance with the VPA or another permit issued by the board that it is unlawful to discharge into, or adjacent to, state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances.
Part I.C.2.	**Setbacks:** 9VAC25-32-560.B.3.e.(1) – (4) establishes setback distances and procedures for extending or waiving residential and property line setbacks.
Part I.C.3.	**Transport requirements:** 9VAC25-32-540.A. – E. identifies requirements for transport routes, vehicles, prevention of drag-out and track-out, clean-up of such drag-out and track-out and clean-up and reporting of spills.
Part I.C.4.	**Land Owner Consent Requirement**: 9VAC25-32-60.D.4. requires the submission of landowner consent forms with the permit application 9VAC25-32-530.B.2.requires the written agreement between the permittee and the landowner, specifies required information and use of the most current form approved by the board. 9VAC25-32-530.A. requires the permittee to maintain the agreement.
Part I.C.5.	**Closure Requirements:** 9VAC25-32-550.F.6 requires development of a closure plan when the facility is no longer utilized and approval of the closure plan by the board. 9VAC25-790-120.F specifies minimum requirements of a closure plan for a facility that manages biosolids.
Part I.D.1.	**Authorization to Distribute EQ Biosolids:** 9 VAC 25-32-570.A.3. states *only exceptional quality biosolids produced from an approved sludge processing facility can be distributed and marketed.*
Part I.D.2.	**Exceptional Quality Biosolids:** 9 VAC 25-32-570.A.1. specifies that only biosolids treated by processes to eliminate pathogens or further reduce pathogens (PFRP), meet vector attractions reduction requirements and trace elements in Tables 7.b and 8 can be marketed and distributed. 9 VAC 25-32-570.A.3. states *only exceptional quality biosolids produced from an approved sludge processing facility can be distributed and marketed.* DEQ protocol requires the review of monitoring data to verify the quality of biosolids on an ongoing basis in order for a biosolids source to maintain approved status.
Part I.D.3.	**Addition of sources:** Water Control Law and the VPA Permit Regulation do not require a permit modification to add a new source; therefore a source may be added with administrative authorization based on review of the appropriate permit application forms for that source.
Part I.D.4.	**Registration with the Virginia Department of Agriculture and Consumer Services**: 9VAC25-32-570.A. states *Exceptional quality biosolids marketed as fertilizers or soil conditioners must be registered with the Virginia Department of Agriculture and Consumer Services*
Part I.D.5.a	**Biosolids Management:** 9 VAC 25-32-570.B. provides for distribution in bulk or bag. 40CFR part 503 allows for the distribution of EQ biosolids in "other containers" and part 503.11(j) defines other container as *either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.*

Appendix B

Part I.D.5.b.	**Biosolids Management:** 9 VAC 25-32-570.B.2, requires a nutrient management plan for bulk biosolids to be land applied except where the biosolids are dried to 90% solids or higher, or the biosolids are blended with another product to be used in a non-agricultural manner such as landscaping or at a greenhouse.
Part I.D.6.	**Product Labeling**: 9 VAC 25-32-570.D. specifies the information to be provided to all users of the EQ biosolids in the form of a brochure for bulk biosolids and a label on bagged biosolids.
Part I.D.7.	**Biosolids Management Plan:** 9VAC25-32-410. identifies minimum requirements to be included in a biosolids Management Plan, which includes an O&M Manual. 9VAC25-790-260 – 300 identifies minimum requirements to be included in a O&M Manual. Additional requirements are included in 9VAC25-32-60.F.3.
Part I.E.1.	**Biosolids Reopener:** 9VAC25-32-220 allows a permit to be opened when a change is made in the promulgated standards or regulations on which the VPA permit was based.
Part I.E.2	**Offsite Spills:** 9VAC25-32-540.D. and E. require the reporting of spills that occur during transport.
Part II	**Conditions Applicable to All VPA Permits:** Conditions applicable to all VPA permits are based on 9VAC25-32-80 and the VPA Permit Manual.

Appendix B

MEMORANDUM
DEPARTMENT OF ENVIRONMENTAL QUALITY
Piedmont Regional Office

4949-A Cox Road, Glen Allen, Virginia 23060-6295 804/527-5020

SUBJECT: Summary of Comments Received During Public Comment Period VPA Permit No. VPA00845, Rollins Soil Enhancement, Inc. - Westmoreland County – Blending of Class A Exceptional Quality Biosolids and Distribution & Marketing of Soil Enhancement Materials

TO: Michael Murphy, Piedmont Regional Office Director, James Golden, Deputy Director for Program Development Office of Exec Mgmt/Public Constituent Affairs

FROM: Anita Tuttle

DATE: 8 January 2015

COPIES: Kyle Winter, file

Background

Virginia Code § 62.1-44.15 authorizes the State Water Control Board to promulgate regulations necessary to carry out its powers and duties. Specifically, § 62.1-44.19:3 requires the State Water Control Board to include in regulation certain requirements pertaining to land application of sewage sludge (biosolids). On January 1, 2008 the Virginia Department of Environmental Quality (DEQ) assumed regulatory oversight of all land application of sewage sludge that has received an established treatment, commonly referred to as biosolids. This change in oversight of the Biosolids Use Regulations from the Virginia Department of Health (VDH) to DEQ was at the direction of the 2007 General Assembly, which voted to consolidate the regulatory programs so that all persons managing would be subject to uniform requirements, and to take advantage of the existing compliance and enforcement structure at DEQ. In addition to directing that DEQ manage the biosolids program, the General Assembly also added additional requirements regarding biosolids permitting and management.

§62.1-44.19:3. of the Code of Virginia prohibits the land application, marketing and distribution of sewage sludge (biosolids) without a permit. Requirements for the adoption of regulations by the Board, public notice and fees are also included in this section. 62.1-44.19:3.A.3 also specifies that: ***No person shall contract or propose to contract, with the owner of a sewage treatment works, to land apply, market or distribute sewage sludge in the Commonwealth, nor shall any person land apply, market or distribute sewage sludge in the Commonwealth without a current Virginia Pollution Abatement Permit authorizing land application marketing or distribution of sewage sludge and specifying the location or locations, and the terms and conditions of such land application, marketing or distribution.***

The DEQ Piedmont Regional Office received an application from Rollins Soil Enhancement, Inc. on 17 April 2014 for a permit to allow the construction and operation of a facility for blending, composting, storage and distribution & marketing of biosolids in the preparation of soil enhancement materials. Requested revisions to the application were completed by 13 May 2014 when the permit application was deemed administratively and technically complete. Due to technical difficulties in drafting the permit to include all phases of the requested activity, DEQ staff drafted a permit to authorize the blending,

distribution & marketing of Class A Exceptional Quality Biosolids such that Rollins Soil Enhancement, Inc. might pursue the issuance of a Certificate to Construct the facilities while awaiting the agency initiated modification to the permit to authorize all requested activities.

Public Notice
The draft permit public notice appeared in the *Westmoreland News* on 19 November and 26 November 2014. The comment period began 20 November and ended on 22 December 2014.

Public Comments
During the draft permit comment period, DEQ - PRO received two emails from Carla Jordan in Westmoreland County, consisting of a petition signed by 45 residents of the county on 12/16/2014 and the same petition signed by an additional 84 residents of the county on 12/22/2014 constituting two requests for public hearing. The text of the petition is reproduced as an attachment to this memorandum. In addition, DEQ received four other written comments during the comment period. The concerns expressed are summarized below and are followed by the staff response.

DEQ Response to Comments

Each comment is addressed below with the DEQ-PRO response, referencing VPA permit conditions for biosolids land application and biosolids regulations 9VAC25-10 et seq., STATE WATER CONTROL BOARD Amendment of Regulations Pertaining to Biosolids After Transfer from the Department of Health. Also referenced is the HJR 694 Biosolids Expert Panel Final Report.

1. *Request for Virginia Department of Transportation (VDOT) studies, concern for road/ traffic issues (Jan Grubic, Carla Jordan et al)*

Staff Response: DEQ does not request VDOT examination of roads proposed to be used by permit applicants. Any DEQ permit holder is responsible for complying with all statutes and regulations of the Commonwealth in conducting the DEQ permitted activity.

2. *Request for a state study on the potential tourism impact of the proposed permit (Carla Jordan et al.)*

Staff Response: DEQ does not request impact studies from other commissions or boards for the issuance of permits that are authorized by statute and regulation in § 62.1-44.19:3.4.B of the Code of Virginia and the VPA Regulation, 9 VAC 25-32.

3. *Request for an additional sixty (60) days for public comments and information requests; notice to the County Administrator of the receipt of a permit application was dated 13 May 2014 while the Draft Permit Notice appeared in the* Westmoreland News *on 26 November, the day prior to Thanksgiving (Carla Jordan et al.)*

Staff Response: DEQ is subject to the provisions of the Administrative Process Act and provides public notice and establishes comment periods accordingly. Draft Permit Notices are required to appear in a newspaper of local circulation for two consecutive weeks. The first notice appeared in

the 19 November edition of the *Westmoreland News*, followed by the second appearance of the notice on 26 November. Permit applications must be processed over a period of time that varies somewhat with each submission. Once a permit is drafted, the public notice is scheduled.

4. *The notice does not provide a clear picture of the activities proposed under the permit application (Carla Jordan et al.)*

Staff Response: Rollins Soil Enhancement, Inc. submitted a comprehensive permit application for the blending, composting, storage, distribution and marketing of biosolids-based landscaping and nursery products. Due to technical issues on DEQ's part, the total permit could not be issued in a timely manner. The blending and D&M portions of the permit were drafted and advertised. This will allow RSE, Inc. to move forward with the project while awaiting the issuance of the remaining portions of the permit by DEQ. Any future modifications to the permit to include the authorization for composting and storage will be subject to additional public notice.

5. *Some of the language used within the public notice may have been misleading due to its positive connotations, environmental organizations were not explicitly notified of this draft permit (Carla Jordan et al.)*

Staff Response: The wording of public notices is developed by DEQ's Central Office and provided to Regional Offices. The language is based on § 62.1-44.19:3.4.B of the Code of Virginia and the VPA Regulation, 9 VAC 25-32. Notification is provided in accordance with statute and regulation.

6. *Issuance of this permit may negatively impact tourism in Westmoreland County; the permitted activity would be in direct conflict with activities currently existing in the County (Carla Jordan et al., Sam Truslow for The Nature Conservancy)*

Staff Response: The VPA Regulation, 9VAC25-32, requires that DEQ receive a Local Government Ordinance Form (LGOF) prior to the issuance of any biosolids permit that includes material storage. This document was signed by Mr. Norm Risavi, Westmoreland County Administrator, on 16 May 2014 and received by the Piedmont Regional Office of DEQ on 29 May 2014. The LGOF states "That the proposed location and operation of the facility is consistent with all ordinances adopted pursuant to Chapter 22 (§15.2-2200 et seq.) of Title 15.2 and §62.1-44.19:3.R. of the Code of Virginia."

7. *Opposed to the issuance of the permit for Rollins Soil Enhancement, Inc. (Jan Grubic, Carla Jordan et al., Bernardino Luna, Michelle Teter)*

Staff Response: The proposed facility is consistent with applicable statutes, regulations and ordinances in the Commonwealth of Virginia.

8. *Concern with environmental impact and drinking water (Jan Grubic, Carla Jordan et al., Bernardino Luna, Sam Truslow for The Nature Conservancy)*

Staff Response: 9VAC25-32 was promulgated to be protective of environmental quality and human health. The regulation provides for an extended setback of 400' from any public gathering place located in proximity to a biosolids operation as well as for any individual who presents a letter of request from that individual's physician.

9. Concern for health effects and impact on property values (Jan Grubic, Bernardino Luna)

Staff Response: Panel of Experts Convened by The Secretary of Natural Resources and The Secretary of Health and Human Resources to Study the Impact of the Land Application of Biosolids on Human Health and the Environment Pursuant to HJR 694 (2007) addressed this issue in the Final Report, House Document No. 27: *The Panel recognizes that odors from biosolids could potentially impact human health, well being and property values, but could not confirm such an impact or the extent of such an impact based on the current body of scientific literature and information presented directly to this Panel.*

10. Request for public hearing – Ms. Jordan et al. submitted two requests for a public hearing in Westmoreland County.

Staff response –
There are no new substantial and disputed issues involved with the issuance of this permit not typically raised in VPA draft permit issuance comment periods.

Staff Recommendations:

9VAC 25-230-50.A of Procedural Rule No. 1 states that for a public hearing to be granted, the Director must find that there are substantial, disputed issues relevant to the issuance of the permit in question. § 62.1-44.15:02 of the Code of Virginia states that a public hearing on a permitting action shall be held if there is significant public interest, as evidenced by the receipt of a minimum of 25 individual requests for a public hearing; that the requesters raise substantial disputed issues relevant to the permitting action; and that the action requested is not on its face inconsistent with, or in violation of, the State Water Control Law, federal law or any regulation promulgated thereunder.

The criteria for convening a public hearing have not been met. Therefore, a public hearing will not be held and staff recommends that the Department proceed with final action on the issuance of VPA permit VPA00845 to Rollins Soil Enhancement, Inc. for Blending of Class A Exceptional Quality Biosolids and Distribution & Marketing of Soil Enhancement Materials.

APPROVED: _____
Regional Director

DATE: January 9, 2015

Attachment: Petition received from Carla Jordan et al.

12/11/14
To Whom It May Concern:

We, the citizens of Westmoreland County, are gravely concerned with the proposed facility to be built on Rappahannock Road for Rollins Soil Enhancement, Inc. of 10558 Kings Highway King George, VA 22485, VPA Permit Number 00845. We are requesting a public hearing, and the reasons for this are cited below, along with a brief, informal statement describing the citizens' interests, to include how the activity negatively impacts the citizens of this community. We are also requesting a VDOT traffic and environmental impact study on the following public roads in this county: Rt. 3 East, Claymont Rd., and Rappahannock Rd.; and we are requesting that all necessary road improvements including signage, road markings, widening, and paving be made prior to conception of this project. Finally, we are requesting a state study on the potential negative impact to tourism within a ten mile radius, and a minimum of 60 more days for the public to make comments and solicit information regarding this project prior to permitting.

The following is a brief, informal statement listing our reasons for the above demands, including the citizens' interests and a description of how this proposed activity might negatively impact the citizens of this community.

A) The Commonwealth of Virginia Department of Environmental Quality sent a notification to Mr. Norm Risavi, County Administrator of Westmoreland County, dated May 13th, 2014, within which stated, "...notice of the draft will appear in the Westmoreland News...with an opportunity to provide comments to DEQ." The official public notice of Environmental Permit was actually published in the Westmoreland News on November 26th, 2014. This was the day before Thanksgiving, many citizens were busy with the holiday or traveling, and therefore did not know about the existence of this notice. Furthermore, the circulation for the Westmoreland News is much higher, by at least 500 papers more per month, during the months of May through September. So, in waiting until November to post the notice, many citizens who would have read the notice did not get the chance to see it. Finally, with the notice being published so late, for such a short period of time, during the holiday season, it left very little time or opportunity for the citizens of Westmoreland County to send comments or solicit further information from the DEQ. This notice should have, in all fairness and good faith, been published in the Westmoreland News multiple times over the months of May through December.
B) The notice published in the Westmoreland News does not adequately portray the site activities proposed at the Rappahannock Road location. For instance, the notice states: production of a blended landscaping product, and marketing and distribution of the final blended product. Nowhere within that public notice does it mention construction of a new facility, storage of biosolids material, trucking, or the scope and scale of the activity. Furthermore, some of the language used within the public notice may have been misleading to local citizens. "Exceptional Quality", "landscaping product", and "Virginia Pollution Abatement", all have positive connotations; these words and phrases would most likely not explain the reality of the situation to local citizens. (Please see enclosed, photocopied

public notice that was published in Westmoreland News to confirm statements made in this section.)

C) Some local environmental groups and organizations, which should have been notified of this proposed project, never were notified because they do not receive the Westmoreland News; and there was no known contact made from the VA Department of Environmental Quality with them. These groups include: The Virginia Conservancy Group, The Friends of the Rappahannock, and the Chesapeake Bay Watershed Foundation, among others. Once notified, representatives from these organizations may have viable information to contribute to this subject at a public hearing.

D) The citizens and businesses of Westmoreland County hold a vested interest in the potential negative impact of this permitted activity on the community. The tourism industry is of vital importance to Westmoreland County. Within a nine mile radius of this proposed facility are: Westmoreland Berry Farm, The Voorhees Nature Preserve, Ingleside Winery and Plantation, Westmoreland State Park, George Washington's Birthplace, and Stratford Hall. Each of these tourist attraction locations receives hundreds, or in some cases, thousands of visitors each year. Many of these guests are public school children from across all areas of the state of Virginia; and a majority of visitors are bussed in on either public school buses or charter buses. These buses and tourists will take the same roads which will be congested with heavy sewer sludge tractor trailer traffic, if this facility is permitted. We must convene to honestly discuss the negative impact on the tourism industry in this area, and the public roadways. Currently, there are no road improvements slated for any of the roads in that area. Claymont road is already considered to be only in "fair" condition, according to the VA Department of Transportation. Both Claymont and Rappahannock Rd. have extremely sharp turns, are completely devoid of any road markings or lighting, and are missing signage. The turn off of Route 3 East onto Claymont Road reaches a width of 217". Claymont road narrows at some places, including in front of Grace United Methodist Church, to 212". The intersection of Claymont Road with Rappahannock Road reaches a point of 210"; and Rappahannock Road reaches a width of 202". A standard tractor trailer truck width is 102.36", excluding side mirrors and safety equipment. A school bus is 96" wide, and a standard tour coach is 102" in width. If two sludge trucks, or a sludge truck and school or tour bus, met in oncoming traffic on either of those roads, one of the two would be forced off of the road, given the current road conditions. This poses an undue risk of HAZMAT incidents, serious injury to or death of VA public school children and local citizens, and extreme public road and environmental damage. VA Department of Transportation has not received a permit application for a road entry into this proposed facility; nor has the DOT conducted an environmental impact traffic study.

E) The Odor Control Plan – CROPS, INC., for Rodney Rollins, directly states two malodor management initiatives which are currently in direct conflict with existing activities in the area. "Minimize operations during periods when potential odors may impact offsite receptors where outdoor activities are active (holidays/gatherings/special events). Should outdoor activities be observed (gatherings/special events) operations should be delayed to limit exposure." Westmoreland Berry Farm and the Voorhees Nature Preserve are in such close proximity to this proposed facility, and hold outdoor events nearly year-long for a minimum of ten hours per day, seven days per week, that based on the wording in the odor

control plan, it would inhibit the facility from operations for a minimum of 70 hours per week. Also, "Minimize queing of transport vehicles on public roads." There is no a way to minimize sewer sludge traffic on the public roads in discussion, as per issues cited in paragraph D, since there are no alternative routes into or out of the proposed facility. Since both of these statements, outlined in the odor control plan within the proposal paperwork, are contradictory to activities currently existing within the immediate community, it does not seem viable to locate the proposed facility at the Rappahannock Road site, and another location should be considered.

Please also view the enclosed signature page, including the names, addresses, and phone numbers of Westmoreland County citizens who are in agreement with the demands set forth in paragraph one of this letter. We greatly appreciate your timely response and consideration of all requests after reading this letter. Thank you for your time and understanding.

Sincerely,

Carla Jordan 1235 Berry Farm Lane Oak Grove, VA 22443 (540) 379-0096
(Staff Note: Petition 1 received 12/16/2014, signed by 45 others; Petition 2 received 12/22/2014, signed by 84 others)