

TENTATIVE AGENDA AND MINIBOOK
STATE WATER CONTROL BOARD MEETING
WEDNESDAY, MAY 17, 2017

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
4949-A COX ROAD, TRAINING ROOM
GLEN ALLEN, VA 23060

CONVENE – 10:00 A.M.

		TAB
I. Minutes (December 12, 2016)		A
II. Permit - Virginia Pollution Abatement Synagro Central, LLC - Permit No. VPA01576 (Nelson Co.)	Zahradka	B
III. Regulation – Final Exempt VPDES Permit Regulation (9VAC25-31) and VSMP Regulation (9VAC25-870) Amendments - Incorporation of Electronic Reporting Rule	Harris	C
IV. Significant Noncompliance Report	O’Connell	D
V. Consent Special Orders - VPDES Archer Western Contractors, LLC (Yorktown)	Pool	E
VI. Public Forum		
VII. Other Business Division Director’s Report Petition for Rulemaking – Selenium Water Quality Standard By-Laws Future Meetings (June 29, September 28 and December 11)	Davenport/Schneider	F

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions arising as to the latest status of the agenda should be directed to the staff contact listed below.

PUBLIC COMMENTS AT STATE WATER CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory actions and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for its consideration.

For Regulatory Actions (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period). Notice of these comment periods is announced in the Virginia Register, by posting to the Department of Environmental Quality and Virginia Regulatory Town Hall web sites and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For Case Decisions (issuance and amendment of permits), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft

permit for a period of 30 days. If a public hearing is held, there is an additional comment period, usually 45 days, during which the public hearing is held.

In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

Regulatory Actions: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who commented during the public comment period on the proposal are allowed up to 3 minutes to respond to the summary of the comments presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.

Case Decisions: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions of the decision. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then allow others who commented during the public comment period (i.e., those who commented at the public hearing or during the public comment period) up to 3 minutes to respond to the summary of the prior public comment period presented to the Board. No public comment is allowed on case decisions when a FORMAL HEARING is being held.

Pooling Minutes: Those persons who commented during the public hearing or public comment period and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes, or 15 minutes, whichever is less.

New information will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in rare instances, new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who commented during the prior public comment period shall submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. In the case of a regulatory action, should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, the Department may announce an additional public comment period in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than those on the agenda, pending regulatory actions or pending case decisions. Those wishing to address the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentations to 3 minutes or less.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378; e-mail: cindy.berndt@deq.virginia.gov.

Modification of VPA Permit No. VPA01576 – Synagro Central, LLC. – Nelson County: When the biosolids program was transferred from the Virginia Department of Health (VDH) in 2008, Synagro Central, LLC (Synagro) was land applying biosolids in Nelson County under the authority of a VDH Biosolids Use Regulation (BUR) permit. DEQ issued the initial VPA permit for this activity on March 8, 2011, and included a total of 695.4 acres (34 fields at 4 sites). There have been no major modifications to the permit since the initial issuance, although some original field acreage has been corrected for a current total of 688.3 acres.

Synagro submitted a VPA permit application on May 12, 2014 requesting to modify their existing permit to add a total of 1929.7 acres (81 fields at 9 sites), and following DEQ technical review and requests for additional information, staff determined the permit application to be complete on June 4, 2015.

Along with the addition of land, DEQ also proposes to modify the permit to incorporate amendments to regulations pertaining to biosolids (9VAC25-32 and 9VAC25-20) that became effective on September 1, 2013.

Public Notice and Public Meeting:

DEQ notified Nelson County officials, VDH, and the Department of Conservation and Recreation (DCR) of receipt of the VPA permit application, and sent 215 postcards to adjacent property owners notifying them of the proposed permit modification and inviting them to a public informational meeting to discuss the proposal. DEQ published notices announcing the public meeting in the *Nelson County Times* on May 26, 2016. DEQ held the public meeting at 6:00 PM on June 8, 2016, at the Nelson County General District Court in Lovingston, Virginia in the General District Courtroom. Approximately 47 persons attended the meeting.

Summary of Public Response:

During the public meeting, several persons made it clear that they wanted to challenge issuance of the permit. Examples include the following:

- One meeting attendee exchanged contact information with other attendees for additional correspondence after the meeting.
- Several persons spoke at the meeting related to:
 - Health concerns over unknown pathogens,
 - Effects of pharmaceuticals in biosolids,
 - Old research regarding health issues and biosolids,
 - Effects of heavy metals on earthworms,
 - Ground and surface water impacts,
 - Interaction with the proposed pipeline path that would be coming through Nelson County
- During the staff presentation, one of the land owners whose property was included in the application announced that he was removing his land from the permit.
- Multiple speakers specifically noted their desire for a hearing, asking how many requests would authorize a hearing. The attendees voiced their confidence that they could easily obtain 25 requests.

There was no formal comment period on the proposed permit action following the public meeting; however, public interest was significant, with numerous persons noting that they wanted to comment and request a hearing. The Nelson County Times contacted the DEQ-VRO to provide more information for a follow up story that was written about the public meeting. The resulting article focused specifically on how to request a hearing, asserted that 25 requests would trigger a hearing, and included statutory and regulatory citations. One citizen requested all adjoining landowner information including a copy of the postcard DEQ sent out and a list of adjoining landowner information, including addresses.

Summary of Locality and State Agency Responses:

DEQ received no comments from Nelson County, the VDH or the Virginia Department of Conservation and Recreation on the permit application.

Permit Applicant Request:

Due to the nature and magnitude of the public response and the associated likelihood that the statutory requirements to convene a public hearing would be met, Synagro discussed with DEQ the mechanism for not waiting for the requisite number of public hearing requests to be received before deciding to convene a hearing. On August 9, 2016, Synagro requested that DEQ consider combining the notice of the draft permit with a notice of public hearing for Nelson County, as Synagro has business needs to expedite the permit issuance. On October 6, 2016, the DEQ Deputy Director authorized a combined comment period for the draft permit and the notice of the public hearing.

Preparation of Draft Permit:

The draft permit was completed on August 30, 2016. Following management review and edits, staff sent the draft permit to Synagro on September 7, 2016. Following edits of field identification numbers, Synagro concurred with the draft permit on September 23, 2016.

Public Notice and Public Hearing

Notice seeking public comment on the draft permit and to announce the public hearing was published in *The Nelson County Times* on November 3, 2016 and November 10, 2016. The comment period ended on January 6, 2017. During the comment period, DEQ received 53 written comments:

- 47 comments were opposed to the permit; 43 of which were essentially the same letter
- 4 were requests for information
- 2 were in favor of the permit.

The public hearing was held at 7:00 p.m. on December 8, 2016, at the Nelson County General District Court in Lovingston. Mr. Robert Dunn served as hearing officer. An interactive informational session preceded the hearing. The public hearing comment period closed on January 6, 2017. Below is a summary from the hearing:

- 22 members of the public attended the hearing, in addition to the permit applicant, state agency representatives, and the Nelson County local biosolids monitor;
- 14 persons provided comments during the public hearing, in addition to the permit applicant;
- § 13 spoke in opposition to the permit;
- § 1 spoke in favor of the permit;
- 3 letters were presented on behalf of Nelson County farmers currently receiving biosolids that were unable to attend the hearing.

Public Comments and Staff Responses

Below is a summary of public comments received in writing during the comment period and orally at the public hearing.

1. Biosolids Composition and Protection of Human Health and the Environment

Comments were received expressing concerns over the composition of biosolids as it relates to human health and the environment:

- Potential risk from nanomaterials and emerging contaminants;
- Disapprove of the spreading of toxic chemicals, pathogens, bacteria & viruses;
- Effects of chemicals, hazardous materials and pharmaceuticals;
- Concerns over unknown chemicals;
- Effects on breathing and the spread of tuberculosis;
- Spreading biosolids on mountains in Nelson would cause diseases to blow throughout the county;
- Large food companies not accepting products from land that has used biosolids;
- Excess nutrient and contaminants entering the food chain;
- Root vegetable restrictions mean biosolids are not safe;
- Health effects after land application;
- Questioned public access restrictions;
- As is, this permit will not protect the health of citizens.

Staff Response:

The Virginia State Water Control Law ([§ 62.1-44.19:3.A.](#)) requires permits for the application of biosolids. The permit conditions contain all of the criteria required by the federal regulation plus additional requirements such as setbacks from homes and environmentally sensitive features, nutrient management plans (NMPs), public notification (including signage), financial assurances, local authority, inspections, and training. The combined state and federal restrictions, such as the federal access and harvesting restrictions and the state requirement for signage, work in concert to mitigate risk. Any person who land applies biosolids must obtain authorization to do so under a VPA permit and conduct all land application activity in conformance with that permit.

The 2007 Virginia General Assembly ([HJ 694](#)) commissioned a group of experts to study the issues surrounding biosolids. The Biosolids Expert Panel (the Panel) published their final report as [House Document No. 27](#) in 2008. The Panel determined that as long as biosolids are applied in conformance with all state and federal laws and regulations, that there is no scientific evidence of any toxic effect to soil organisms, plants grown in treated soils, or to humans (via acute effects or bio-accumulation pathways) from inorganic trace elements (including heavy metals) found at the current concentrations in biosolids. DEQ and the State Water Control Board (SWCB) considered the Panel's review and recommendations when the VPA regulations were [amended in 2013](#). The Panel noted in its report that "while certain contaminants have been found in land-applied biosolids, mere presence will not in itself cause

water quality impacts without a means to reach ground and surface waters. Additionally, presence does not indicate danger without a toxic concentration.”

Research into the safety and use of biosolids as an agricultural soil amendment is ongoing. The Clean Water Act ([Section 405\(d\)\(2\)\(C\)](#)) requires the Environmental Protection Agency (EPA) to [review existing sewage sludge regulations](#) at least every two years. The purpose of the review is to identify additional pollutants that may be present in sewage sludge, and if appropriate to develop regulations for those pollutants. DEQ, along with VDH, monitor the progress of the research conducted by EPA in this regard, and if necessary, will respond to significant findings with recommendations to modify the VPA regulation. The [latest review](#) for which EPA has finalized results is 2011. The 2013 review is currently being evaluated by EPA management, and the review for 2015 is in progress.

During the summer of 2014, VDH performed a follow-up review of the VPA regulations in light of research that had been conducted since 2008. Consistent with earlier reviews, VDH’s recent literature review did not find any contributory associations between biosolids exposure and adverse health effects. In addition, the 2016 Virginia General Assembly passed [HJ120](#), which directs the [Joint Legislative Audit and Review Commission \(JLARC\)](#) to analyze the current scientific literature regarding the long-term effects of biosolids and industrial residuals on health, including potential impacts on well, surface, and ground water; and evaluate the regulatory requirements for land application and storage. Until there is new relevant research to conclude otherwise, DEQ is confident that the VPA regulations and permits are protective of human health and the environment.

2. Sampling and Testing of Biosolids and Soils

Comments were received suggesting

- Not enough testing;
- Concerns over methodology of testing;
- Testing for pharmaceuticals, chemicals and hazardous materials;
- The permit only regulates 9 heavy metals which falls short of all possible metals that could be present;
- Study by EPA says more action is needed to protect water resources from unmonitored hazardous chemicals;
- Testing of sludge before land application and disclosure of results;
- Every load of biosolids delivered to a site should be tested;
- Increased frequency of testing and duration of testing after land application takes place.

Staff Response:

The constituents in biosolids that the draft permit requires be monitored, and the frequency of that monitoring, is consistent with federal regulation ([40CFR Part 503](#)). Frequency is based on the amount of biosolids that is land applied from a particular source, and takes into account the expected consistency of the biosolids content. Sources of contamination from industrial sources is regulated through the implementation of pre-treatment programs that both protect the critical biological populations in advanced wastewater treatment plants as well as limit potentially harmful levels of pollutants in the solids removed from the wastewater. Contamination of biosolids during transport from the wastewater treatment plant to the land application site has not been identified as a likely source of pollutant limit exceedances. Monitoring by the permit holder is a primary component of the regulations used to implement Clean Water Act requirements and is used extensively throughout all water permits.

3. Livestock, Wildlife, and Unrestrained Domestic Animals

Comments were received concerning possible effects of biosolids applications to livestock and how wildlife and unrestrained domestic animals moving through land application sites may be affected.

- Chronic wasting disease in deer populations;
- Effects of livestock for human consumption grazing on biosolid fields and passing heavy metals into the food chain;
- Tye River is stocked, will there be coordination with stocking the Tye and land application?;
- Requesting disclosure on food animal production on sludge fields;
- No food production should be allowed on sludge fields;

Staff Response:

The VPA permit regulation ([9VAC25-32-675.B.5.e](#)) requires that livestock not graze on fields for a minimum of 30-days after Class B biosolids have been land applied.

The wildlife and domestic animal matter was considered by the Biosolids Expert Panel and no additional requirements were included in the VPA Regulation, as it was found that the limited exposure to wildlife poses no greater threat than normal agricultural activity. Additionally, the federal risk assessment did not find that wildlife posed a significant risk of pathogen transmission.

4. Landowner Consent

Comments were received questioning whether the landowners were fully aware of the following:

- What source was being land applied;
- Liability of the farmer versus the land applier;
- Financial risk to farmer if sued by neighbors;
- Farmer accountability for clean up;
- In Pennsylvania, farmers are liable for decreased property values;
- Farmers should be relieved of any liability for accepting sludge.

Staff Response:

Virginia law ([§ 62.1-44.19:3](#).A.3 of the Code of Virginia) requires that permit applications for land application of biosolids include the landowner's written consent to apply biosolids on his or her property. In signing the consent form, the landowner also attests that they have received a copy of the [DEQ Biosolids Fact Sheet](#). The Fact Sheet includes information regarding the origin of biosolids, different types of biosolids treatment, what testing is required, and ongoing EPA research on contaminants of emerging concern.

Pursuant to Va. Code ([§ 62.1-44.22](#)), the fact that any owner holds or has held a permit issued by the Board shall not constitute a defense in any civil action involving private rights of adjacent or nearby property owners. In addition, as required by the Va. Code ([§ 62.1-44.19:3](#).H) and the VPA regulations, Synagro maintains an environmental liability policy applicable to all their land application activity in Virginia, to pay claims for cleanup costs, personal injury, and property damage resulting from the transportation, storage, or land application of biosolids.

5. Accumulation of heavy metals

Comments were received with concerns regarding the risks of heavy metal accumulation. Comments included:

- Accumulation of heavy metals could deem biosolids land application sites hazardous waste dumps;
- Has DEQ calculated the cumulative APLR for these sites using the VDHBUR and VPA permits?

Staff Response:

EPA addressed heavy metal accumulation in the development of the federal regulations for biosolids land application ([40CFR Part 503](#)) and determined that as long as the concentration of heavy metals in the biosolids were below specified levels, accumulation would not cause problems. The basis for this assertion is that the considerable organic component contained in the biosolids acts as a sink for the small amounts of added metals; as additional metals are added, so is additional organic matter to bind those metals. The state and federal rules require that if biosolids contain metals above specified levels, then cumulative loading rates (CPLR) for Class B materials, and annual pollutant loading rates (APLR) for exceptional quality/Class A materials, would be required. Federal and state regulations prohibit land application of biosolids with metals concentrations above certain concentrations. DEQ has not calculated the APLR for Class B land application sites in Virginia because (i) the regulatory requirement is not applicable, and (ii) the metals concentrations in the biosolids land applied in Virginia are below the levels where accumulation would pose a problem.

6. Odor

Comments were received expressing concern in regard to the odor associated with biosolids, including.

- Requesting air testing every six months.

Staff Response:

The regulations do not prohibit odors. Biosolids, at times, can and do have objectionable odors. The type of treatment process and the climatic conditions during and after application can influence both odor and its intensity. In the development of the most recent biosolids amendments to the VPA Permit Regulation, the regulatory advisory panel considered the use of odor measurement devices, but the requirement was not included in the regulation due to the inherent subjectivity of the measurements. Further, the methodology and equipment to conduct air testing related to

odor or airborne constituents is not standardized as a commercially available product suitable for regulatory measurements. The VPA Permit Regulation does require the mitigation of odors [[9VAC25-32-60.F.1.c.\(3\)](#)] by both the wastewater plants generating biosolids and the land appliers. Accordingly, the permit requires an Odor Control Plan with the following conditions:

- (a) Methods used to minimize odor in producing biosolids;
- (b) Methods used to identify malodorous biosolids before land application (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 such as incorporation, if applicable.

The odor control plans will become an enforceable part of the permit, and may be reviewed over the course of the permit term for adequacy should site or source specific odor issues become repetitive. DEQ encourages nearby residents to contact the agency at the number provided on the notification sign as soon as possible when odor issues are identified so that site-specific issues can be investigated and any patterns with sources, practices, or sites identified.

7. Insufficient Laws, Regulations, and Permits

Comments were received addressing VPA laws, regulations, and draft permits and the lack of confidence that the permits encompass or thoroughly regulate all potential situations:

- Regulations should be reevaluated;
- Deny permit until JLARC study has been completed;
- 100' setback from rivers is not sufficient-it should increase as elevation increases;
- Desire for increased signage, increase setback from wells and surface water to 750';
- Desire for signage for sludge free zones;
- Concerns about frequency of land application;
- 25 year/24 hour storm terminology is out dated;

Staff Response:

DEQ has processed the permit application and prepared a permit in accordance with the law and regulation as they exist. The permit is an original issuance of a VPA permit. As part of the issuance process, and in accordance with the VPA regulation, adjacent landowners were notified, a public meeting was held, and public notice of the draft permit was completed.

The permit contains all of the criteria required by the state and federal regulations such as setbacks from homes and environmentally sensitive features, NMPs, public notification (including signage), financial assurance, local authority, inspections, and training.

The work of the 2008 Virginia Biosolids Expert Panel, the biennial reviews by the EPA, the technical advisory committee that advised DEQ on the regulations promulgated in 2013, and the VDH review in 2014 have all contributed to the existing regulatory requirements. In addition, the 2016 Virginia General Assembly passed [HJ120](#), which directs the [Joint Legislative Audit and Review Commission \(JLARC\)](#) to analyze scientific literature on the health effects of biosolids and industrial residuals, evaluate the feasibility of requiring municipal utilities that are currently permitted to generate "Class B" material to upgrade their facilities to generate "Class A" material, and undertake other analyses. This is a two-year study.

The permit includes a "reopener" clause, which would allow DEQ to make modifications to the permit before the expiration date, should any of JLARC's findings necessitate changes to State Water Control Law or the VPA Permit Regulation.

8. Use of Class B biosolids and Class A biosolids

Comments were received questioning the safety of Class B biosolids. Comments included:

- Suggest requiring application of Class A material only, as it is more treated;
- Class B biosolids require more stringent oversight;
- Class B cannot be used in urban areas but can in rural areas, thus showing disregard to rural citizens;

Staff Response:

The biosolids characterization as Class A or Class B refers to the level of pathogen reduction treatment. Class A biosolids do contain fewer pathogens than a Class B material. For this reason, federal and state regulations require land application site restrictions, such as setbacks and access restrictions, for the land application of Class B materials. The pathogen reduction requirements established by EPA (and incorporated into Virginia regulation) maintain that the protections afforded by Class B pathogen reduction plus specified site restrictions equals the protections afforded by land application of Class A material without site restrictions.

Class B biosolids can be applied in urban areas; however, the access restriction is longer. The relevant rule governing differences in site management for Class A and Class B biosolids can be found at [9VAC25-32-675](#) of the VPA Permit Regulation. Land application of Class B biosolids is allowed on public contact sites (areas where people are likely to come into contact with biosolids applied to the land) if specific access restrictions are followed. [9VAC25-32-675.B.5.f-h](#). details the relevant restrictions (e.g. public access restricted for 1 year). Private farmland is considered to have a low potential for public exposure, thus the access restriction is shorter (30 days).

As mentioned in the comment response in section 7, the [JLARC study \(HJ120\)](#) will evaluate the feasibility of requiring municipal utilities that are currently permitted to generate "Class B" material to upgrade their facilities to generate "Class A" material, and undertake other analyses.

9. Property Values, Truck Traffic, and Quality of Life

DEQ received comments that alleged that there would be a decrease in property values and a negative effect on the quality of life as a result of land application of biosolids:

- Effects to agri-tourism in Nelson County, including:
 - Fruit and vegetable production
 - Decreases in tourism due to odors
 - Contamination of rivers causing
 - § Decrease in fishing
 - § Water recreation worries

Staff Response:

The impact of land application on property values and quality of life was an inherent consideration during the development and adoption of the VPA regulation, and the regulation includes requirements specifically designed to protect the quality of surface waters and reduce the potential for odor impacts. The permit was prepared in accordance with the regulation.

In 2007, [HJ 694](#) required the Biosolids Expert Panel to respond to the question of whether odors from biosolids could affect property values or impact human health and well-being. The Panel's final report recognized that odors from biosolids could potentially impact property values, but could not confirm such an impact or the extent of such an impact based on the current body of scientific literature and information presented directly to the Panel. The Panel recommended that DEQ consider requiring that municipal biosolids generators be required to have odor control plans to ensure that the generator is observing critical control points to minimize odors, thus reducing the potential that odor would impact adjacent properties. The permit includes a requirement for odor control plans from both the generators of the biosolids land applied as well as the land applier.

The permit requires that transport routes shall comply with all VDOT requirements and standards as specified in section [9VAC25-32-540](#) of the VPA Permit Regulation. The permit also specifies the operational requirements of vehicles that may be used to transport biosolids, as described in sections [9VAC25-32-420.A.](#) and [9VAC25-32-540](#) of the VPA Permit Regulation.

10. Background Water Monitoring

Comments were received related to water and soil monitoring:

- Requesting baseline testing of ground water drinking wells before land application and should be tested quarterly after application of biosolids;

Staff Response:

Biosolids land application research that included extensive pre and post application monitoring of soils, stormwater runoff, and groundwater was used to design the BMPs prescribed in the permit so that ongoing testing would not be necessary. The extent of pre-application soils monitoring in the permit is based on the need of data to support the planning of appropriate land application rates. For metals, protective application rates are not dependent upon the concentration of metals in the soils, considering that the land application sites currently support agricultural use (i.e. if there were a soils problem that would cause environmental issues related to metals, that problem would likely be occluding agricultural productivity). For nutrients, the degree of pre-application monitoring in soils is based on the nutrient management regulations and standards and criteria. When permit conditions are followed, post-application monitoring of soils, surface water, and groundwater is not necessary. If non-compliance was suspected, DEQ would consider post application upgradient and downgradient water monitoring as a mechanism to determine if any adverse environmental impact occurred.

Further, biosolids land application is consistent with the [USDA-NRCS Soil Health initiative](#) in that it adds organic matter which can increase biological activity, improve soil structure, and increase water holding capacity which will increase infiltration and reduce surface water runoff.

11. Permit Applicant's Compliance History

Comments were received questioning the compliance history of the permit applicant, Synagro, and responsibility for any damages.

Staff Response:

Synagro currently land applies biosolids in Nelson County under an administratively continued VDH-BUR permit and has no current compliance issues.

The draft permit allows Synagro to land apply biosolids in a manner that is protective of human health and the environment. Pursuant to Va. Code ([§ 62.1-44.22](#)), the fact that any owner holds or has held a permit issued by the Board shall not constitute a defense in any civil action involving private rights of adjacent or nearby property owners. In addition, as required by the Va. Code ([§ 62.1-44.19:3.H](#)) and the VPA regulations, Synagro maintains an environmental liability policy applicable to all their land application activity in Virginia, to pay claims for cleanup costs, personal injury, and property damage resulting from the transportation, storage, or land application of biosolids.

DEQ will perform inspections to ensure compliance with the permit and will initiate enforcement action, if applicable. Any injunctive relief and civil charges sought in an enforcement proceeding will be consistent with applicable law as well as DEQ enforcement guidelines and appropriate for the severity of the violation.

12. DEQ Inspections

Comments were received that questioned DEQ's ability to adequately inspect land application sites, specifically:

- Not enough DEQ staff for adequate oversight.

Staff Response:

[§ 62.1-44.19:3.M](#) of the Code of Virginia requires that DEQ conduct random, unannounced site inspections while biosolids land application is in progress at a sufficient frequency to determine compliance. Pursuant to the Fees for Permits and Certificates Regulation [9VAC25-20-146](#), DEQ collects fees paid by the generators of biosolids. These fees are used to fund inspection staff adequate to monitor the land application of biosolids. Because the amount of the fee paid is based on the dry tons of biosolids land applied, the resources available to fund inspection staff is directly proportional to the amount of biosolids land application activity. With the advent of proportionally more biosolids being land applied in Virginia that have met Class A pathogen reduction standards, DEQ focuses more inspections towards land application of biosolids treated to Class B pathogen reduction standards. In this way, DEQ maximizes inspection value based on the revenue received. Overall, DEQ inspects pollutant management activity related to biosolids land application at a higher frequency than any other permitted activity.

13. Setbacks

Comments were received that questioned the adequacy of setbacks from surface waters to protect public health, specifically:

- Concerns for swimmers and kayakers and why waters are not considered publicly accessible sites for purposes of establishing minimum setbacks.

Staff Response:

The conditions in the permit were written in accordance with Virginia Pollution Abatement (VPA) regulation ([9VAC25-32-30.A.](#)) to prohibit point source discharges of pollutants to surface waters, including wetlands, except in the case of a storm event greater than the 25-year, 24-hour storm.

The VPA regulation ([9VAC25-32-560](#)) requires the implementation of agricultural best management practices (BMPs) to reduce nonpoint source pollution from farmland. This includes restrictions on application timing, application rate, slope, and in particular, setback distances from surface waters. Land application of biosolids may not occur closer than 100 feet from surface waters without a vegetated buffer, nor closer than 35 feet from surface waters with a 35-foot vegetated buffer. All segments of streams and tributaries designated as a Public Water Supply under the Water Quality Standards require a 100 foot setback, regardless of buffer characteristics. Public water supply reservoirs require a 400 foot setback.

[9VAC25-32-560.B.3.e.\(1\)](#) of the VPA Permit Regulation requires that biosolids land application may not occur closer than 200 ft from property lines of publicly accessible sites. The VPA regulation considers publicly accessible sites to be open to the general public and routinely accommodate pedestrians including, not limited to, schools, churches, hospitals, parks, nature trails, businesses open to the public, and sidewalks. Public roads or similar thoroughfares are not considered publicly accessible sites for the purposes of establishing extended property line setbacks.

Unlike features such as nature trails and sidewalks, rivers and streams do not exist solely to accommodate travelers, thus exposure of shoreland area to boaters would be expected to be more intermittent than that of the land area next to a public pedestrian site. Further, the exemption of public roads from the 200 foot setback acknowledges that the traveler on the road is expected to pass through an area rather than remain near the site. This same dynamic applies to a traveler in a boat that is moving along a river or stream. Waters with designated public swimming areas, or waters within a park would be considered publicly accessible and would require the 200 ft. property line setback.

14. Neighbors not being treated fairly

Comments were received with concerns that neighbors were not being treated fairly under the law as the farmers receiving biosolids; specifically citing;

- The 14th amendment - not treating all citizens fairly.

Staff Response:

DEQ wrote the terms of the draft permit in accordance with the Virginia Pollutant Abatement Permit Regulation, which was promulgated under authority granted in the State Water Control Law §62.1-44.15 and (insert biosolids section) and in accordance with the Virginia Administrative Process Act ([§§ 2.2-4000-4031](#) of the Code of Virginia).

15. Support of Permit Issuance and Biosolids Use

Comments were received that supported the issuance of the permit and biosolids use. These comments included:

- Utilization of renewable energy is very important and as a renewable resource biosolids should be used;
- Improved soil health, growth and productivity;
- Economic benefit of biosolids utilization;
- Increased soil fertility as evidenced by control of broom straw and to allow more palatable forages to thrive;
- Has not had any ill health effects from biosolids land application;
- Usage of biosolids allows farming to continue versus selling off for development.

Staff Response:

DEQ acknowledges the comments provided.

Changes to the Draft Permit Requested by Permit Applicant

Following public notice of the opportunity to comment on the draft permit, the applicant requested that fields 2-13 at the Thomas H. Fitzgerald site (NE06) and all fields at the Shannon Tillman site (NE13) be removed from the draft permit.

VPDES Permit Regulation, 9VAC25-31 and VSMP Regulation, 9VAC25-870 - Final Exempt Action –

Incorporation of EPA’s NPDES Electronic Reporting Rule: This regulatory amendment to the Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation, 9VAC25-31, and the Virginia Stormwater Management Program (VSMP) Regulation, 9VAC25-870, is presented to the Board for your consideration as final regulation.

On October 22, 2015, the EPA issued the National Pollution Discharge Elimination System (NPDES) Electronic Reporting Rule which provides requirements for the electronic reporting and sharing of program information. This rule requires the use of electronic reporting instead of paper-based reporting with a goal to improve the ability of programs, such as Virginia’s VPDES program, to shift limited resources to more pertinent tasks by reducing time and resources necessary for the paper-based reporting activities. This rule provides important flexibility during the move from paper-based reporting to electronic reporting while still implementing electronic reporting in a timely manner. The final exempt regulatory action will amend the regulations in order to incorporate the federal electronic reporting rule. This amendment is exempt from the APA as it is necessary to conform to the changes in the federal regulations (§2.2-4006.A.4.c) and also provides clarification of the 24 hour reporting provisions (§2.2-4006.A.4.a).

Report on Facilities in Significant Noncompliance: There are no facilities reported to EPA on the Quarterly Noncompliance Report as being in significant noncompliance for the quarter ending September 30, 2016.

Archer Western Contractors, LLC, Yorktown – Consent Special Order/Civil Charge: Archer Western Contractors, LLC (“Archer”) is the operator of construction activities and CGP permit holder at the P984 Regimental Headquarters and P985 Bachelor Enlisted Quarters at the Yorktown Naval Weapons Station. During stormwater inspections of the Site on June 22, 2015 and August 5, 2015, DEQ staff documented numerous violations of the CGP and Virginia Stormwater Management Program Regulations, including failure to install and maintain erosion and sediment controls in accordance with the erosion and sediment control plan in the SWPPP; failure to update the SWPPP in accordance with CGP requirements; and failure to implement the erosion and sediment control plans as approved or to modify the plans to account for potential or actual changes to drainage areas impacting the design of control measures. During a VWP inspection on July 6, 2015, DEQ staff documented fill material, in the form of measurable accumulations of sediment and gravel, impacting 4,870 linear feet of streams and more than 2.77 acres of wetlands downslope from Archer’s land disturbing activities. Archer contributed to these impacts through stormwater runoff from denuded areas at the Site without effective erosion and sediment controls. The order requires submittal of an updated SWPPP for DEQ review and approval by January 13, 2017. Archer has completed this requirement, and DEQ has approved the updated SWPPP. The order also requires Archer to complete work on erosion and sediment control within 14 days of the effective date of the order (stabilization of dormant areas, stabilization or protection of stockpiles, repair inlet protection, repair sediment traps, repair silt fence). Civil Charge: \$50,000 (\$18,304 for construction stormwater violations and \$31,696 for VWP violations).