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: District of Columbia Water and Sewer Authority  
Owner Address: 5000 Overlook Ave, SW  
Washington, DC 20032  
Permit Name: DC Water - Bloom

The authorized pollutant management shall be in accordance with this cover page and Parts I and II as set forth herein.

Melanie D. Davenport  
Director, Water Permitting Division

______________________________________________  
Date
Part I

DISTRIBUTION AND MARKETING OF EXCEPTIONAL QUALITY BIOSOLIDS

During the period beginning with the permit’s effective date and lasting until the permit’s expiration date, and in accordance with 9VAC25-32-10 et seq. and the limitations, conditions and requirements set forth in this permit, the Permittee, District of Columbia Water and Sewer Authority (DC Water), is authorized to market and distribute Exceptional Quality (EQ) biosolids produced at the District of Columbia Advanced Wastewater Treatment Plant at Blue Plains (Blue Plains).

EQ biosolids shall meet an approved Class A pathogen reduction standard, including treatment alternative and indicator organism monitoring, one Vector Attraction Reduction Option, 1 – 8, have monthly average metals concentration below the Pollutant Concentration (PC) and all maximum metals concentrations below the ceiling limits. Exceptional Quality biosolids shall also be monitored annually for organic chemicals.

The DC Water - Blue Plains EQ biosolids, known as “Bloom Products”(1), may be marketed and distributed throughout Virginia in the following ways:

1. The sale or giveaway of bulk EQ cake(2) biosolids for the purpose of land application on agricultural(3) land in accordance with a Nutrient Management Plan (NMP) prepared by a certified nutrient management planner as stipulated in regulations promulgated pursuant to § 10.1-104.2 of the Code of Virginia;

2. The sale or giveaway of bulk EQ cake(2) biosolids for the purpose of land application on sites in accordance with a Nutrient Management Plan (NMP) prepared by a certified nutrient management planner as stipulated in regulations promulgated pursuant to § 10.1-104.2 of the Code of Virginia. The use of an application rate greater than the prescribed agronomic rate will be considered the reclamation of disturbed land and shall be managed in accordance with Part I.D.4 of this permit;

3. The sale or giveaway of EQ cake biosolids in a bag or other container(4);

4. The sale or giveaway of bulk EQ cake(2) biosolids to a facility for the purpose of blending;

5. The sale or giveaway of bulk blended EQ biosolids products for the purpose of land application on turf farms or other agricultural(3) land 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;

6. The sale or giveaway of bulk blended EQ biosolids products for non-agricultural use;

7. The sale or giveaway of blended EQ biosolids products in a bag or other container. (4)

---

(1) **Bloom Products** – The term “Bloom Products” refers to (i) EQ cake biosolids treated and produced at DC Water - Blue Plains; (ii) Blended EQ biosolids derived from EQ cake biosolids treated and produced at DC Water - Blue Plains that are blended with mulch and other 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, mineral products (including sand) and topsoil. Bloom Products may be marketed under various names as registered with the Virginia Department of Agriculture and Consumer Services (VDACS)
(2) **Cake biosolids** – refers to dewatered biosolids with a solids content greater than 15% solids and less than 90% solids and may include digested, lime stabilized, or pasteurized biosolids, etc. Cake biosolids does not include composted biosolids, blended biosolids, or other biosolids products that include bulking agents or other feed stocks.

(3) **Agricultural land** - For the purposes of this permit, refers to land dedicated to agricultural use which includes the bona fide production of crops, or animals, or fowl including the production of fruits and vegetables of all kinds; meat, dairy, and poultry products; nuts, tobacco, nursery, and floral products; and the production and harvest of products from silviculture activity.

(4) **Other container** - For the purposes of this permit, “other container” means either an open or a closed receptacle, including, but not limited to, a bucket, box, carton, vehicle or trailer with a load capacity of one metric ton or less.

A. LIMITATIONS AND MONITORING REQUIREMENTS

All biosolids samples shall be collected and analyzed in accordance with Title 40 of the Code of Federal Regulations, Parts 503 and 136. Analyses shall be conducted by a VELAP accredited environmental laboratory.

1. EQ BIOSOLIDS

   a. **Metals Limitations** – EQ cake biosolids, for distribution and marketing and for use in the production of a blended product, and blended EQ biosolids products shall be monitored and limited as specified below. Biosolids shall not be marketed and distributed as a cake or blended product, or used to produce a blended product if:

      1) The monthly average concentration of any pollutant in the biosolids exceeds the Pollutant Concentration (PC) limitation of that pollutant; or

      2) The maximum concentration of any pollutant in a single sample exceeds the ceiling limitation of that pollutant.

<table>
<thead>
<tr>
<th>PARAMETERS(1)</th>
<th>PC LIMITATIONS</th>
<th>CEILING LIMITATION</th>
<th>MONITORING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monthly Average (mg/kg)</td>
<td>Maximum (mg/kg)</td>
<td>Frequency</td>
</tr>
<tr>
<td>Arsenic</td>
<td>41</td>
<td>75</td>
<td>1/Month</td>
</tr>
<tr>
<td>Cadmium</td>
<td>39</td>
<td>85</td>
<td>1/Month</td>
</tr>
<tr>
<td>Copper</td>
<td>1,500</td>
<td>4,300</td>
<td>1/Month</td>
</tr>
<tr>
<td>Lead</td>
<td>300</td>
<td>840</td>
<td>1/Month</td>
</tr>
<tr>
<td>Mercury</td>
<td>17</td>
<td>57</td>
<td>1/Month</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>NL(3)</td>
<td>75</td>
<td>1/Month</td>
</tr>
<tr>
<td>Nickel</td>
<td>420</td>
<td>420</td>
<td>1/Month</td>
</tr>
<tr>
<td>Selenium</td>
<td>100</td>
<td>100</td>
<td>1/Month</td>
</tr>
<tr>
<td>Zinc</td>
<td>2,800</td>
<td>7,500</td>
<td>1/Month</td>
</tr>
</tbody>
</table>

NL = No Limitation, monitor and report

---

(1) All parameters are subject to pollutant concentrations (PC) and ceiling limitations. “PC biosolids” contain the parameters identified above at concentrations below the monthly average specified in Part I.A.1.b.

(2) All limits and criteria are expressed on a dry weight basis.

(3) The monthly average concentration 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. Class A Pathogen Reduction and VAR Requirements – EQ cake biosolids shall be treated and monitored to meet Class A Pathogen Reduction and VAR standards prior to sale or giveaway in bulk, bag or other container for the purpose of land application or blending, and prior to use in a blended product. Biosolids shall be monitored and limited in accordance with the treatment option identified below:

<table>
<thead>
<tr>
<th>TREATMENT OPTION: CLASS A PATHOGEN REDUCTION ALTERNATIVE 1</th>
<th>MONITORING REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 9VAC25-32-356 B, C, E or F.</td>
<td>1/Month (1)(2)</td>
</tr>
</tbody>
</table>

b) The temperature of the sewage sludge that is used or disposed shall be maintained at a specific value for a period of time in accordance with 9VAC25-32-710.A.3.b.

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.

<table>
<thead>
<tr>
<th>EQUATION (1)</th>
</tr>
</thead>
</table>
| \[
D = \frac{131,700,000}{10^{0.1400t}} \\
D = \text{time in days} \\
t = \text{temperature in degrees Celsius}
\] |

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).

<table>
<thead>
<tr>
<th>EQUATION (2)</th>
</tr>
</thead>
</table>
| \[
D = \frac{50,070,000}{10^{0.1400t}} \\
D = \text{time in days} \\
t = \text{temperature in degrees Celsius}
\] |

<table>
<thead>
<tr>
<th>VECTOR ATTRACTION REDUCTION TREATMENT STANDARD OPTION 1</th>
<th>MONITORING REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>38% Reduction of volatile solids by digestion (9VAC25-32-720.B.1).</td>
<td>1/Month (1)(2)</td>
</tr>
</tbody>
</table>

(1) Between sampling events, operating records shall demonstrate that the wastewater treatment plant (WWTP) is operating at a performance level known to meet pathogen reduction and VAR standards.

(2) Process monitoring shall be sufficient to demonstrate compliance with Pathogen Reduction Alternative 1 and VAR Option1 requirements.
Nutrient Characteristics – All EQ cake biosolids and blended EQ biosolids products shall be monitored and limited as specified below prior to distribution and marketing:

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>LIMITATIONS</th>
<th>MONITORING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monthly Average</td>
<td>Minimum and Maximum</td>
</tr>
<tr>
<td>Percent Solids (%)</td>
<td>NL</td>
<td>NA</td>
</tr>
<tr>
<td>Volatile Solids (%)</td>
<td>NL</td>
<td>NA</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen (mg/kg)&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>NL</td>
<td>NA</td>
</tr>
<tr>
<td>Ammonium Nitrogen (mg/kg)&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>NL</td>
<td>NA</td>
</tr>
<tr>
<td>Nitrate Nitrogen (mg/kg)&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>NL</td>
<td>NA</td>
</tr>
<tr>
<td>Total Phosphorus (mg/kg)&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>NL</td>
<td>NA</td>
</tr>
<tr>
<td>Total Potassium (mg/kg)&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>NL</td>
<td>NA</td>
</tr>
<tr>
<td>pH (s.u.)</td>
<td>NA</td>
<td>NL</td>
</tr>
<tr>
<td>Alkalinity as CaCO&lt;sub&gt;3&lt;/sub&gt; (mg/kg)&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>NL</td>
<td>NA</td>
</tr>
</tbody>
</table>

NL = No Limitation, monitor and report
NA = Not Applicable

<sup>(1)</sup> Expressed on a dry weight basis
d. EQ Biosolids Characteristics – All EQ cake biosolids and blended EQ biosolids products shall be monitored and limited as specified below prior to distribution and marketing:

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>LIMITATIONS</th>
<th>MONITORING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polychlorinated biphenols (PCBs)</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Aldrin/dieldrin (total)</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Benzo (a) pyrene</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Chlordane</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>4 4’ DDT/DDE/DDD (total) (2)</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Dimethyl nitrosamine</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Heptachlor</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Hexachlorobenzene</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Hexachlorobutadiene</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Lindane</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Toxaphene</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Aluminum</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Boron, water soluble</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Calcium</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Chorides</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Manganese</td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>Total Sulfur</td>
<td>NL</td>
<td>NL</td>
</tr>
</tbody>
</table>

NL = No Limit, monitor and report

(1) All parameters are expressed on a dry weight basis.
(2) 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
B. REPORTING REQUIREMENTS

1. Monthly Reporting – The permittee shall submit biosolids monitoring data and a monthly distribution report to the Department of Environmental Quality (DEQ) - Office of Land Application (OLAP) by the 15th day of each month (as evidenced by the transmission date or postmark), for monitoring and land application activities that occurred in the previous calendar month. When the report is submitted electronically, the sender must include the attestation statement in Part I.B.1.d. which states that the transmitted documents are being submitted under his/her signature.

If no EQ cake biosolids or blended EQ biosolids products are produced or distributed under this permit during a calendar month, a report shall be submitted stating that no EQ cake biosolids or blended EQ biosolids products were produced and/or distributed. All reports shall include the name of the permittee and the DEQ permit number.

a. Biosolids Monitoring Data – The following data shall be submitted with the monthly report for all biosolids land applied during the previous month:
   1) The results of the monitoring specified in:
      (a) Part I.A.1.b. Metals Limitations for:
         i. EQ cake biosolids – for sale or giveaway and used in blending;
         ii. Blended EQ biosolids products;
      (b) Part I.A.1.c. Class A Pathogen Reduction and Vector Attraction Reduction – for cake biosolids for sale or giveaway and used in blending:
         i. Indicator organism monitoring;
         ii. CambiTHP™ process control time and temperature data for pathogen reduction;
         iii. Digester volatile solids reduction for VAR;
      (c) Part I.A.1.d. Nutrient Characteristics for:
         i. EQ cake biosolids for sale or giveaway;
         ii. Blended EQ biosolids;
      (d) Part I.A.1.e. EQ Biosolids Characteristics for:
         i. EQ cake biosolids for sale or giveaway and used in blending;
         ii. Blended EQ biosolids;
   2) Monitoring required by Part I.B.1.a.1) shall be submitted in the format provided in the Biosolids Monitoring Report. Supporting documentation, including laboratory chain of custody forms and certificates of analyses, shall be included in the report;
   3) 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. 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 for each month samples were collected in the monitoring period and the highest monthly average reported. Individual results and calculations shall be submitted with the report; and
   4) The maximum concentration shall be reported as the highest single result from all samples collected and analyzed during a monitoring period.
   5) 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 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."
b. Monthly Distribution Report – The monthly distribution report shall include the following information for the month:

1) Monthly Production:
   (a) Total amount of EQ cake biosolids produced, in dry tons and wet tons;
   (b) Total amount of EQ cake biosolids distributed, in wet tons;
   (c) The total amount of EQ cake biosolids used in the blended product, in wet tons;
   (d) The total amount of blended EQ biosolids product produced, in wet tons;
   (e) The total amount of blended EQ biosolids product distributed, in wet tons.

2) For EQ cake biosolids and blended EQ biosolids product distributed in a bag or other container in Virginia include:
   (a) The total amount of EQ cake biosolids or blended EQ biosolids products bagged, in wet tons;
   (b) The amount of EQ cake biosolids or blended EQ biosolids products distributed in bags, in wet tons;
   (c) When bagged EQ cake biosolids or blended EQ biosolids products are distributed in amounts greater than 1 metric ton in a single transaction, for each such transaction include:
      i. The amount of bagged EQ cake biosolids or blended EQ biosolids products distributed, in wet tons;
      ii. The name of the recipient;
      iii. The name of the business that will use the biosolids products, if applicable; and
      iv. The date of each transaction.
   (d) The amount of EQ cake biosolids or blended EQ biosolids products distributed in other containers, in wet tons;

3) For EQ cake biosolids distributed in bulk to permitted blending facilities in Virginia, include:
   (a) Total amount of EQ cake biosolids distributed in bulk to permitted blending facilities, in wet tons;
   (b) The amount of EQ cake biosolids distributed in bulk for blending, by transaction, in wet tons;
   (c) The name of the permitted blending facility receiving the EQ cake biosolids;
   (d) The blending facility’s Virginia Pollution Abatement permit number authorizing blending, marketing and distribution of EQ biosolids products; and
   (e) The date of each transaction;

4) For blended EQ biosolids product distributed in bulk for use in Virginia include:
   (a) The amount of blended EQ biosolids product distributed in bulk, by transaction;
   (b) The name of the recipient of bulk blended EQ biosolids product;
   (c) The name of the business that will use the biosolids products, if applicable; and
   (d) The date of each transaction;

5) For EQ cake biosolids and blended EQ biosolids products distributed in bulk for the purpose of land application in Virginia, include:
   (a) Total amount of EQ cake biosolids distributed in bulk for land application at agricultural operations, including turf farms, in dry tons and wet tons;
   (b) The amount of EQ cake biosolids distributed in bulk for land application at non-agricultural sites, by transaction, in dry tons and wet tons;
   (c) The amount of blended EQ biosolids products distributed in bulk for land application at agricultural sites, by transaction, in wet tons;
   (d) The name of the recipient of bulk EQ cake biosolids or blended EQ biosolids products;
   (e) The name of the agricultural operations where the bulk EQ cake biosolids or blended EQ biosolids products were applied;
   (f) The address of the agricultural operation where the bulk EQ cake biosolids or blended EQ biosolids products were applied, as identified on the Nutrient Management Plan;
   (g) The latitude and longitude of the delivery location, in decimal degrees; and
   (h) The date of each transaction.
(i) For EQ cake biosolids, provide a presentation of the calculation of the total fee; and
(j) A summary list of the total amount of biosolids applied and the calculated fee broken down by County, presented in alphabetical order by county.

6) 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.

7) 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 VPA04002. With the transmission of this email, I attest that the above statement is true and valid to the best of my knowledge.”

2. Biosolids Land Application Fee – The permittee shall remit to the DEQ a fee of $3.75 per dry ton of Exceptional Quality cake biosolids distributed in bulk for land application in the Commonwealth of Virginia.

Billing and payment procedures are as follows:

1) Upon reviewing the Monthly Distribution Report in Part I.B.1.b.5., DEQ will bill the permittee for the fee that is due. Payment is due 30 days after receipt of the bill from DEQ;

2) The permittee shall collect this fee from the facilities that generated the biosolids that were applied; and

3) A check or money order shall be made 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

Failure to submit payment by the due date may result in the permit being revoked or approved sources being reclassified as unapproved. This permit shall not be reissued, administratively continued or modified without full payment of any past due fee.
3. Annual Report – The permittee shall submit an Annual Report not later than February 19th of each year to the DEQ - OLAP. The report shall be for the previous calendar year's activity. If no EQ cake biosolids were generated or distributed under this permit during a calendar year, a report shall be submitted stating that no EQ cake biosolids were generated or distributed. The report shall include at minimum:

   a. The annual total amount of EQ cake biosolids produced, in dry tons and wet tons;

   b. The annual total amount of EQ cake biosolids and blended EQ biosolids products distributed in Virginia, in dry tons and wet tons;

   c. The annual total amount of EQ cake biosolids distributed in bulk for land application in Virginia, in dry tons and wet tons;

   d. The annual total amount of blended EQ biosolids products distributed in bulk for land application in Virginia, in wet tons;

   e. The annual total amount of EQ cake biosolids distributed in bulk to permitted blending facilities in Virginia, in wet tons;

   f. The annual total amount of EQ cake biosolids and blended EQ biosolids products bagged, in wet tons;

   g. The annual total amount of EQ cake biosolids and blended EQ biosolids products distributed in bags in Virginia, in wet tons;

   h. The annual total amount of EQ cake biosolids and blended EQ biosolids products distributed in other containers in Virginia, in wet tons;

   i. The results of the EQ Biosolids Characteristics monitoring data required by Part I.A.1.e.;

   j. Any biosolids monitoring data required by Part I.A. that were not submitted during the reporting calendar year; and

   k. The annual report shall be certified and signed in accordance with Part II.K.
C. RECORD KEEPING REQUIREMENTS

1. Records Retention – The permittee shall retain records of EQ cake biosolids and blended EQ biosolids products production, marketing and distribution activities for a period of at least five 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. Records to be retained include:

   a. Monitoring information required in Part I.A.;
   b. Reports required in Part I.B.;
   c. Records required below in Part I.C.2.;
   d. Records required below in Part I.E.; and
   e. Site Operator Notification and Information as required in Part I.E.6.;

2. Exceptional Quality Biosolids Record Keeping – Records shall include:

   a. The following certification statement:
      "I certify, under penalty of law, that the information that will be used to determine compliance with the Class A pathogen requirements in 9VAC25-32-675 A and the vector attraction reduction requirement in (insert one of the vector attraction reduction requirements in 9VAC25-32-685 B 1 through B 8) 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.";
   b. A description of how the Class A pathogen requirements in 9VAC25-32-675 A are met; and
   c. A description of how one of the vector attraction reduction requirements in 9VAC25-32-685 B 1 through B 8 is met.

D. BIOSOLIDS MANAGEMENT PLAN (BSMP)

1. BSMP – The BSMP and all of its components are an enforceable part of the permit. The permittee shall implement and maintain a BSMP which shall consist of the following components:

   a. The materials developed and submitted at the time of permit application or permit modification in accordance with 9VAC25-32-60.F.;
   b. The Operations and Maintenance (O&M) Manual;
   c. The Odor Control Plan; and
   d. Reclamation plan for mined and disturbed land.

Any proposed changes in biosolids production, marketing or distribution practices or procedures followed by the permittee, as represented in the documents required by Part I.D.1.a. – c., shall be documented and submitted to DEQ-OLAP within 90 days of the effective date of the changes.
2. **O&M Manual Requirement** – An O&M Manual shall be submitted to DEQ-OLAP within 90 days of the effective date of this permit. The permittee shall conduct all biosolids production, marketing or distribution practices activities in accordance with the O&M Manual. The O&M Manual shall include at a minimum:

   a. A copy of this permit;

   b. Procedures for making the blended EQ biosolids products as registered or licensed by VDACS;

   c. Procedures for a Virginia Certified Land Applicator to provide oversight, as described in Part I.E.5, of the farm sites where EQ cake biosolids or blended EQ biosolids are delivered and land applied, including procedures for:

      1) Confirming presence of the NMP upon delivery of EQ cake biosolids or blended EQ biosolids at the agricultural site where the biosolids will be applied;

      2) Reviewing site management requirements with the farm operator;

      3) Sign posting or evaluation of adequate sign placement at the farm site; and

      4) Evaluation of appropriate staging location and on-site storage facility at the farm site.

   d. Schedules and record keeping instructions for a Virginia Certified Land Applicator assigned to oversight on the farm sites where EQ cake biosolids or blended EQ biosolids are delivered and land applied;

   e. Sampling schedules for:

      1) Required monitoring, including a list of required minimum tests; and

      2) Operational control testing;

   f. Sample collection, preservation, and analysis procedures, including selection of sample locations, and laboratories and methods used;

   g. Instructions for recording and reporting of all monitoring activities; and

   h. Spill response, remediation, and reporting procedures for offsite spills, including telephone numbers for immediate reporting to the DEQ - OLAP; and

3. **Odor Control Plan (OCP) Requirement** – The generating facility’s OCP shall include at a minimum:

   a. Methods used to minimize odor in producing biosolids;

   b. Methods used to identify malodorous biosolids before delivery to the land applier (at the generating facility);

   c. Methods used to identify and abate malodorous biosolids if delivered to the field, prior to land application; and

   d. Methods used to abate malodor from biosolids if land applied.
4. Reclamation of Mined and Disturbed Land – EQ biosolids may be land applied at greater than agronomic rates on sites that have been mined or disturbed, as identified in an approved Reclamation Plan for the purpose of mineral sands mine soil reconstruction; construction site top soil replenishment, or other such soil restoration at disturbed sites in accordance with 9VAC25-32-300 et seq., this permit and the Reclamation Plan.

a. Prior to delivery of EQ biosolids to a reclamation site, the permittee shall submit the following:

1) Reclamation Plan for the reclamation activity:
   A Reclamation Plan developed with the assistance of the Department of Crop and Soil Environmental Sciences of the Virginia Polytechnic Institute and State University for all sites and VDMME for mined sites, that includes at minimum:
   (a) A site map showing area included in the field, including any setbacks that are required;
   (b) The Soil Reconstruction Protocol(s) to be used at the site;
   (c) EQ biosolids rate(s) of application;
   (d) Soil analysis results;
   (e) Crop to be planted following application, including information on the seeding mixture and a seeding schedule; and
   (f) Other practices as required by the Reclamation Plan; and

2) Approved NMP for agricultural activity or turf maintenance following reclamation or release from VDMME for mined sites.

b. The following conditions also apply to reclamation activities on mined and disturbed land:

1) The EQ biosolids application rate shall be limited by the most restrictive cumulative trace element loading in accordance with the table below:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATIONS</th>
<th>MONITORING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum CPLR(1)</td>
<td>Frequency</td>
</tr>
<tr>
<td></td>
<td>(kg/ha)(2)(3)</td>
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<tr>
<td>Cadmium</td>
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<tr>
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<td>16</td>
</tr>
<tr>
<td>Molybdenum</td>
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</tr>
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</tr>
<tr>
<td>Selenium</td>
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</tr>
<tr>
<td>Zinc</td>
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<td>2,500</td>
</tr>
<tr>
<td>Aluminum(5)</td>
<td>4,570</td>
<td>4,113</td>
</tr>
</tbody>
</table>

(1) The CPLR 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 s.u. and lack of regulatory controls of soil pH adjustment after biosolids application ceases.

(2) All limits and criteria are expressed on a dry weight basis in kg/ha and lb/A.

(3) No person shall apply bulk biosolids subject to the CPLR identified above to agricultural land, forest, a public contact site, or a reclamation site if any of the CPLRs identified above has been reached.

(4) The maximum cumulative application is currently under study by USEPA. Research suggests that for Molybdenum a cumulative pollutant loading rate below 40 kg/ha may be appropriate to reduce the risk of copper deficiency in grazing animals.
(5) All sites that receive WTP residuals containing aluminum are subject to the tracking of aluminum loading, regardless of concentration of aluminum in the residuals.

2) If the cadmium concentration of the EQ biosolids is greater than 21 mg/kg, post application soil pH shall maintained at 6.0 or greater during the first year after the initial application.

3) The site shall be revegetated with grass and legumes in accordance with the Reclamation Plan.

c. After a reclaimed site has been released from its permit conditions with the Virginia Department of Mines, Mineral and Energy, or any local government bond obligation, the EQ biosolids may not be applied at reclamation rates. The site must be managed in accordance with the approved nutrient management plan.

E. DISTRIBUTION AND MARKETING

1. DISTRIBUTION AND MARKETING OF EQ CAKE BIOSOLIDS AND BLENDED EQ BIOSOLIDS

a. Under the authority of this permit:
   1) EQ cake biosolids produced at DC Water - Blue Plains may be marketed and distributed in Virginia in bulk, bag or other container;
   2) EQ cake biosolids produced at DC Water - Blue Plains may be distributed in bulk to facilities for blending.; and
   3) Blended EQ biosolids products derived from EQ cake biosolids produced at DC Water - Blue Plains may be marketed and distributed in Virginia in bulk, bag or other container.

b. Prior to the distribution and marketing of any EQ cake biosolids or blended EQ biosolids products, the biosolids product must be registered with the Virginia Department of Agriculture and Consumer Services in accordance with the provisions of § 3.2-3607 of the Code of Virginia. A copy of the registration shall be submitted to the DEQ OLAP.

   The permittee shall maintain the VDACS registration for the duration of this permit.

c. Product Labeling – A label shall be affixed to a bag or other container in which biosolids is sold or given away, or an information sheet shall be provided to the person who receives the biosolids. The label or information sheet provided to users of marketed or distributed biosolids shall include the following:
   1) The name and address of the preparer of the biosolids;
   2) The nutrient content;
   3) A statement that application of the exceptional quality biosolids to the land is prohibited except in accordance with the instructions on the label or information sheet; and
   4) Other information in accordance with regulations promulgated under § 3.2-3601 of the Code of Virginia and with the labeling provisions of § 3.2-3611 of the Code of Virginia.
2. DISTRIBUTION OF EQ CAKE OR BLENDED EQ BIOSOLIDS IN BAGS OR OTHER CONTAINERS

   a. EQ cake biosolids and blended EQ biosolids products may be sold or given away in bag or other containers for resale or direct use.

   b. The permittee shall document the following information for the sale or giveaway of bagged EQ biosolids – cake or blended:
      1) The amount of EQ cake biosolids and blended EQ biosolids bagged;
      2) The amount of EQ cake biosolids and blended EQ biosolids sold or given away in bags; and
      3) The amount of EQ cake biosolids and blended EQ biosolids sold or given away in other containers.

   c. The permittee shall document the following information for the sale or giveaway of bagged EQ biosolids – cake or blended – in amounts greater than 1 metric ton:
      1) Name of recipient;
      2) Name of business that will land apply or resell the biosolids, if applicable;
      3) Amount distributed, in wet tons; and
      4) The date of the transaction.

3. DISTRIBUTION OF EQ CAKE BIOSOLIDS FOR THE PURPOSE OF BLENDING

   a. EQ cake biosolids produced at DC Water – Blue Plains may be sold or given away in bulk to a facility that will blend the EQ biosolids in accordance with a valid VDACS license and registration.

   b. The permittee shall document the following information for the sale or giveaway of EQ cake biosolids in bulk to a blending facility:
      1) Total amount of EQ cake biosolids distributed in bulk to permitted blending facilities, in wet tons;
      2) The name of the blending facility receiving the EQ cake biosolids;
      3) The amount of EQ cake biosolids distributed in bulk for blending, by transaction, in wet tons; and
      4) The date of each transaction.

   c. Notice and Necessary Information - The permittee shall provide to the operator of the blending facility that receives EQ cake biosolids notification and information. The notification shall include at minimum:

      1) A statement that biosolids land applied meet
         (a) Class A pathogen reduction; and
         (b) VAR requirements 1 through 8; and
      2) A statement that metals concentrations in the biosolids were below the pollution concentration and the ceiling limit;
      3) The concentration of Nitrogen and Phosphorus in lbs/wet ton.
4. BULK DISTRIBUTION OF BLENDED EQ BIOSOLIDS PRODUCTS FOR USE AT NON-AGRICULTURAL SITES

a. Blended EQ biosolids products may be sold or given away in bulk for non-agricultural use in Virginia.

b. The permittee shall document the following information for the sale or giveaway of bulk blended EQ biosolids products in amounts greater than 1 metric ton:
   1) Name of recipient;
   2) Name of business that will use the blended EQ biosolids, if applicable;
   3) Amount of blended EQ biosolids products distributed, in wet tons; and
   4) The date of the transaction.

c. Notice and Necessary Information - The permittee shall provide to the recipient of the biosolids notification and information. The notification shall include at minimum:
   1) A statement that biosolids land applied meet
      (a) Class A pathogen reduction;
      (b) VAR requirements 1 through 8; and
   2) A statement that metals concentrations in the biosolids were below the pollution concentration and the ceiling limit;
   3) The concentration of Nitrogen and Phosphorus in lbs/wet ton.

5. BULK DISTRIBUTION OF EQ CAKE BIOSOLIDS FOR LAND APPLICATION AT AGRICULTURAL AND NON-AGRICULTURAL SITES AND BLENDED EQ BIOSOLIDS FOR LAND APPLICATION AT AGRICULTURAL SITES

The following conditions apply to EQ cake biosolids and blended EQ biosolids products that are marketed or distributed in bulk for the purpose of land application at agricultural operations, including turf farms, in Virginia, and EQ cake biosolids marketed or distributed in bulk for the purpose of land application:

a. If EQ cake biosolids are land applied at a site that is authorized to receive biosolids under a VPA or VPDES permit, the biosolids shall be land applied under the authority and conditions of the VPA or VPDES permit; and the site will be managed as such.

b. The permittee shall have on site prior to the start of land application, a certified land applier. While on-site the land applier shall:
   1) Ensure proper staging of the biosolids;
   2) Inspect the on-site storage pad, as applicable;
   3) Post the signs at appropriate locations, or ensure that the signs have been posted at appropriate locations;
   4) Verify the presence of the NMP on site; and
   5) Discuss site specific staging requirements, on-site storage requirements and setbacks with the recipient or operations manager.

c. Nutrient Management Plan
   1) Bulk quantities of EQ cake biosolids or blended EQ biosolids 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.
   2) The NMP shall be developed prior to delivery of bulk EQ cake biosolids or blended EQ Biosolids to the farm site.
      (a) If the NMP is prepared by the permit holder:
i. When EQ cake biosolids or blended EQ biosolids products are bulk 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 bulk land application at the site has commenced; or

ii. When EQ cake biosolids or blended EQ biosolids products are bulk 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 EQ cake biosolids or blended EQ biosolids products to the recipient. The permit holder shall provide a copy of the NMP to DCR within 30 days after bulk land application at the site has commenced.

(b) If the NMP is prepared by the recipient of EQ cake biosolids or blended EQ biosolids products:

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

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

3) After submittal of the NMP to DCR, the permittee is not required to maintain a copy of the NMP.

4) The amount of bulk EQ cake biosolids or blended EQ Biosolids distributed shall not exceed the amount required to meet the application rate established in the NMP.

5) The permittee shall instruct the recipient that the NMP must be onsite during the application of biosolids.

6) Site specific application rates shall not exceed the rates established in the NMP.

d. The permittee shall maintain records of the transaction, including:

1) The amount of EQ cake biosolids distributed, in dry tons and wet tons;

2) The amount of blended EQ biosolids products distributed, in wet tons;

3) The name of the recipient;

4) The name of the farm where the biosolids will be applied;

5) The latitude and longitude, in decimal degrees, of the delivery location;

6) The address of the farm as identified on the NMP; and

7) The date of the transaction.

e. Site Management

1) EQ cake biosolids or blended EQ biosolids shall not be land applied in the setbacks established in the NMP;

2) EQ cake biosolids or blended EQ biosolids shall not be applied in the setbacks from property lines and occupied dwellings that have been extended due to health concerns;

3) EQ cake biosolids or blended EQ biosolids shall not be applied within 200 feet from the property line of a publicly accessible site, or 400 feet from an odor sensitive receptor, such as a hospital, school or church, etc;

4) Upon delivery to an agricultural site, biosolids that will be land applied within 7 days must be staged in accordance with the staging requirements in Part I.G. below.

5) Biosolids may be stored up to 45 days from the day of delivery on an agricultural site in accordance with the on-site storage requirements in Part I.H. below.

f. Daily Notification – The permittee shall provide to DEQ-OLAP written notification each day bulk EQ cake biosolids or bulk blended EQ biosolids are distributed for land application at an agricultural site. This notification shall include:
1) Deliveries pre-scheduled for the day, including
   (a) Name of the recipient;
   (b) Name of the farm where biosolids will be delivered, as identified on the NMP;
   (c) The amount of EQ cake biosolids, or blended EQ biosolids ordered for delivery, in wet tons; and
   (d) Latitude and longitude, in decimal degrees, of the delivery location.

2) Unscheduled deliveries that occurred on the previous day, including
   (a) Name of the recipient;
   (b) Name of the farm where biosolids will be delivered, as identified on the NMP;
   (c) The amount of EQ cake biosolids, or blended EQ biosolids delivered, in wet tons; and
   (d) Latitude and longitude, in decimal degrees, of the delivery location.

2) Sign Posting
   1) Upon delivery of bulk EQ cake biosolids, the permittee shall provide to the recipient a minimum of 2 signs for each field indicated in the nutrient management plan to receive EQ cake biosolids. The permittee shall instruct the recipient to post signs at the site so that they are visible and legible from the public right-of-way in both directions of travel, and conform to the specifications herein.

   Alternatively, the permittee may have a Certified Land Applicator who oversees delivery of biosolids to the site post the signs at the site in accordance with the specifications herein.

   (a) Signs shall be posted at or near the intersection of the public right-of-way and the main site access road or driveway to the site used by the biosolids transport vehicles.
   (b) If the field is located adjacent to a public right-of-way, at least one sign shall be posted along each public road frontage beside the field to which biosolids are to be land applied.
   (c) Signs shall remain in place until application has been completed at the site. From the time of posting until the land application has been completed, the farm operator shall make a good faith effort to repair any sign that has been damaged so as to render any of its required information illegible or replace any sign that has been removed from a land application site.

   2) Signs shall be made of weather-resistant materials and shall be sturdily mounted so as to be capable of remaining in place and legible throughout the period that the sign is required at the site. Signs required by this section shall be temporary, nonilluminated, and four square feet or more in area, and contain at least the following information:
      (a) A statement that Exceptional Quality biosolids are being land-applied at the site;
      (b) The name of the permitted product;
      (c) The telephone number of an individual designated by the permittee to respond to inquiries; and
      (d) Contact information for DEQ, including a telephone number for inquiries.

h. Notice and Necessary Information - The permittee shall provide to the operator of the site that receives biosolids notification and information. The notification shall include at minimum:

   1) A statement that biosolids land applied meet
      (a) Class A pathogen reduction; and
      (b) VAR requirements 1 through 8;
   2) A statement that metals concentrations in the biosolids applied to the site were below the pollution concentration and the ceiling limit; and
   3) The concentration of Nitrogen and Phosphorus in lbs/wet ton.
F. TRANSPORT

1. Transport routes should follow primary highways, shall avoid residential areas when possible, and shall comply with all Virginia Department of Transportation requirements and standards.

2. Transport vehicles shall be sufficiently sealed to prevent leakage and spillage of biosolids. For biosolids with a solids content of less than 15%, totally closed watertight transport vehicles with rigid tops shall be used to prevent spillage unless adequate justification is provided to DEQ-OLAP demonstrating that such controls are unnecessary prior to transport. DEQ-OLAP may also require certain dewatered biosolids exceeding 15% solids content to be handled as liquid Biosolids.

3. The permittee shall take appropriate steps to prevent drag-out and track-out of dirt and debris or biosolids from land application sites onto public roads. Where material is transported onto a paved or public road surface, the road surface shall be cleaned thoroughly as soon as practicable, but no later than the end of each day.

4. The permittee shall be responsible for the prompt cleanup and removal of biosolids spilled during transport. The operations manual shall include a plan for the prevention of spills during transport and for the cleanup and removal of spills. The permit holder shall ensure that its personnel, subcontractors or the drivers of vehicles transporting biosolids for land application shall be properly trained in procedures for spill removal and cleanup.

5. The permittee shall promptly report offsite spills to DEQ-OLAP, the chief executive officer or designee for the local government jurisdiction in which the spill occurred, 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.

6. A written report, which shall include a description of measures taken in response to the spill, shall be submitted by the permittee to DEQ, 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.

G. STAGING

Biosolids may be staged in preparation for commencing land application or during an ongoing application at agricultural sites. Biosolids shall be staged within the land application area of the field identified in the NMP or an adjacent field. Staging is not considered storage and shall not take the place of storage.

a. Staging of biosolids shall not commence unless the field meets the requirements for land application in accordance with Part IX of 9VAC25-32-303 and field conditions are favorable for land application.

b. Biosolids may be staged for up to seven days, including the first day biosolids are offloaded onto the staging area, with the following exceptions:

1) In areas of Karst topography;
2) In areas identified in the U.S. Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS) soil survey as frequently flooded; or
3) At sites that have on-site storage.
c. If staged biosolids cannot be spread by the end of the seventh day of staging, the permittee shall ensure the following actions are taken:

1) Biosolids shall be covered to prevent contact with precipitation;
2) DEQ-OLAP shall be notified in writing within 24-hours of determining that the biosolids will not be spread by the end of day seven, and no later than the close of business on day seven. Notification shall include the biosolids source(s) and amounts, location of the site, and reason for staging biosolids longer than seven days; and
3) Biosolids which have been staged for greater than seven days shall be spread or removed from the field as soon as field conditions that prohibit access to the field by loaders and spreaders no longer exist.

d. Staging shall be limited to the amount of biosolids specified in the NMP to be applied at the intended field.

e. Biosolids will be staged within the land application area of the field in which the biosolids will be applied or in a field adjacent to the subject field, in a location selected to prevent runoff to waterways and drainage ditches.

f. Biosolids shall not be staged in the setback areas identified in the NMP.

g. Biosolids shall not be staged overnight within 400 feet of an occupied dwelling unless the setback is reduced or waived with the written consent of the dwelling occupant and landowner.

h. Biosolids shall not be staged overnight within 200 feet of a property line unless the setback is reduced or waived with the written consent of the landowner.

i. Management practices, as described in the BSMP, shall be utilized as appropriate to prevent pollution of state waters by staged biosolids.

j. The certified land applier will instruct the farm operator to inspect the staged biosolids daily and after precipitation events of 0.1 inches or greater to ensure that runoff controls are in good working order. Observed excessive slumping, erosion, or movement of biosolids is to be corrected within 24 hours of observation. Any ponding at the site is to be eliminated and any malodor shall be addressed in accordance with the OCP.

k. Staged biosolids shall be managed so as to prevent adverse impacts to water quality or public health.
H. ON-SITE STORAGE

a. Biosolids may be stored for up to 45 days on a constructed surface at a location preapproved by DEQ-OLAP. These stored biosolids shall be applied only to sites under the operational control of the same owner or operator of the agricultural site where the on-site storage is located.

b. Operational requirements for on-site storage include the following:

1) The permittee shall notify DEQ-OLAP on the day of delivery whenever it is necessary to implement on-site storage. Notification shall include the amount of biosolids and the location of biosolids to be stored;
2) Storage shall be limited to the amount of biosolids specified in the NMP to be applied at sites under the operational control of the same owner or operator of the site where the on-site storage is located;
3) If malodors related to the stored biosolids are verified by DEQ-OLAP at any occupied dwelling on surrounding property(ies), the malodor shall be corrected, in accordance with the OCP, within 48 hours following DEQ’s notification to the permittee, or the biosolids must be removed from the storage site;
4) All biosolids stored on the on-site storage pad shall be land applied by the 45th day, including the first day of on-site storage;
5) Best management practices shall be utilized as appropriate to prevent contact of the biosolids with storm water run on or runoff;
6) The certified land applier shall instruct the farm operator to inspect the stored biosolids at least every seven days and after precipitation events of 0.1 inch or greater to ensure that runoff controls are in good working order;
7) Observed excessive slumping, erosion, or movement of biosolids is to be corrected within 24 hours of observation. Any ponding or malodor at the storage site is to be corrected in accordance with the OCP; and
8) Storage of biosolids shall be managed so as to prevent adverse impacts to water quality or public health.

c. Construction requirements for on-site storage include the following:

1) Existing on-site storage shall comply with the requirements of this section as of September 1, 2014;
2) An on-site storage “pad” shall be constructed within a site approved for land application;
3) On-site storage shall be located to provide minimum visibility of the biosolids from adjacent properties;
4) The surface shall be constructed with sufficient strength to support operational equipment and with a maximum permeability of 10^{-7} cm/sec; and
5) In areas of Karst topography and environmentally sensitive sites, on-site storage may be prohibited or require additional restrictions.
I. OTHER SPECIAL CONDITIONS

1. Threatened and Endangered Species Protection – No person shall apply biosolids to the land if it is likely to adversely affect a threatened or endangered species listed in 4VAC15-20-130 and § 4 of the Endangered Species Act (16 USC § 1533) or if the land application is likely to adversely affect its designated critical habitat.

2. The Board will modify or, alternatively, 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 promulgated under Section 405(d) of the Clean Water Act, the State Water Control Law, or 9VAC 25-32-10, et seq., of the Virginia Pollutant Abatement Permit Regulation.

3. 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.

4. 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.
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. Records related to biosolids data and information specified in agreements between generator, owner, agents, landowners and farmers 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 as specified in Part I.B. of this permit.
2. Monitoring results shall be reported on forms provided or specified by the Department.
3. If the permittee monitors any pollutant specifically addressed by this permit, at a sampling location specified in this permit, more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted on the reporting form specified by the Department.
4. If the permittee monitors any pollutant that is not required to be monitored by this permit, at a sampling location specified in this permit, and uses test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection
Agency, or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted on the reporting form specified by the Department.

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.
1. 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.
2. 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 effects 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.
3. 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.
4. 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 I G, H and I may be made to the Department’s Central Office at (804) 698-4000 (voice) or (804) 698-4032 (fax), or online at http://www.deq.virginia.gov/programs/pollutionresponsepreparedness/makingareport.aspx. 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 Management 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, to reflect the requirements of any changes in the statutes or regulations. 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. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

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.