Permit No.: VPA03002

Effective Date: November 4, 2009 Expiration Date: November 3, 2019

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: **Nutri-Blend**, **Inc.**

Owner Address: P.O. Box 58060; 2353 Charles City Road

Richmond, Virginia 23231

Facility Name: Nutri-Blend, Inc. – Campbell County, Virginia

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.

Steven A	. Dietrich, P.E., Regional Director, Blue Ridge Regional Office
	Date

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. Biosolids – During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage biosolids in accordance with 9VAC25-32-10 et seq. and as detailed in the approved Operations and Maintenance Manual.

The pollutants in the biosolids land applied under this permit shall be monitored and limited as specified below: a, b

BIOSOLIDS CHARACTERISTICS	<u>LIMITAT</u>	MONITORING	REQUIREMENTS	
		Ceiling Concentration		
	Monthly Average (mg/kg)* ^c	Maximum (mg/kg)* ^d	Frequency	Sample Type
Percent Solids (%)	NL	NA	****	Composite
Volatile Solids (%)	NL	NA	****	Composite
Total Arsenic ***	41	75	***	Composite
Total Cadmium ***	39	85	****	Composite
Total Copper ***	1,500	4,300	****	Composite
Total Lead ***	300	840	****	Composite
Total Mercury ***	17	57	****	Composite
Total Molybdenum ***	NA	75	****	Composite
Total Nickel ***	420	420	****	Composite
Total Selenium ***	100	100	****	Composite
Total Zinc ***	2,800	7,500	****	Composite
TKN (%)	NL	NA	****	Composite
Ammonium Nitrogen (%)	NL	NA	****	Composite
Nitrate Nitrogen	NL	NA	****	Composite
Total P (%)	NL	NA	****	Composite
Total K (%)	NL	NA	****	Composite
pH (Std. Units)	NL	NA	****	Composite
CCE** as CaCO ₃ (%)	NL	NA	***	Composite

NL = No limitations, monitoring required

NA = Not applicable

^{* =} Dry weight basis, unless otherwise stated

^{** =} CCE is Calcium Carbonate Equivalence (CCE)

^{*** =} Constituents subject to cumulative pollutant loading rates (CPLR), pollutant concentrations (PC) and ceiling limits. (PC biosolids are those with concentrations of these constituents below the monthly average specified in Part I.A.1.)

^{**** =} Frequency of sampling biosolids from each generator is based on the amount of biosolids produced by that generator that is land applied.

Amount of biosolids (dry tons per 365-day period)	<u>Frequency</u>
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: 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).

- a. The results of the biosolids monitoring specified above shall be submitted electronically (Part I.B.2) with the monthly activity report.
- b. The results of the biosolids monitoring specified above shall also be included in the annual report (Part I.B.4). The monitoring results may be submitted using the VPA Biosolids Monitoring Report Forms provided. The report shall include a certification statement signed in accordance with Part II.K.
- c. 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, each monthly average shall be calculated and the highest monthly average reported. Individual results and calculations shall be submitted with the report.
- d. The maximum concentration shall be reported as the highest single result from sampling during a monitoring period. If the concentration of any single sample of biosolids exceeds the Ceiling Limit for any parameter, the biosolids shall not be land applied.
- e. The Permittee shall ensure that all biosolids land applied in Virginia through this permit are monitored in accordance with the monitoring requirements in Part I.A. However the monitoring may be conducted by the generator of the biosolids and provided to the permittee.
- f. All samples shall be collected and analyzed in accordance with Title 40 Code of Federal Regulations Parts 503 and 136.
- g. Pathogen Reduction Limitations: Biosolids land applied in Virginia shall comply with one of the applicable Class B pathogen reduction alternatives specified in 9 VAC 25-32-440.D and Table 3. The permittee shall identify the alternative used in the annual report and provide the data that demonstrate compliance with the applicable alternative.
- h. Vector Attraction Reduction Limitations: Biosolids land applied in Virginia shall comply with one of the applicable vector attraction reduction alternatives specified in 9 VAC 25-32-440.D and Table 3. The permittee shall identify the alternative used in the annual report and provide the data that demonstrate compliance with the applicable alternative.

A. LIMITATIONS AND MONITORING REQUIREMENTS

2. Biosolids – During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage biosolids in accordance with 9VAC25-32-10 et seq. and as detailed in the approved Operations and Maintenance Manual.

If the concentration of any of these constituents in biosolids from any source exceeds the monthly average pollutant concentration in Part I.A.1., then the biosolids from the source are subject to CPLR rules and tracking (Part I.C.22 - 27) and the cumulative pollutant loading at each site shall be limited by the permittee as specified below*:

	LIMIT	<u>ATIONS</u>		
BIOSOLIDS CHARACTERISTICS			MONITORING R	EQUIREMENTS
	Maximum Cumulative l	Pollutant Loading Rate**		
	<u>Kg/ha</u>	Lbs/Ac	Frequency	Sample Type
Total Arsenic ***	41	36	Each application	Calculated
Total Cadmium ***	39	35	Each application	Calculated
Total Copper ***	1,500	1,340	Each application	Calculated
Total Lead ***	300	270	Each application	Calculated
Total Mercury ***	17	16	Each application	Calculated
Total Molybdenum ***	NA	NA	Each application	Calculated
Total Nickel ***	420	375	Each application	Calculated
Total Selenium ***	100	89	Each application	Calculated
Total Zinc ***	2,800	2,500	Each application	Calculated

NA = Not applicable

- * = No person shall apply bulk biosolids subject to the cumulative pollutant loading rates identified above to agricultural land, forest, a public contact site, or a reclamation site if any of the cumulative pollutant loading rates identified above has been reached.
- ** = The Cumulative Pollutant Loading Rate is the maximum cumulative application of trace elements that can be applied to soils used for crop production. The maximum cumulative application rate is limited for all ranges of cation exchange capacity due to soil background pH in Virginia of less than 6.5 and lack of regulatory controls of soil pH adjustment after biosolids application ceases.
- *** = Constituents subject to cumulative pollutant loading rates, pollutant concentrations (PC) and ceiling limits. (PC biosolids are those with concentrations of these constituents below the monthly average specified in Part I.A.1.)

A. LIMITATIONS AND MONITORING REQUIREMENTS

3. SOIL – During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage biosolids in accordance with 9VAC25-32-10 et seq. and as detailed in the approved Operations and Maintenance Manual.

The soil shall be monitored by the permittee as specified below:

<u>PARAMETERS</u>	LIMITATIONS	MONITORING REQUIREMENTS		
		<u>Frequency</u>	Sample Type	
Soil pH (Std. Units)	NL	Prior to biosolids application*	Composite***	
Cation Exchange Capacity (meq/100)	NL	Prior to biosolids application**	Composite***	
Available Phosphorus (mg/kg)	NL	Prior to biosolids application**	Composite***	
Exchangeable Potassium (mg/kg)	NL	Prior to biosolids application**	Composite***	
Exchangeable Magnesium (mg/kg)	NL	Prior to biosolids application**	Composite***	
NL = No Limitation, monitoring required				

- * For biosolids with a cadmium concentration greater than or equal to 21 mg/kg the soil pH sample must be less than 1 year old; refer to Part I.C.19.
- ** Soil samples shall be collected and analyzed no more than 3 years prior to the biosolids application.
- *** A representative soil sample of each field representing an area up to approximately twenty acres will be comprised of cores randomly sampled throughout the field. Soil sampling core depth will be from 0-4 inches for land that has not been tilled within the past three years, or 0-6 inches for land that has been tilled within the past three years.
- a. Results of the soil monitoring specified above shall be used to develop the nutrient management plan in accordance with Part I.C.2. Submission of a separate monitoring report is not required.
- b. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: All land application sites that receive biosolids through this permit.
- c. Sampling shall be performed as outlined in the approved Operations and Maintenance Manual and the Nutrient Management Plan.
- d. Except for pH, all parameters are reported on a dry weight basis.
- e. Soil testing used to develop a Nutrient Management Plan must be conducted by a DCR approved laboratory in accordance with the Virginia Nutrient Management Standards and Criteria.

Permit No. VPA03002 Part I Page 5 of 14

B. REPORTING REQUIREMENTS

- 1. **Biosolids Monitoring** The results of the biosolids monitoring specified in Part I.A.1 shall be submitted electronically to the DEQ Blue Ridge Regional Office Lynchburg and the DEQ-Office of Land Application with the monthly activity report (Part B.2.) not later than the 15th day of the month after monitoring takes place. Supporting documentation, including laboratory chain of custody forms and certificates of analyses, shall be included with the report.
- 2. **Monthly Activity Report** -- The permittee shall submit, either hard copy or electronically, a monthly activity report to the DEQ Blue Ridge Regional Office Lynchburg and Office of Land Application by the 15th day of the month (postmark), for land application activities that occurred in the previous calendar month.

The monthly activity report shall include the following information:

- a. Name of Permittee, DEO permit number and dates of activity;
- b. Name and certificate number of the certified land applicators with a signed statement attesting that they were onsite at the times of the reported applications and that those applications were in compliance with the permit;
- c. Identification of land application sites, including the county where taxes are remitted and permitted site identification name, letters and numbers, as appropriate;
- d. The source of biosolids and approximate field area (reported to the nearest 0.1 acres) receiving those biosolids;
- e. The amount of biosolids applied in dry tons and the method and calculations used to determine the reported value. Dry ton value shall be reported to the nearest 0.01 dry tons;
- f. Dates and type of any interactions with local monitors and names of individuals involved in the interactions:
- g. 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;
- h. Presentation of the calculation of the total fee;
- i. A summary list of the total amount of biosolids applied and the calculated fee broken down by County, presented in alphabetical order by county;
- j. Biosolids Loading for each application of biosolids to an application site, the permittee shall submit in the monthly biosolids monitoring report, the concentration of PAN and P₂O₅ (as pounds per dry ton) in the biosolids and the amount of PAN and P₂O₅ (as pounds per acre) applied to the site from the biosolids.
- 3. **Land Application Fee --** The permittee shall remit to the DEQ a fee of \$7.50 per dry ton of biosolids applied in the Commonwealth of Virginia.
 - a. The permittee shall collect this fee from the facilities that generated the biosolids applied.
 - b. The permittee shall submit by postal service an invoice to DEQ-Office of Receipts Control by the 15th day of the month (postmark) for the land application activities of the previous month. The invoice shall include presentation of the calculation of the total fee; a summary list of the total amount of biosolids applied and the calculated fee broken down by County, presented in alphabetical order by county; and the signature of the permit holder with the certification statement provide below, as required by Part I.B.2.g.-i.:

"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."

Upon reviewing the report, DEQ will notify the Permittee of the fee that is due and set a due date. Failure to submit payment within 60 days of notification by DEQ of the fee due may result in the permit being revoked or approved sources being reclassified as unapproved.

- c. Alternatively, the permittee may submit the payment with the monthly activity report, based on the calculation in Part I.B.2.h.
- d. The check or money order shall be payable to the "Treasurer of Virginia", and mailed with the invoice to:

Department of Environmental Quality Receipts Control P.O. Box 1104 Richmond, VA 23218

- 4. **Annual Report** The permittee shall submit an Annual Report not later than February 19th of each year to the DEQ Blue Ridge Regional Office Lynchburg. Each report is for the previous calendar year's activity. If no biosolids were applied to the land during the reporting period, "no biosolids were applied" shall be reported. The report shall include at minimum:
 - a. Biosolids Monitoring Reports as required by Part I.A.1, certified and signed in accordance with Part II.K;
 - b. A summary of biosolids disposal contracts currently held as well as any other biosolids or sludges currently being handled;
 - c. A summary of approved biosolids storage facilities including the capacity at each facility which is dedicated for a particular biosolids. Provide the amount of remaining storage capacity;
 - d. A summary of land application sites completed in the last year including, by county, the source, dry tons, field designation, acres and the date of last application;
 - e. A summary of any partially completed land application sites including the date of last application; and
 - f. The total acreage of permitted land application sites available for use in the next calendar year.
- 5. **Records Retention** The permittee shall retain records of all monitoring information pertaining to biosolids and biosolids land application, including all calibration and maintenance records, 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 5 years from the date of the sample, measurement, report or application, unless otherwise specified in this permit. This period of retention may be extended by request of the Board at any time.

- C. Biosolids Land Application Special Conditions
 - 1. Biosolids shall be applied only at the sites identified in (Attachment A).
 - 2. **Nutrient Management Plan (NMP) Requirement --** A nutrient management plan (NMP) shall be developed for each land application site prior to biosolids application. A copy of the NMP shall be present at the land application site during land application operations and available for review by DEQ staff. A copy of the NMP shall be submitted to the DEQ Blue Ridge Regional Office Lynchburg at any time, but no later than 3 weeks after the application was completed. Copies of the NMP shall also be provided to the farmer/operator of the site, the Department of Conservation and Recreation (DCR) regional office and the chief executive officer or designee for the local government, unless they request in writing not to receive the NMP. The NMP shall be enforceable through this permit.

The nutrient management plan shall be prepared and revised by a certified nutrient management planner as stipulated in regulations promulgated pursuant to §10.1-104.2 of the Code of Virginia. The nutrient management plan shall be written in accordance with the criteria stipulated in regulations promulgated pursuant to §10.1-104.2 of the Code of Virginia.

All nutrient management plans shall account for all sources of nutrients to be applied to the site.

Where land application of biosolids is to be performed more frequently than once every three years at greater than 50% of the annual agronomic rate; or where the owner or lessee of the land application site is the operator of a confined animal feeding operation in accordance with §62.1-44.17:1 of the Code of Virginia; or where site-specific conditions demonstrate an increased risk to state waters as determined by DEQ, the permittee shall submit an NMP that has been approved by the DCR with a copy of the approval letter at the time of any permit modification requests to DEQ.

3. **Loading Rates** -- Application rates shall be based on the annual average sludge quality. The average sludge quality shall be established from the results of approved analytical testing of composite samples obtained during the most recent 12 months of monitoring.

The permittee shall calculate biosolids loading rates based on the most rate limiting factor, specifically plant available nitrogen (PAN), phosphorus (as P_2O_5) or calcium carbonate equivalency (CCE); within the recommendations of the nutrient management plan for the application site and other limiting factors specified in Part I.C.11., Part I.C.12. and Part I.C.13.

However, for biosolids subject to the cumulative pollutant loading rate, the biosolids application shall be restricted by the metals content of the biosolids if the cumulative pollutant loading rate at the site is approached or if the ceiling limit of the biosolids is reached, unless the nutrient management plan specifies more restrictive biosolids application rates based on the nutrient content or CCE of the biosolids

- 4. **14 Day Notification --** The permittee shall provide written notification to the DEQ Blue Ridge Regional Office Lynchburg at least 14 days prior to commencing land application of biosolids at each permitted site. The notice shall contain the following information:
 - a. permitted site identification,
 - b. permitted site location, to include:
 - 1) county
 - 2) route number/road name

- 3) latitude/longitude coordinates in decimal degrees that represent a location within the boundaries of the site
- c. approximate dates of application, and
- d. expected sources of biosolids.
- 5. **Signage Requirements --** At least 48 hours prior to the delivery of biosolids to each land application site, the permittee shall post a sign at the site notifying the public that biosolids will be applied. The sign shall be maintained at the site during the application and for at least 48 hours after the biosolids application has been completed.
 - a. The sign shall be visible and legible from the public road adjacent to the field, or the intersection of the public road and the main access road or driveway to the site. Upon the request of the permittee, the department may grant a waiver to this or any other signage requirement, or require alternative posting options due to extenuating circumstances.
 - b. The sign shall be weather-resistant and sturdy enough to remain in place and legible throughout the period that the sign is required at the site. The sign shall be at least four square feet in area and shall only contain the following information:
 - 1) A statement that biosolids are being land-applied at the site;
 - 2) The name and telephone number of the permit holder;
 - 3) The name or title, and telephone number of an individual designated by the permit holder to respond to complaints and inquiries;
 - 4) Contact information for the DEQ Blue Ridge Regional Office Lynchburg, including a telephone number for complaints and inquiries.
- 6. **100 day notification to the locality** -- At least 100 days prior to the first land application of biosolids at a site permitted under the VPA/VPDES Permit regulation, the permit holder shall provide written notification to the local government where the site is located. The notice shall identify the location of the permitted site and the expected sources of the biosolids to be applied to the site. This requirement may be satisfied by providing a list of all available permitted sites in the locality at least 100 days prior to commencing the application at any site on the list. This requirement shall not apply to any application commenced prior to October 10, 2005. If the site is located in more than one county or city, the notice shall be provided to all jurisdictions where the site is located.
- 7. **Addition of sources --** For the addition of biosolids sources 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 the regional office of the Department of Environmental Quality for authorization. Land application of biosolids from new sources shall not commence until authorization is received from DEQ.
- 8. **Certified Land Applicator Requirement --** The permittee shall ensure that no land application activities occur unless a certified land applicator (as specified in Article 5 of the VPA Permit Regulation 9 VAC 25-32 (Sections 690 through 760)) is onsite at all times during such land application. Certified land applicators may be considered to be onsite if they are at the site permitted for land application and, if it is necessary to leave the site, they are available within 30 minutes to return to the site to verify and ensure that land application of biosolids is in compliance with the permit.

- 9. Operations and Maintenance (O&M) Manual Requirement The term O&M Manual as used in this permit refers to a document that incorporates the requirements of the three documents required by 9VAC25-32-310 et seq, which include the O&M Manual, the sludge management plan and the best management practices plan. The permittee shall conduct all biosolids use or disposal activities in accordance with the O&M Manual approved with the issuance of this permit. Any proposed changes in the biosolids use or disposal practices or procedures followed by the permittee shall be documented and submitted for Department of Environmental Quality approval 90 days prior to the effective date of the changes. Upon approval, the O&M Manual becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations/conditions necessitated by substantive changes in biosolids use or disposal practices.
- 10. Biosolids shall not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under Virginia Water Quality Standards Regulation (9 VAC 25-260-00 et seq.) or Section 4 of the Endangered Species Act or if the land application is likely to adversely affect its designated critical habitat.
- 11. Land application sites receiving "infrequent" biosolids applications shall be managed in accordance with the following requirements:
 - a. Biosolids shall be applied on a once per three-year basis. None of the sites listed in Attachment A that previously received a complete application of biosolids shall be used again until at least three years after the date of the last application. For the purposes of this special condition, a complete biosolids application shall be defined as the sum of all biosolids applications made within a 12 month period, regardless of whether or not the target level of nutrient addition was achieved. The soil sampling test results, in accordance with Part I A.3, that are most recent, but not more than 3 years old, shall be included in the NMP before biosolids is reapplied to any field.
 - b. The rate of biosolids application shall never exceed 15 dry tons per acre per three years.
- 12. Land application sites receiving "frequent, below agronomic rate" biosolids applications shall be managed in accordance with the following requirements:
 - a. The application of biosolids together with any other source of PAN shall not exceed 70% of the agronomic loading rate for the crops grown on each site. Records of the actual biosolids application rates should be retained on site for inspection during land application operations.
 - b. A maximum of 70% of the nitrogen requirement of the permanent pasture or hay crop can be applied on an annual basis. The 70% application rate shall be calculated after accounting for the previous two years' applied biosolids nitrogen mineralization rates.
 - c. A maximum of 50% of the nitrogen requirement of the permanent pasture or hay crop can be applied on an annual basis. It is not necessary to account for the previous two years' applied biosolids nitrogen mineralization rates under this option.
 - d. The rate of biosolids application shall never exceed 15 dry tons per acre per year.
- 13. At no time shall liquid biosolids (< 15% total solids) be surface applied at a hydraulic loading rate greater than 14,000 gal/ac (0.5 inches depth) in a single application procedure. Sufficient drying time shall be allowed between subsequent applications.

- 14. Operational limitations during periods of inclement weather.
 - a. Biosolids shall not be applied during times when the ground is saturated.
 - b. Surface application of biosolids shall not be made to cultivated or bare ground covered with ice; however, biosolids may be applied to snow covered ground if snow cover does not exceed an average depth of one inch and the snow and biosolids are immediately incorporated within 24 hours of application.
 - c. Biosolids may be applied to frozen ground only under the following conditions:
 - 1) solids content of the biosolids is greater than 15%,
 - 2) slopes are not greater than 5%,
 - 3) a minimum of a 200 foot vegetative (or at least 60% uniformly covered by stalks or other vegetation) buffer is maintained from all surface water courses,
 - 4) only those soils characterized by the USDA as "well drained" are utilized, and
 - 5) stalks, vines, stubble or other vegetation or crop residue provides uniform soil coverage of at least 60% and is sufficient to prevent surface runoff.
- 15. Biosolids shall be direct injected or incorporated (mixed within the normal plow layer) within 48 hours if applied on sites with less than 60% uniform soil coverage by crop residue, stalks, vines, stubble, or other vegetation within any portion of the permitted site or if applied to areas subject to frequent flooding as defined by soil survey information.
- 16. Biosolids shall not be applied to site slopes that exceed 15%.

During the period of November 16 to March 15 of the following year, when biosolids are applied to site slopes between 7% and 15%, one of the following best management practices shall be used to prevent runoff and soil loss:

- a. Biosolids shall be surface applied or subsurface injected beneath an established living crop such as hay, pasture, or timely planted small grain or cover crop;
- b. Biosolids shall be surface applied or subsurface injected so that immediately after application the crop residue still provides at least 60% soil surface coverage; or
- c. The site is operated in compliance with an existing soil conservation plan approved by the USDA Natural Resource Conservation Service and will remain in compliance after any subsequent tillage operation to incorporate the biosolids.

During the period of November 16 to March 15 of the following year, on site slopes between 5% and 7%, biosolids can be land applied using one of the following best management practices:

- a. Biosolids shall be surface applied or subsurface injected beneath an established living crop such as hay, pasture, or timely planted small grain or cover crop;
- b. Biosolids can be land applied by surface application or subsurface injection followed by incorporation within 48 hours of application if crop residue still provides at least 30% soil surface coverage immediately following incorporation; or
- c. Biosolids can be land applied by surface application or subsurface injection followed by ridge tilling or chisel plowing within 48 hours of application.

17. Land application of biosolids shall not occur within the following minimum buffer zones:

Minimum Distance (feet) to Land Application Area

Adjacent Features	Surface Application ^a	Incorporation	Winter b
Occupied dwellings ^c	200	200	200
Water supply wells and springs	100	100	100
Property lines ^c	100	50	100
Perennial streams and other surface waters except intermittent streams	50	35	100
Intermittent streams/drainage ditches	25	25	50
All improved roadways	10	5	10
Rock outcrops and sinkholes	25	25	25
Agricultural drainage ditches with slopes equal to or less than 2.0%	10	5	10

- a. Not plowed or disked to incorporate within 48 hours.
- b. If surface application occurs on average site slopes between 7% and 15% during the time between November 16 of one year and March 15 of the following year.
- c. Buffers may be reduced with the written consent of affected landowners and residents.
- 18. All vehicles that transport biosolids shall be sufficiently sealed to prevent leaking and spillage of biosolids. Totally closed, water tight transport vehicles with rigid tops shall be provided for liquid biosolids to prevent spillage.
- 19. If the cadmium concentration of the biosolids is greater than 21 mg/kg, post application soil pH shall be 6.0 or greater. If the pre-application soil pH is below 6.0, pH adjustment may be required. The pre-application soil pH result at the time of application shall not be over 1 year old. Lime application shall be calculated taking into account the Calcium Carbonate Equivalency (CCE) of the biosolids at the proposed biosolids application site.
- 20. Valid landowner consent forms shall be maintained for all sites specified in Attachment A of this permit. The permittee shall immediately notify the regional office of any change in landowner agreement. The permittee shall provide the owner or leaseholder of the land on which the biosolids is applied necessary information to comply with the requirements in this permit.
- 21. Site Restrictions for Land Application of Class B biosolids
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids;
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remains on the land surface for four months or longer prior to incorporation into the soil;

- c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remains on the land surface for less than four months prior to incorporation into the soil;
- d. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids;
- e. Animals shall not be allowed to graze on the land for 30 days after application of biosolids:
- f. Lactating dairy livestock shall not be allowed on sites within 60 days following biosolids application and green chopped forage from the site shall not be fed to milk cows if forage is removed within 60 days following biosolids application.
- g. Turf grown on land where biosolids is applied shall not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Water Control Board;
- h. Public access to land with a high potential for public exposure shall be restricted for one year after application of biosolids;
- i. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.
- 22. Biosolids subject to the cumulative pollutant loading rates (CPLR), listed in Part I.A.2, shall not be applied to agricultural land, forest, a public contact site, or a reclamation site if any of the cumulative pollutant loading rates has been reached.
- 23. Before biosolids subject to the cumulative pollutant loading rates (CPLR) listed in Part I.A.2 is applied to the land, the permittee shall contact the regional office of the Department of Environmental Quality to determine whether biosolids subject to the cumulative pollutant loading rates has been applied since July 20, 1993.
 - a. If biosolids subject to the cumulative amount for each pollutant listed in Part I.A has not been applied since July 20, 1993, the cumulative amount for each pollutant may be applied to the site in accordance with the cumulative loading limits listed in Part I.A.2.
 - b. If biosolids subject to the cumulative loading limits in Part I.A has been applied since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the biosolids since that date is known, the cumulative amount of each pollutant applied to the site shall be used to determine the additional amount of each pollutant that can be applied to the site in accordance with the cumulative loading limits listed in Part I.A.2.
 - c. If biosolids subject to the cumulative loading limits in Part I.A.2. has been applied since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the bulk biosolids since that date is not known, an additional amount of each pollutant shall not be applied to the site.
- 24. Once a land application site has received biosolids subject to the cumulative pollutant loading rates listed in Part I A.2., tracking of the cumulative amount of each pollutant shall continue and take into account pollutant inputs from all biosolids, PC and CPLR, applied onto the site.
- 25. For PC and CPLR biosolids, the permittee is required to retain the following information a) through g) for at least 5 years:
 - a. The concentrations of each pollutant in Part I.A.1.;
 - b. Which pathogen reduction requirements in Part I.A.1. are met;
 - c. Which vector attraction reduction requirements in Part I.A.1. are met;
 - d. A description of how the management practices specified in the approved O&M Manual and/or this permit are met;
 - e. A description of how the site restrictions specified in the approved O&M Manual and/or

- this permit are met (if applicable);
- f. The date bulk biosolids are applied to each site
- g. The following certification statement:
 "I certify under the penalty of law, that the information that will be used to determine compliance with the pathogen requirements in [permittee shall insert either 9 VAC 25-32-610 B, C or D], the vector attraction reduction requirements in [permittee shall insert one of the vector attraction reduction requirements in 9 VAC 25-32-610 E 1 through E 10], the management practices, and the site restrictions (if applicable) for each site on which bulk biosolids are applied was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."
- 26. For biosolids subject to the cumulative pollutant loading rate, the permittee is required to retain the following information a) through g) indefinitely:
 - a. The location, by either street address or latitude and longitude, of each site on which biosolids are applied;
 - b. The number of hectares in each site on which biosolids is applied;
 - c. The date bulk biosolids are applied to each site;
 - d. The cumulative amount of each pollutant (i.e. kilograms) listed in Part I.A.2 in the bulk biosolids applied to each site, including the amount of each pollutant applied since July 20, 1993;
 - e. The amount of biosolids (i.e., tons) applied to each site;
 - f. A description of how the requirements to obtain information regarding the cumulative pollutant loading rates and the cumulative amount for each pollutant are met;
 - g. The following certification statement: "I certify under the penalty of law, that the information that will be used to determine compliance with the requirements to obtain information in Special Conditions 23 and 26 of Part I.C. of the VPA Permit for each site on which bulk biosolids are applied was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including fine and imprisonment."
- 27. When 90 percent or more of any of the cumulative pollutant loading rates in Part I.A.2. is reached at a site, the information in Part I.C.26., sections a. g. shall be reported to the Blue Ridge Regional Office Lynchburg of the Department of Environmental Quality on February 19 of each year for the previous calendar year's activity.
- 28. **Compliance with VPA Biosolids Program** -- Land application activities shall comply with the operational requirements of Part IX: Biosolids Program of the VPA Permit Regulation 9 VAC 25-32 (Sections 310 through 760) in effect as of the effective date of this permit.

D. Biosolids Storage Special Conditions

- 1. Biosolids shall be stored in accordance with all requirements adopted pursuant to §62.1-44.19:3 R of the Code of Virginia.
- 2. Emergency storage The owner shall notify the DEQ Blue Ridge Regional Office Lynchburg upon implementation of any emergency storage. Emergency storage may be implemented due to

unforeseen circumstances, including the delivery of sludge which has not been stabilized to biosolids standards. The biosolids in emergency storage shall be managed in accordance with the approved O&M Manual and shall not result in water quality, public health or nuisance problems.

- 3. Temporary storage The owner shall notify the DEQ Blue Ridge Regional Office Lynchburg upon implementation of any temporary storage. Temporary storage may be implemented due to unforeseen climatic factors that prevent land application of biosolids on a site on the same day that the biosolids has been offloaded at the site or is in transit to the site. Temporary storage is restricted as follows:
 - a. Biosolids stored at the site shall be land applied prior to additional offloading of biosolids at the same site;
 - b. The owner shall be restricted to storing a daily maximum amount of 100 wet tons per operational site;
 - c. The stored biosolids shall be land applied within 30 days from the initiation of storage or moved to a routine biosolids facility;
 - d. Approval of plans for temporary storage will be considered as part of the overall operations and maintenance manual;
 - e. Temporary storage shall not occur in areas prone to flooding at a 25-year or less frequency interval;
 - f. A synthetic liner shall be required for placement under and over biosolids stored in this manner with one exception: where biosolids is stockpiled for less than seven days, a liner placed under the stored biosolids is not required. Surface water diversions and other best management provisions (BMP) should be utilized as appropriate;
 - g. Temporary storage shall not result in water quality, public health or nuisance problems.
- 4. Field Storage Variances to temporary storage issued by the Virginia Department of Health allowing "Field Storage" shall remain in effect until this permit is modified or revoked and reissued to include other special conditions to address field storage. The biosolids in field storage shall be managed in accordance with the *Variance to Temporary Storage* authorized by the Commissioner of Health and shall not result in water quality, public health or nuisance problems.

E. Other Requirements or Special Conditions

- 1. The Board may modify or revoke and reissue this permit to incorporate changes to any applicable standard or requirement for the use or disposal of biosolids, industrial wastewater sludge, or septage promulgated under Section 405(d) of the Clean Water Act, State Water Control Law, or the VPA Permit Regulation (9VAC25-32).
- 2. 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.
- 3. 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.

CONDITIONS APPLICABLE TO ALL VPA PERMITS

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.

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 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 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.

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:

Virginia Department of Environmental Quality Blue Ridge Regional Office – Lynchburg 7705 Timberlake Road Lynchburg, Virginia 24502

- 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. <u>Duty to Provide Information</u>

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. <u>Compliance Schedule Reports</u>

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. <u>Unauthorized Discharges</u>

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 Regional Office at (434) 582-5120 (voice) or (434) 582-5125 (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. <u>Duty to Reapply</u>

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. <u>Duty to Mitigate</u>

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. <u>Inspection and Entry</u>

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.

Attachment A

LISTING OF LAND APPLICATION SITES

- 1. County in which sites are located: Campbell County, Virginia
- 2. Field designation (Unique identifier): Reference the site booklets submitted with the permit application.
- 3. Gross Acres: 3,536 acres total for all proposed land application sites.
- 4. Any other locating information necessary to determine exact location of land application sites: Reference the site booklets submitted with the permit application.

3

Virginia Pollution Abatement Biosolids Monitoring Report Sources that produce ≥16,535 Dry Tons of Biosolids

Facility Name:			VPA Permit	VPA Permit #:			
Source Name:			Pathogen Control Alternative:				
Biosolids Type (treatment method):			Vector Attra	ction Reduction Alternat	tive:		
Amount of Biosolids receive	ed during monitoring j	period:	Monitoring p	eriod:			
		Dry tons			Month/Year		
BIOSOLIDS CHARACTERISTICS ^a	Monthly Average (mg/kg)*b	Monthly Maximum (mg/kg)*	Monthly Average (mg/kg)*	Ceiling Concentration Maximum (mg/kg)*	<u>Frequency</u>	Sample Type	
	Reported	<u>Reported</u>	Monitoring Limits	Monitoring Limits	1/month required	Composite required	
Percent Solids (%)		NA	NL	NA			
Volatile Solids (%)		NA	NL	NA			
Total Arsenic			41	75			
Total Cadmium			39	85			
Total Copper			1,500	4,300			
Total Lead			300	840			
Total Mercury			17	57			
Total Molybdenum			NA	75			
Total Nickel			420	420			
Total Selenium			100	100			
Total Zinc			2,800	7,500			
NL = No limitations, monitoria	ng required	NA = Not applicable	* = Dry weight basis,	unless otherwise stated			
Source of data reported:							
Printed Name of Permittee	direction or s properly gath persons who information, and complete	supervision in accordance with a system and evaluate the information sul manage the system, or those person the information submitted is, to the	nt and all attachments were prepared und stem designed to assure that qualified po- position. Based on my inquiry of the per- ns directly responsible for gathering the best of my knowledge and belief, true, ant penalties for submitting false inform- ent for knowing violations."	ersonnel son or accurate,	ittee	Date	

Virginia Pollution Abatement Biosolids Monitoring Report Sources that produce ≥16,535 Dry Tons of Biosolids

Facility Name: VPA Permit #			#:				
Source Name:			Pathogen Co	Pathogen Control Alternative:			
Biosolids Type (treatment i	nethod):		Vector Attra	action Reduction Alterna	tive:		
Amount of Biosolids receive	ed during monitoring	period: Dry tons		period:	Month/Year		
BIOSOLIDS CHARACTERISTICS ^a	Monthly Average (mg/kg)*b	Monthly Maximum (mg/kg)	Monthly Average (mg/kg)*	Ceiling Concentration Maximum (mg/kg)*	Frequency	Sample Type	
	Reported	<u>Reported</u>	Monitoring Limits	Monitoring Limits	<u>1/month</u> required	Composite required	
TKN (%)		NA	NL	NA			
Ammonium Nitrogen (%)		NA	NL	NA			
Nitrate Nitrogen		NA	NL	NA			
Total P (%)		NA	NL	NA			
P ₂ O ₅ (%)		NA	NL	NA			
Total K (%)		NA	NL	NA			
pH (Std. Units)		NA	NL	NA			
CCE** as CaCO ₃ (%)		NA	NL	NA			
NL = No limitations, monitoring required NA = Not applicable *= Dry weight basis, unless otherwise stated ** = CCE is Calcium Carbonate Equivalence Source of data reported:							
COMMENTS:							
Printed Name of Permittee "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."					Date		

Virginia Pollution Abatement Biosolids Monitoring Report Page 2 of 2

Virginia Pollution Abatement Biosolids Monitoring Report Sources that produce ≥ 1,653 and < 16,535 Dry Tons of Biosolids

Facility Name: VPA Permit #:			t #:			
Source Name:			Pathogen Control Alternative:			
Biosolids Type (treatment n	nethod):		Vector Attr	action Reduction Altern	ative:	
Amount of Biosolids receive	d during monitoring p		Monitoring	period:		
		Dry tons		<u> </u>	Month/Year	
BIOSOLIDS CHARACTERISTICS ^a	Monthly Average (mg/kg)* ^b	Monthly Maximum (mg/kg)*	Monthly Average (mg/kg)*	Ceiling Concentration <u>Maximum (mg/kg)*</u>	<u>Frequency</u>	Sample Type
	Reported	<u>Reported</u>	Monitoring Limits	Monitoring Limits	Once every 2 month required	Composite required
Percent Solids (%)		NA	NL	NA		
Volatile Solids (%)		NA	NL	NA		
Total Arsenic			41	75		
Total Cadmium			39	85		
Total Copper			1,500	4,300		
Total Lead			300	840		
Total Mercury			17	57		
Total Molybdenum			NA	75		
Total Nickel			420	420		
Total Selenium			100	100		
Total Zinc			2,800	7,500		
NL = No limitations, monitoring Source of data reported:	ng required	NA = Not applicable	* = Dry weight basi	s, unless otherwise stated		
Printed Name of Permittee	direction or su properly gather persons who m information, th and complete.	pervision in accordance with a syst r and evaluate the information sub- tanage the system, or those persons the information submitted is, to the b	and all attachments were prepared un em designed to assure that qualified p nitted. Based on my inquiry of the pe directly responsible for gathering the best of my knowledge and belief, true, at penalties for submitting false informations."	personnel person or person	uittee	Date

Virginia Pollution Abatement Biosolids Monitoring Report Sources that produce ≥ 1,653 and < 16,535 Dry Tons of Biosolids

Facility Name: VPA Perm			VPA Permit	#:			
Source Name:			Pathogen Co	Pathogen Control Alternative:			
Biosolids Type (treatment r	nethod):		Vector Attra	ction Reduction Altern	ative:		
Amount of Biosolids receive	ed during monitoring		Monitoring p	period:			
		Dry tons			Month/Year		
BIOSOLIDS CHARACTERISTICS ^a	Monthly Average (mg/kg)*b	Monthly Maximum (mg/kg)	Monthly Average (mg/kg)*	Ceiling Concentration <u>Maximum (mg/kg)*</u>	Frequency	Sample Type	
	Reported	<u>Reported</u>	Monitoring Limits	Monitoring Limits	Once every 2 month required	Composite required	
TKN (%)		NA	NL	NA			
Ammonium Nitrogen (%)		NA	NL	NA			
Nitrate Nitrogen		NA	NL	NA			
Total P (%)		NA	NL	NA			
P ₂ O ₅ (%)		NA	NL	NA			
Total K (%)		NA	NL	NA			
pH (Std. Units)		NA	NL	NA			
CCE** as CaCO ₃ (%)		NA	NL	NA			
NL = No limitations, monitoring required NA = Not applicable *= Dry weight basis, unless otherwise stated ** = CCE is Calcium Carbonate Equivalence Source of data reported:							
COMMENTS:							
Printed Name of Permittee "I certify under penalty of law that this document and all attachr my direction or supervision in accordance with a system designs personnel properly gather and evaluate the information submitted the person or persons who manage the system, or those persons gathering the information, the information submitted is, to the b belief, true, accurate, and complete. I am aware that there are si submitting false information, including the possibility of fine an violations."			system designed to assure that qualified nation submitted. Based on my inquiry of those persons directly responsible for tted is, to the best of my knowledge and that there are significant penalties for	of		Date	

Virginia Pollution Abatement Biosolids Monitoring Report

Page 2 of 2

Virginia Pollution Abatement Biosolids Monitoring Report Sources that produce ≥ 320 and < 1,653 Dry Tons of Biosolids

Facility Name:			VPA Permit	VPA Permit #:			
Source Name:			Pathogen Co	Pathogen Control Alternative:			
Biosolids Type (treatment method): Amount of Biosolids received during monitoring period:			Vector Attra	nction Reduction Altern	ative:	_	
			Monitoring	period:			
		Dry tons			Month/Year		
BIOSOLIDS CHARACTERISTICS ^a	Monthly Average (mg/kg)*b	Monthly Maximum (mg/kg)*	Monthly Average (mg/kg)*	Ceiling Concentration Maximum (mg/kg)*	<u>Frequency</u>	Sample Type	
	Reported	<u>Reported</u>	Monitoring Limits	Monitoring Limits	Quarterly required	Composite required	
Percent Solids (%)		NA	NL	NA			
Volatile Solids (%)		NA	NL	NA			
Total Arsenic			41	75			
Total Cadmium			39	85			
Total Copper			1,500	4,300			
Total Lead			300	840			
Total Mercury			17	57			
Total Molybdenum			NA	75			
Total Nickel			420	420			
Total Selenium			100	100			
Total Zinc			2,800	7,500			
NL = No limitations, monitoring	ng required	NA = Not applicable	* = Dry weight basis	, unless otherwise stated			
Source of data reported:							
Printed Name of Permittee	direction or properly gat persons who information, and complet	supervision in accordance with a system and evaluate the information sub- manage the system, or those person the information submitted is, to the	t and all attachments were prepared un stem designed to assure that qualified p omitted. Based on my inquiry of the pe is directly responsible for gathering the best of my knowledge and belief, true, ant penalties for submitting false infor- int for knowing violations."	personnel person or person or person accurate,	ttee	Date	

Virginia Pollution Abatement Biosolids Monitoring Report Sources that produce ≥ 320 and < 1,653 Dry Tons of Biosolids

Facility Name: VPA Permit #:				#:		
Source Name: Pathogen Co			ontrol Alternative:			
Biosolids Type (treatment method): Vector Attraction			action Reduction Alterna	tive:		
Amount of Biosolids receive	ed during monitoring]		Monitoring J	period:		
		Dry tons		Ţ	Month/Year	
BIOSOLIDS CHARACTERISTICS ^a	Monthly Average (mg/kg)*b	Monthly Maximum (mg/kg)	Monthly Average (mg/kg)*	Ceiling Concentration <u>Maximum (mg/kg)*</u>	<u>Frequency</u>	Sample Type
	Reported	Reported	Monitoring Limits	Monitoring Limits	Quarterly required	Composite required
TKN (%)		NA	NL	NA		
Ammonium Nitrogen (%)		NA	NL	NA		
Nitrate Nitrogen		NA	NL	NA		
Total P (%)		NA	NL	NA		
P ₂ O ₅ (%)		NA	NL	NA		
Total K (%)		NA	NL	NA		
pH (Std. Units)		NA	NL	NA		
CCE** as CaCO ₃ (%)		NA	NL	NA		
NL = No limitations, monitoring Equivalence Source of data reported:		JA = Not applicable	* = Dry weight basis,	unless otherwise stated	** = CCE is Calcium	Carbonate
COMMENTS:						
Printed Name of Permittee	direction or s properly gath persons who information, and complete	supervision in accordance with a system and evaluate the information sumanage the system, or those person the information submitted is, to the	ent and all attachments were prepared un ystem designed to assure that qualified p ibmitted. Based on my inquiry of the pe ons directly responsible for gathering the e best of my knowledge and belief, true, cant penalties for submitting false infor- ent for knowing violations."	personnel erson or es, accurate,	ittee	Date

Virginia Pollution Abatement Biosolids Monitoring Report Page 2 of 2

Virginia Pollution Abatement Biosolids Monitoring Report Sources that produce < 320 Dry Tons of Biosolids

Facility Name:			VPA Permit #	VPA Permit #:						
Source Name:			Pathogen Control Alternative:							
Biosolids Type (treatment method):			Vector Attraction Reduction Alternative:							
Amount of Biosolids received during monitoring period:			Monitoring period:							
	Dry tons	Dry tons			Year					
BIOSOLIDS CHARACTERISTICS ^a	Monthly Average (mg/kg)*b	Monthly Maximum (mg/kg)*	Monthly Average (mg/kg)*	Ceiling Concentration Maximum (mg/kg)*	Frequency	Sample Type				
	Reported	<u>Reported</u>	Monitoring Limits	Monitoring Limits	1/year required	Composite required				
Percent Solids (%)		NA	NL	NA						
Volatile Solids (%)		NA	NL	NA						
Total Arsenic			41	75						
Total Cadmium			39	85						
Total Copper			1,500	4,300						
Total Lead			300	840						
Total Mercury			17	57						
Total Molybdenum			NA	75						
Total Nickel			420	420						
Total Selenium			100	100						
Total Zinc			2,800	7,500						
NL = No limitations, monitoring required NA = Not applicable * = Dry weight basis, unless otherwise stated										
Source of data reported:										
Printed Name of Permittee		"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 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 their are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."				Date				

Virginia Pollution Abatement Biosolids Monitoring Report Sources that produce < 320 Dry Tons of Biosolids

Facility Name:			VPA Permit	VPA Permit #:						
Source Name:			Pathogen Control Alternative:							
Biosolids Type (treatment method):			Vector Attraction Reduction Alternative:							
Amount of Biosolids received during monitoring period: Dry tons			Monitoring period:Year							
BIOSOLIDS CHARACTERISTICS ^a	Monthly Average (mg/kg)*b	Monthly Maximum (mg/kg)	Monthly Average (mg/kg)*	Ceiling Concentration <u>Maximum (mg/kg)*</u>	<u>Frequency</u>	Sample Type				
	Reported	<u>Reported</u>	Monitoring Limits	Monitoring Limits	1/year required	Composite required				
TKN (%)		NA	NL	NA						
Ammonium Nitrogen (%)		NA	NL	NA						
Nitrate Nitrogen		NA	NL	NA						
Total P (%)		NA	NL	NA						
P ₂ O ₅ (%)		NA	NL	NA						
Total K (%)		NA	NL	NA						
pH (Std. Units)		NA	NL	NA						
CCE** as CaCO ₃ (%)		NA	NL	NA						
NL = No limitations, monitoring required NA = Not applicable *= Dry weight basis, unless otherwise stated ** = CCE is Calcium Carbonate Equivalence Source of data reported: COMMENTS:										
Printed Name of Permittee "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."										

Virginia Pollution Abatement Biosolids Monitoring Report Page 2 of 2