

TENTATIVE AGENDA AND MINIBOOK
STATE WATER CONTROL BOARD MEETING
 THURSDAY, DECEMBER 11, 2014
 AND FRIDAY, DECEMBER 12, 2014, IF NECESSARY

General Assembly Building
 9th & Broad Streets,
 Richmond, VA 23219

9:30 A.M. - DECEMBER 11, 2014 - HOUSE ROOM C

			TAB
I.	Minutes (September 29, 2014)		A
II.	Synagro Central LLC Virginia Pollution Abatement Permit - Land Application of Industrial Residuals	Winter	B
III.	Regulations - Final Water Quality Management Planning Regulations (9VAC25-720) 2014 HB445 Amendment	Harris	C
IV.	TMDLs - 7 TMDL Reports including 36 Wasteload Allocations <i>“Benthic Total Maximum Daily Load (TMDL) Development for the North Creek Watershed” ; “TMDLs for Benthic Impairments in Little Otter River (Sediment and Total Phosphorus), Johns Creek, Wells Creek, and Buffalo Creek (Sediment)” ; “Bacteria TMDL Development for Hyco River, Aarons Creek, Little Buffalo Creek, and Beech Creek Located in Halifax and Mecklenburg Counties, Virginia” ; “Sediment TMDL Development for the Coleman Creek Watershed Located in Halifax County, Virginia” ; “Total Maximum Daily Load Development for the Back Bay, North Landing River, and Pocaty River Watersheds” ; “Bacteria TMDL Development in Red Bank Creek and Machipongo River, Virginia” ; and “E. coli TMDL Development for The Pamunkey River and Tributaries, VA”</i>	McKercher	D
V.	Significant Noncompliers Report	O'Connell	E

2:00 P.M. - DECEMBER 11, 2014

VI.	Recyc Systems, Inc. Virginia Pollution Abatement Permit - Land Application of Biosolids	Dail	F
VII.	Public Forum		
VIII.	Other Business Virginia Revolving Loan Fund Future Meetings	Gills	G

9:30 A.M. - DECEMBER 12, 2014 - IF NEEDED - HOUSE ROOM D

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 action 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; fax (804) 698-4346; e-mail: cindy.berndt@deq.virginia.gov.

VPA Permit No. VPA00584, Synagro Central LLC, Land Application of Industrial Residuals:

Background: The proposed Virginia Pollution Abatement (VPA) permit contemplates authorizing Synagro Central LLC to land apply industrial residuals to 321 agricultural and silvicultural sites in the Piedmont region, totaling 16,042.3 acres. The sites are located in Goochland, King and Queen, King William, New Kent, Prince George and Surry Counties. The industrial residuals identified as sources in the permit application are post-wastewater treatment residuals derived from wood processing at the RockTenn plant in West Point, food processing at the Tyson plant in Glen Allen, and food processing at the Smithfield Foods plant in Smithfield. Approximately 44% of the acreage in the VPA permit application has been previously permitted for land application by the Virginia Department of Health (VDH) under its former Biosolids Use Regulation (BUR) program. Since 2008, Synagro has applied both Smithfield Foods and Tyson residuals under administratively continued BUR permits to approximately 9% of the land application area proposed in Prince George, Goochland, King William, and King and Queen. The Smithfield and Tyson residuals have also been land applied under BUR permits in Caroline, Essex, Hanover, Louisa, Madison, Orange, Spotsylvania, and Westmoreland counties. RockTenn, Tyson and Smithfield Foods' wastewater treatment process trains have been evaluated by DEQ and have been included in the "Approved Source List" maintained by the DEQ Office of Land Application Programs (OLAP).

In May 2013, DEQ received the VPA permit application from Synagro Central LLC. DEQ staff conducted significant technical review of the application, and subsequent applicant revisions occurred between initial permit application submittal and completion of the draft permit in December 2013.

Public Notice, Adjoining Property Owner Notification and Public Hearing

Notices announcing the public's opportunity to comment on the draft permit appeared over two successive weeks in five different newspapers (listed below) serving the localities where the sites are located.

- Tidewater Review – 12/25/13 and 1/1/14
- Sussex-Surry Dispatch – 12/23/13 and 12/30/13
- Progress Index – 12/26/13 and 1/2/14
- Herald Progress – 12/26/13 and 1/2/14
- Goochland Gazette – 12/26/13 and 1/2/14

The comment period ended on January 31, 2014.

Contemporaneously, approximately 450 letters were sent to adjoining property owners advising them of the draft permit and the opportunity for them to submit comments. A copy of the notice of the draft permit was included with each letter.

Additionally, letters were sent to the Board of Supervisors chairs, county administrators, VDH health district directors, and planning district commission directors that serve each of the affected localities.

In response to the public notice, comments were received related to odor, the potential for harmful impacts from land application to the land and surface waters, and on public health. A number of comments specifically referenced biosolids, rather than industrial residuals. One commenter questioned the effect of land application on adjoining property values. A total of 72 written comments requesting a public hearing were received: 16 requests did not contain all required criteria, and 41 comments received were in the style of a form letter.

Based on the requests for hearing received, the Director authorized public hearings to be held in King William Courthouse on April 9, 2014 and in Goochland Courthouse on April 10, 2014. These hearings were noticed as follows:

- Tidewater Review – 3/5/14
- Sussex-Surry Dispatch – 3/5/14
- Progress Index – 3/5/14
- Herald Progress – 3/6/14
- Goochland Gazette – 3/6/14

A second comment period associated with the hearings closed on April 25, 2014.

The proposed site in Hanover County, included in the permit application, was withdrawn at the request of the landowner in August 2014.

During the summer of 2014, the VDH Office of Epidemiology performed an additional review of the draft permit. On August 29, 2014, VDH provided DEQ with a letter that, in addition to summarizing their recent literature review related to biosolids, also indicated that VDH did not have any significant concerns with the draft permit for land application of industrial residuals.

In September 2014, DEQ discovered that while the newspaper public notices announcing opportunity for public comment on the draft permit were correct and published properly, some of the notices DEQ sent to the local governments contained typographical errors that caused the notices to not represent the correct geographic scope of the proposed permit. DEQ also discovered that some other county officials had not received the appropriate notices. In response to these process errors, DEQ scheduled an additional public hearing that was held on October 23, 2014 at the DEQ Piedmont Regional Office in Glen Allen. Notices announcing the additional hearing date and an associated comment period were published in newspapers in the affected localities. This comment period began on September 17, 2014 and closed on November 7, 2014.

- Tidewater Review –9/17/14 and 9/24/14
- Sussex-Surry Dispatch – 9/17/14 and 9/24/14
- Progress Index – 9/17/14 and 9/24/14
- Goochland Gazette – 9/18/14 and 9/25/14

Including the applicant, a total of 59 verbal comments were received at the public hearings. DEQ received written comments from a total of 501 persons during the two comment periods associated with the three hearings.

In reviewing the comments on the draft permit, staff consolidated like comments where it was possible to do so without sacrificing meaning. A detailed summary of the comments received with staff responses follows. The comments are organized and presented by issue; there is an accompanying table identifying each person/organization that provided comments and their comment(s).

Elected Official Comments

Four letters were submitted by affected localities opposing issuance of VPA00584 during late spring and summer of 2014. Additionally, three localities and Delegate Chris Peace submitted similar letters during the comment period beginning September 17, 2014.

1. *Delegate Chris Peace who represents Virginia's 97th district submitted letters on September 9, 2014 and October 10, 2014. Mr. Peace expressed concern that DEQ did not have technical standards or a regulatory scheme which specifically address industrial residuals. Mr. Peace expressed concern that excessive nutrients from the proposed land application activity could be harmful to both public health and the environment. Mr. Peace cited a Notice of Violation issued to Synagro on March 12, 2010, regarding biosolids storage facilities in Goochland, Essex, and Fauquier Counties, as well as a lawsuit filed against the company by a citizen of Surry County, and asked that the State Water Control Board deny the permit until consensus can be reached on the science. Mr. Peace requested that additional hearings be held in affected localities to allow for residents to attend.*
2. *Board Chair Manuel Alvarez, on behalf of the Goochland County Board of Supervisors submitted letters on June 13 and October 22, 2014. Mr. Alvarez expressed concerns about unknown long-term effects of land application of industrial residuals on groundwater, surface water, and human health. Mr. Alvarez requested that studies, similar to previous JLARC studies of biosolids, be conducted on industrial residuals and that industrial residual specific regulatory standards and testing and monitoring protocols be established prior to permit issuance. Mr. Alvarez also requested that the setbacks along Beaverdam Creek (and its tributaries), the James River, and adjacent residences be increased prior to permit issuance.*
3. *Board Chair Sean Davis, on behalf of the Hanover County Board of Supervisors submitted a letter on September 18, 2014. Mr. Davis stated that the Hanover Board of Supervisors had received many comments from residents concerned that DEQ does not have technical standards or a regulatory scheme which specifically addresses industrial residuals. Mr. Davis expressed a concern that due to differences in the materials, regulating land application of industrial residuals as biosolids may not ensure protection of public health or the environment. The Hanover Board of Supervisors requested that VPA00584 be denied until DEQ has conducted a study to determine the potential risks of land application of industrial residuals and regulations specific to industrial residuals are established.*
4. *County Administrator Thomas Swartzwelder, at the direction of the King & Queen County Board of Supervisors submitted a letter on June 18, 2014. Mr. Swartzwelder requested the permit be denied, due to possible impacts to ground and surface waters citing the county's abundance of Chesapeake Bay watershed surface waters and the reliance of its citizens upon private wells for drinking water, and lack of regulations specific to industrial residual land application. Mr. Swartzwelder referenced two research papers (G.K. Evanylo et.al. and M.S. Byerly) and submitted those papers with his letter.*
5. *Board Chair Otto Williams, on behalf of the King William County Board of Supervisors submitted letters on May 22 and September 22, 2014. Mr. Williams stated that due to concerns of groundwater contamination not being adequately addressed by the applicant or the DEQ, the permit should be denied. Mr. Williams also requested in his September letter*

that due to DEQ notification errors, an additional hearing be held in King William County, rather than Glen Allen and offered the assistance of county staff in conducting a King William hearing.

6. *County Administrator Rodney Hathaway, on behalf of the New Kent County Board of Supervisors submitted a letter on August 13, 2014. Mr. Hathaway expressed concern that DEQ website stated there are no technical standards for industrial wastes and that DEQ uses other technical resources such as those involving biosolids and those from the Department of Conservation & Recreation for nutrient management. The New Kent County Board of Supervisors requested that VPA00585 not be issued until regulations specific to industrial residual land application are developed.*

Staff Response:

- The Virginia Pollution Abatement (VPA) regulations govern land application activities to prevent discharges to state waters. Material which meets testing standards, including animal manures, biosolids, industrial wastewater, and industrial residuals are applied to land under VPA permits. Done in accordance with applicable requirements, these activities provide valuable sources of nutrients to the lands. The VPA regulations were developed pursuant to CITATION, in consultation with the Virginia Department of Health (VDH) and a number of stakeholders in the academic, industrial and environmental communities. They were reviewed by the Office of the Attorney General, and approved by the State Water Control Board (Board) as activities which could be undertaken with minimal risk to human health and the environment.
- VPA regulations are quite specific regarding the requirements applicable to land application of biosolids, primarily because the nature of biosolids is generally the same among municipal wastewater treatment facilities. Because the composition of industrial residuals is variable depending upon the process from which they were derived, the regulations pertaining to industrial residuals are instead outcome-driven, mandating that permit limitations and conditions be established in each permit to ensure compliance with technology-based limitations, water quality standards, and the State Water Control Law. 9VAC25-32-100 mandates that DEQ impose requirements appropriate to the nature of the specific industrial residuals for which land application is sought to ensure that permits adequately protect natural resources. In all cases, DEQ follows the permitting process for industrial residuals identified at §62.1-44.16 for identifying potential environmental issues and addressing those issues to ensure that public health and the environment are protected. For the three sources proposed to be included in the draft Synagro permit (Tyson, Smithfield, and RockTenn), the permit conditions are similar to conditions applied to biosolids because the risks being mitigated are essentially the same. Conditions are modified where differences warrant; for example, DEQ has proposed additional special conditions to address potential sodium effects of the Smithfield residuals, as this material contains higher concentrations of that element than most biosolids. The draft permit also requires the permit holder to land apply industrial residuals on the same day that they are delivered to the site, which is more restrictive than biosolids permits. The industrial residuals from the Tyson and Smithfield facilities are the residual solids remaining following the complete biological treatment of process wash water generated in the course of the processing of food intended for human consumption. The chemistry of these residuals is predictable and has been verified by testing undertaken by the respective facilities as part of the permit application process. Further, the feathers, skin and offal are diverted to rendering and therefore excluded from the wastewater train that results in the sludge that may be land applied; even if de minimis quantities of these substances are inadvertently entrained in the wastewater, they are removed very early in the treatment process so that they do not end up in the material that is land applied. The industrial residuals from the RockTenn facility are the end products of treatment processes associated with the manufacture and recycling of paper. The predominant constituent being treated is cellulose fiber, and land application of paper mill residuals is not an uncommon practice in the industry. Testing has shown no chemicals of concern. RockTenn uses chlorine dioxide in its bleaching process which does not result in dioxin formation. Again, the chemistry of these residuals is predictable and has been verified by testing.
- Both the Tyson and RockTenn facilities employ state of the art wastewater treatment and are subject to rigorous permit effluent limitations and monitoring requirements. The liquid effluent from the Smithfield facility must comply with the pretreatment requirements of the Hampton Roads Sanitation District, to which it is discharged; and is consistent with DEQ regulations which were developed in conjunction with the VDH.
- VPA permitting regulations require that DEQ technical staff review the nature of the specific industrial residuals at issue. Because of these requirements, and because of the nature of the industrial residuals at issue in this permit, DEQ has a high level of confidence that the permit as drafted is protective of public health and the environment. The VDH has reviewed the permit as well, to include input from local district health directors in the affected localities, and has no significant concerns with the permit. Pursuant to CITE, the State Water Control Board is under a statutory obligation to render a decision on the draft permit.
- Notification errors were limited to notification required to be sent to local governments. Citizens who requested a hearing during the initial draft permit comment period were properly notified of the hearings held in King William on April 9, 2014 and Goochland County on April 10, 2014. Additionally, all comments submitted at the April 9 and April 10, 2014 hearings and the associated comment period have been included in the public comment record and submitted to the State Water Control Board.
- DEQ had communication with several property owners on Timber Ridge Road in Goochland County, which is adjacent to the proposed GO30 site. In response to health-related concerns, DEQ provided the form required for

requesting extended setbacks to these citizens. Extended setbacks have been included in the proposed permit where citizens submitted a completed request form. This process has been available to all residents and/or property owners adjacent to proposed sites. The form is available at the [DEQ website](#) or by contacting the DEQ Piedmont Regional Office.

Public Comments

1. *Comments related to human health (Julia Gary, Elizabeth Donoghue, Ashley Jones, Kathy Crockett, Sherry Woodlief, Donald & Rose Marie Berberich, Ernest Milburn, Bernard Noakes, Charles Skalsky, Rance Tate, Reginald Catlett, Sterling Callahan, Ann Brummer, Douglas Shackelford, Lee Westerman, Lee Rosson, Jacqueline & Cory Hart, C. Tignor, Cal Tate, Charles Linton, Cynthia Smith, Daniel Cash, David Smith, Donald Terrell, Douglas Sowers, J. Hundley, Jack Spain, James Schenck, John Amon, John Mills Jr., John Vaughn, Kenny Barnard, Kevin Engel, Lawrence Coleman, Leonard Scott, Logan Vaughn, Lynwood Broaddus, Mae Coleman, Miles Terrell, Murphy Bailey, Pete Henderson, Peter Fischer, Robert, Baylor Jr., Thomas Farleigh, Todd Beazley, Todd Robinson, William Kreider, John Broaddus, Larry Wells, Steve Smith, Tanju Sonuparlak, Ann Brummer, Mary Kesterson, Cecelia Ropelewski, Eric Ecklesdafer, Diana Parker, Douglas Shackelford, Lee Westerman, Rod & Susan Tatum, Mari Hollingsworth, Allen Guilliams Anne-Marie Jiles, Traci Hurry, Carolanne Whiteside, Latane Moore, Michael Collins, Brenda Tignor, Elizabeth Whiteside, Heather McMahon, Hunter Davis, Kevin Tate, Marvin McDaniel, Mike Shipley, Patrick Newchok, Tammy Wetherington, Troy McDaniel, David Smith, Diane Monohan, Sarah Wetherington, Claudia Lawton, David Bernard, Jacqueline & Cory Hart). Several commenters expressed concern that people with compromised immune systems would be at particular risk from the proposed activity. Requests were made for more extensive testing of biosolids and soils, imposing time restrictions on applications, and imposing increased buffers along the James River. One commenter expressed concern for biosolids constituents entering the food chain. One commenter attributed her mother's death to a nearby biosolids application. One commenter stated that three citizens on the TAC resigned due to their concerns that health issues were not being adequately addressed by the TAC; another commenter read the resignation letter. On the other hand, two commenters stated that they live in proximity to application sites and have not observed any ill health effects. A number of commenters stated that based on personal research and/or personal experience they expect no threat is posed to human health.*

Staff Response: DEQ consulted with the Virginia Department of Health (VDH) to develop the current VPA regulations, and appropriate medical considerations were not diminished during regulatory development. DEQ continues to coordinate with epidemiologists and physicians at VDH to ensure that the permits developed in accordance with the regulation are protective of human health and the environment. In December 2013, DEQ notified VDH local district health directors of the draft permit. During the summer of 2014, the VDH Office of Epidemiology performed an additional review. On August 29, 2014, VDH provided DEQ with a letter that, in addition to summarizing their recent literature review related to biosolids, also indicated that VDH did not have any significant concerns with the draft permit for land application of industrial residuals.

DEQ has also developed a standard procedure for working with VDH physicians to consider extended setbacks for citizens with specific health conditions, specifically those with compromised immune systems. Where citizens request that setbacks from homes and property lines be extended based on medical reasons, DEQ will double the setback distance upon request from the citizen's physician. If further extensions are requested, the request is reviewed by VDH and DEQ establishes a permit requirement based on the resulting VDH recommendation.

The constituents in the industrial residuals proposed to be managed are of a different nature than those typically found in a municipal wastewater treatment train, most notably in the fact that potential human pathogens are expected to be absent or present in substantially lower levels. Nonetheless, the draft permit contains identical setbacks from environmental features designed to limit transport of pollutants to surface and ground waters. Where these setbacks have been observed, no adverse human health effects have been directly linked to land application activity.

While the subject permit proposal addresses industrial residuals that are expected to contain fewer human pathogens due to the origin and composition of the materials, Part I.A.C of the draft permit requires that any industrial residuals produced at a facility where domestic sewage is comingled with the industrial wastewater in the industrial wastewater treatment facility or where meat or any other raw animal based product is processed meet the same pathogen reduction standard as is required by **9VAC25-32-675** for the land application of biosolids. Further, the draft permit requires that any fields where residuals required to meet the pathogen reduction standard are land applied must also be subject to the access and harvest restrictions. Where this suite of restrictions has been employed for land applied materials, there is no scientific evidence of any toxic effect to humans via bio-accumulation pathways from inorganic trace elements (including heavy metals) found at the current concentrations in the industrial residuals included as sources in the draft permit.

2. *Comments related to odor (Francis Gwathmey, Julia Gary, Ralph Sutton, John Broaddus, Larry Wells, Steve Smith, Tanju Sonuparlak, Ann Todd, Ann Brummer, Rick & Gail Gardner, Mary Kesterson, Kelly Place, Larry McClung, Carolanne Whiteside, Latane Moore, Michael Collins, Bonnie Hite, John Davenport, Ron Edwards, Carla Sturtz) or the drift of airborne contaminants (Ken Davidson, Don Wagner). Commenters generally disapproved of odors associated with biosolids*

land application, with some concerns raised about the drift of materials from the application sites onto organic farmland or other property. A number of commenters stated that based on personal experience odors were minimal and short lived.

Staff Response

Staff experience with the three proposed source materials indicates that impact to adjacent properties from odor will be minimal. The materials in question have either an earthy (Tyson and Smithfield) or pasty (RockTenn) consistency; therefore, it is unlikely that dusts or aerosols will be emitted from the application process. The setback distances, from property lines and adjacent occupied dwellings that are contained in the draft permit are based on those required by **9VAC25-32-560** for the land application of biosolids. To address any potential odor issues, the draft permit requires the permittee to submit to the department, within 90 days of permit issuance, an "Odor Control Plan". Within this plan, both the facilities generating the residuals as well as the permit holder (land applier) must identify:

- (a) Methods used to minimize odor in producing the residuals;
- (b) Methods used to identify malodorous residuals before land application (at the generating facility);
- (c) Methods used to identify and abate malodorous residuals if delivered to the field, prior to land application; and
- (d) Methods used to abate malodor from residuals if land applied.

The odor control plan will become an enforceable part of the permit. Additionally, Part I.A.D of the draft permit requires that any industrial residuals produced at a facility where domestic sewage is comingled with the industrial wastewater in the industrial wastewater treatment facility, or where meat or any other raw animal based product is processed, meet the same vector attraction reduction standard as is required by **9VAC25-32-685** for the land application of biosolids.

3. *Comments related to Synagro compliance history and/or DEQ's record of inspections/enforcement (Julia Gary, Kelly Place, Bonnie Hite, Carla Sturtz, Elizabeth Donoghue, Bill Ticharek, James Folk, Helen Eggleston, William and Emilie Townsend, Don Wagner, Leslie Fellows, Helen Eggleston, David & Patricia Dalton, Donna Malvin, Linda Hosey, Valerie Miller, Thomas Roberts, Kathleen Owens, Dan Rowland, Mary Dennis, Christopher Bednar, Bruce Albert, Tom Wadsworth, Allen Hurry, Charles Ferguson, Cynthia Spiggle, David Stratton, E. Stratton, Eddie Stratton, Gloria Moore, Henry Cox, James Carvin, Jamie Palembos, Jerry Moore, John Alvis, John Hamm, Julie Stratton, Lauren Smith, Nancy Ferguson, Nathan McGraw, P. McGraw, Rosemarie Presbrey, Tony Beamer Sr., William Scott, John Davenport, Michael Eggleston, Dale Taylor, Roger Turner, Deborah Wooten). Commenters generally disapproved of Synagro's compliance history (several noted compliance issues in other states, and several referred to compliance with permit requirements during biosolids application on a tract in King William County in 2013). Other commenters asked whether inspection reports were available to the public, suggested that Synagro hire a third party contract inspector, questioned whether (and how) Synagro would indemnify anyone harmed by the proposed activity, questioned the validity of the self-reporting nature of VPA permits and requested that violations be assessed the "maximum penalty". A number of commenters expressed a distrust of DEQ, while a number expressed confidence in the ability of DEQ to effectively administer the program.*

Staff Response

If the permit is approved by the Board, DEQ will perform inspections to ensure compliance and will initiate enforcement action if applicable. The reports generated from these inspections are public information and will be made available on request in a manner consistent with the Virginia Freedom of Information Act.

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.

The proposed permit would allow Synagro to land apply industrial residuals 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, Synagro maintains an environmental liability policy applicable to all their land application activity in Virginia, pursuant to Va. Code § 62.1-44.19:3(H) to pay claims for cleanup costs, personal injury, and property damage resulting from the transportation, storage, or land application of sewage sludge.

In late 2013, track-out and odor complaints were received by DEQ regarding the Rose tract in King William County. DEQ staff inspected the site several times to resolve the issues. During those inspections, DED did not find evidence that either the rate of application or the proximity to buffers and setbacks contravened permit requirements. In early 2014, water quality samples taken in the vicinity of the application site and there was no significant difference between the background samples and those downstream of the Rose tract. Synagro's performance in other states is not a statutory or regulatory basis for issuance or denial of a VPA permit.

4. *Comments related to runoff/contamination of surface waters (Marjorie Farquhar, Leslie Fellows, Garrie Rouse, Hill Wellford, Jr., Donald Phillips, Joann Fridley, Ashley Jones, Alice Wellford, Kaye Davis, Rick Smith, Ann Brummer, Rick & Gail Gardner, Frank Kostek, Paul & Judy Hamby, Jeanette Wagner, Larry Roussel, Deborah Bigdely, Kelly Place, Don*

Wagner, Marie Winn, Alana May, Amanda & Art Moody, Amy Koch, Ann Moore, Anna Jeng, Arthur Ritter, Barbara Buckner, Barbara Greenleaf, Betty Bartlett, Bill Johnson, Blanton Seward, Brennan Smith, Bruce Tarr, Bryan Hofmann, Carla Roman, Carol Pruner, Carol Stephens, Cathryn Staples, Cathy Strickler, Charles Strickler, Cheryl Wilson, Chris McCloud, Christopher Robin, Christy Anderson, Chuck Bennett, Collin Bright, Dale Clark, David Atkinson, David Martin, David Spears, David Stets, Diana Artemis, Donna Haynes, Douglas Austin, Drew Haynes, Ed Sandtner, Edward Collie, Edward Kast, Eileen Lerandoski, Eileen Tarr, Elvie Hoag, Emerald Young, Erica Gray, Evelyn Friedley, Evelyn Waring, Felicia Hoag, Frances Gaines-Stabb, Franklin & Rhonda Walton, Fred Denn, George Morartis, Giovanna Govea, Grant LaRouche, Gwyn Williams, Hazel Collie, Herbert Fitzell, Ileana Gonzalez, Ishmael Buckner, Ivy Main, James Steele, Jason Turner, Jeff Painter, Jeff Staples, Jim Scibek, Jim Wright, Jody Lochmiller, Joe Cook, John Kasper, Jon Baker, Jonas Courey, Joseph Greenwell, Josephine Dodt, Juanita Seay, Kate Addleson, Katherine Layton, Kathleen Burns, Kathleen Donovan, Kathy Glass, Kelley Galownia, Ken Schaal, Kenneth Coghill, Kevin Shaw, Lauren Leahowiz, Lee Riggins Rich, Linda Bailey, Linda Muller, Linda Reaves, Lois Carter, Lydia Epp, Lynn Crowder, Mabel Wells, Maggie & Wade Harrell, Marvin Kerby Jr., Mary Dempsey, Mary Rudy, Maryanne Lee, Max Jamison-Lee, Melanie Bennett, Michael Bochynski, Michael Johnson, Michelle Shaw, Mitzi Humphrey, Muriel Smith, Nancy Keslsey, Nancy Vest, Nissa Dean, Patricia VonOhlen, Paul Smith, Paula Chow, Peggy Lankford, Ralph Grove, Rebecca Mitton, Robert Epp, Robert Lowry Jr., Ron Skinner, Rosario Escandor, Kade Havens, Rose Frontuto, Sandy Coghill, Sarah Bucci, Seth Heald, Shannon Reynolds, Sharon Slavey, Stephen Ramey, Steve Morton, Steven Bruckner, Susan Belcher, Suzanne Keller, Sylvia Clute, Sylvia Gibson, Tara Sagman, Terry Frontuto, Tess Matteson, Thang Truong, Theresa Sellers, Thomas Ellis, Tiffany Goodson, Tiffany Hall, Tony Singer, Tyla Matteson, Virginia Cowles, William Lee, William Reynolds, William White, WM & Barbara Berry, Zachary Jarjoura, Zane Havens, Zelfia Cobb, John Moncrief, Abbi Easter, Alyssa Freeman, Andrea Burks, Ann McRee, Barbara Jordan, Bob Reardon, Brie Hayden, Candace Graham, Caryl Quinn, Charles Lippy, Chris Banks, Colleen Williams, Corey Lipscomb, Corrina Beall, Cynthia Tanner, David Crighton, Dennis Bussey, Dennis Cary, Diedre Foerster, Dotty Rilee, Eileen Edmonds, Elizabeth Greenberg, Emelia March, Emma Barnes, Erik March, Gill Sigmon, Ginette Bellefeuille, Harry Dell, Hayes Gouger, Inez Fridley, J Alan Schintzius, James McPhereson, James Sears, James Taylor, Janet Davidson, Jimmy Cheverius, Jingjie Zhang, John Coombs, Jonathan Howard, Judy Wyatt, Karen Tootelian, Karena Crutchfield, Kendyl Crawford, Laura Graham, LE Culbreth, Linnea McCarty, Margaret Bridgfork, Mark Whitehead, Mary Crutchfield, Mary Mitchum, Meredith Davis, Natalie Leighty, Nick Kindig, Page Mizell, Rachel Brown, Randie Trestrail, Robert Mefford, Robin Scheu, Rodney Tatum, Roger Pittard, Sandra Darnes, Sandy Cheverius, Sarah Hart, Sarah Kindig, Sharon Klein, Steven Galvis, Steven Heinitz, Sunhwa Yoon, Tamara Smith, Tammy Chamberlain, Thomas Frances, Willard Waples, William Todd, Glen Besa, Linda Hosey, Jacqueline & Cory Hart, Bonnie Hite, Kade Havens, Jeanne Hamm, John Davenport, Claudia Lawton Michael Hild). Commenters generally expressed concern about the potential for contamination of surface waters from runoff from the application fields. Specific comments included concern about application on areas with steep slopes or application in wetlands; comments also addressed impacts to specific water bodies (Mattaponi), nutrient enrichment of the Chesapeake Bay or potential impacts to shellfish beds from materials in the residuals.

Staff Response

VPA land application permits prohibit discharges of pollutants to surface waters including wetlands except in the case of a storm event greater than the 25-year, 24-hour storm. This is achieved through the implementation of best management practices (BMPs) such as restrictions on application timing, rate, and setbacks from sensitive environmental features, among others. For any agricultural system to function properly, the hydrologic cycle necessarily includes rainfall, infiltration, evaporation and transpiration. BMPs are required by the VPA permit to ensure that surface waters are not negatively affected. Setbacks from surface waters in the draft permit are consistent with the requirements of **9VAC25-32-560**, **9VAC25-630-50**, and **9VAC25-192-70** which regulate the land application of biosolids, poultry litter, and animal manures respectively. The same setbacks are used for the industrial residuals in the draft permit because the types of pollutants are similar (nutrients, metals, pathogens), the potential pathways for transport to surface and ground water are similar (infiltration, runoff) and the purpose for which the residuals are used is similar (fertilization of an actively growing crop capable of taking up nutrients). The draft permit requires that a Nutrient Management Plan (NMP) be written by a DCR certified NMP writer, and that land application be conducted in accordance with the NMP. The NMP dictates rate and timing of application. The draft permit places limitations on land application to sites with >15% slope and sites characterized by the USDA Soil Survey as "Frequently Flooded". Plans are written to ensure that the material land applied is applied at a rate which is ergonomically based. In contrast, other agricultural inputs such as commercially prepared fertilizers are subject to no regulatory restrictions governing their application.

5. *Comments related to potential contamination of groundwater (Vera England, Laurie Hite, Marjorie Farquhar, Francis Gwathmey, Donald Phillips, Elizabeth Donoghue, Dale Taylor, Joann Fridley, Ashley Jones, Thomas Rubino, Pat Dolan, Sherry Woodlief, Donald & Rose Marie Berberich, David & Lori Johnson, Stephanie Sanford, Ann Todd, Kaye Davis, Rick Smith, Ann Brummer, Rick & Gail Gardner, Frank Kostek, Paul & Judy Hamby, Ed & Lisa Gooding, Ron Barnes, Joan Poskey, Tom & Robin Hillman, Mary Kesterson, Cecelia Ropelewski, Karla Havens, Jeanette Wagner, Deborah Bigdely, Kelly Place, Marie Winn, Don Wagner, Alana May, Amanda & Art Moody, Amy Koch, Ann Moore, Anna Jeng, Arthur Ritter, Barbara Buckner, Barbara Greenleaf, Betty Bartlett, Bill Johnson, Blanton Seward, Brennan Smith, Bruce Tarr,*

Bryan Hofmann, Carla Roman, Carol Pruner, Carol Stephens, Cathryn Staples, Cathy Strickler, Charles Strickler, Cheryl Wilson, Chris McCloud, Christopher Robin, Christy Anderson, Chuck Bennett, Collin Bright, Dale Clark, David Atkinson, David Martin, David Spears, David Stets, Diana Artemis, Donna Haynes, Douglas Austin, Drew Haynes, Ed Sandtner, Edward Collie, Edward Kast, Eileen Lerandoski, Eileen Tarr, Elvie Hoag, Emerald Young, Erica Gray, Evelyn Friedley, Evelyn Waring, Felicia Hoag, Frances Gaines-Stabb, Franklin & Rhonda Walton, Fred Denn, George Morartis, Giovanna Govea, Grant LaRouche, Gwyn Williams, Hazel Collie, Herbert Fitzell, Ileana Gonzalez, Ishmael Buckner, Ivy Main, James Steele, Jason Turner, Jeff Painter, Jeff Staples, Jim Scibek, Jim Wright, Jody Lochmiller, Joe Cook, John Kasper, Jon Baker, Jonas Courey, Joseph Greenwell, Josephine Dodt, Juanita Seay, Kate Addleson, Katherine Layton, Kathleen Burns, Kathleen Donovan, Kathy Glass, Kelley Galownia, Ken Schaal, Kenneth Coghill, Kevin Shaw, Lauren Leahowiz, Lee Riggins Rich, Linda Bailey, Linda Muller, Linda Reaves, Lois Carter, Lydia Epp, Lynn Crowder, Mabel Wells, Maggie & Wade Harrell, Marvin Kerby Jr., Mary Dempsey, Mary Rudy, Maryanne Lee, Max Jamison-Lee, Melanie Bennett, Michael Bochynski, Michael Johnson, Michelle Shaw, Mitzi Humphrey, Muriel Smith, Nancy Keslsey, Nancy Vest, Nissa Dean, Patricia VonOhlen, Paul Smith, Paula Chow, Peggy Lankford, Ralph Grove, Rebecca Mitton, Robert Epp, Robert Lowry Jr, Ron Skinner, Rosario Escandor, Rose Frontuto, Sandy Coghill, Sarah Bucci, Seth Heald, Shannon Reynolds, Sharon Slavey, Stephanie Larson, Stephen Ramey, Steve Morton, Steven Bruckner, Susan Belcher, Suzanne Keller, Sylvia Clute, Sylvia Gibson, Tara Sagman, Terry Frontuto, Tess Matteson, Thang Truong, Theresa Sellers, Thomas Ellis, Tiffany Goodson, Tiffany Hall, Tony Singer, Tyla Matteson, Virginia Cowles, William Lee, William Reynolds, William White, WM & Barbara Berry, Zachary Jarjoura, Zane Havens, Zelfhia Cobb, John Moncrief, Abbi Easter, Alyssa Freeman, Andrea Burks, Ann McRee, Barbara Jordan, Bob Reardon, Brie Hayden, Candace Graham, Caryl Quinn, Charles Lippy, Chris Banks, Colleen Williams, Corey Lipscomb, Corrina Beall, Cynthia Tanner, David Crighton, Dennis Bussey, Dennis Cary, Diedre Foerster, Dotty Rilee, Eileen Edmonds, Elizabeth Greenberg, Emelia March, Emma Barnes, Erik March, Gill Sigmon, Ginette Bellefeuille, Harry Dell, Hayes Gouger, Inez Fridley, J Alan Schintzius, James McPherson, James Sears, James Taylor, Janet Davidson, Jimmy Cheverius, Jinggie Zhang, John Coombs, Jonathan Howard, Judy Wyatt, Karen Tootelian, Karena Crutchfield, Kendyl Crawford, Laura Graham, LE Culbreth, Linnea McCarty, Margaret Bridgfork, Mark Whitehead, Mary Crutchfield, Mary Mitchum, Meredith Davis, Natalie Leighty, Nick Kindig, Page Mizell, Rachel Brown, Randie Trestrail, Robert Mefford, Robin Scheu, Rodney Tatum, Roger Pittard, Sandra Darnes, Sandy Cheverius, Sarah Hart, Sarah Kindig, Sharon Klein, Steven Galvis, Steven Heinitz, Sunhwa Yoon, Tamara Smith, Tammy Chamberlain, Thomas Frances, Willard Waples, William Todd, Glen Besa, Bonnie Hite, James & Rebecca Sears, Claudia Lawton, Kim Singhas, Jacqueline & Cory Hart). Commenters generally expressed concern about contamination of groundwater resulting from the proposed activity. Specific comments included concern about application on areas in proximity to shallow or bored wells, wells in differing states of repair, and wells of differing constructions. Concern was expressed about nutrients, metals, etc moving through soil to groundwater as well as how new landowners would be made aware that their new well is being developed near a previously approved land application site.

Staff Response

The land application requirements in VPA permits are designed to ensure that neither infiltration nor runoff will have a detrimental effect on aquifers that supply drinking water. Regarding infiltration, the draft permit requires that groundwater be greater than 18” from the surface when land application takes place, and that timing of land application occurs such that crop rooting systems impede the downward movement of pollutants to groundwater. Regarding runoff that could impact wells, the draft permit addresses field conditions (crop conditions, soil type, topography, etc.) that would affect runoff potential, and requires a 100’ setback distance from all wells located near land application sites. This setback distance is consistent with the requirements of **9VAC25-32-560**, **9VAC25-630-50**, and **9VAC25-192-70** which regulate the land application of biosolids, poultry litter, and animal manures respectively. DEQ does have the authority to require increased setbacks from wells on a site specific basis where greater setback distances are deemed necessary. Where new wells are constructed after a land application site is approved, the permit holder would be required to implement the minimum 100’ setback, even though the original site map did not include the well. Land application area and total application rates for the field would necessarily be reduced based on the proximity of the new well to the land application field.

Additionally, Virginia Department of Health regulations, **12 VAC 5-630-380**, require a minimum 100’ distance between new well construction and a “Sewage Disposal System or other contaminant source” including drainfields, underground storage tanks, barnyards and hog lots. The VPA permit requirement for a 100’ setback from industrial residuals land application is a conservative application of this established standard, as agricultural fertilization of crops at controlled rates and timing is not included in the VDH regulations as a contaminant source in this context and is not an activity that would require a mandatory setback for a newly constructed well. For wells that do not meet the VDH safe construction standards, the impact risk to a well is greater from more frequent and common activities surrounding the well than from land application activities undertaken observing appropriate regulatory setbacks, BMPs and other required protections. Assistance for well owners is available from the Virginia Household Water Quality Program administered by Virginia Cooperative Extension (<http://www.wellwater.bse.vt.edu/vahwqp.php>).

6. *Comments related to a potential for hazardous materials in sludges (Claudia Lawton, Kim Singhas, Michael Eggleston, John Davenport, Nancy Raine, David Bernard, Linda Hosey, Larry McClung, Alana May, Amanda & Art Moody, Amy Koch, Ann*

Moore, Anna Jeng, Arthur Ritter, Barbara Buckner, Barbara Greenleaf, Betty Bartlett, Bill Johnson, Blanton Seward, Brennan Smith, Bruce Tarr, Bryan Hofmann, Carla Roman, Carol Pruner, Carol Stephens, Cathryn Staples, Cathy Strickler, Charles Strickler, Cheryl Wilson, Chris McCloud, Christopher Robin, Christy Anderson, Chuck Bennett, Collin Bright, Dale Clark, David Atkinson, David Martin, David Spears, David Stets, Diana Artemis, Donna Haynes, Douglas Austin, Drew Haynes, Ed Sandtner, Edward Collie, Edward Kast, Eileen Lerandoski, Eileen Tarr, Elvie Hoag, Emerald Young, Erica Gray, Evelyn Friedley, Evelyn Waring, Felicia Hoag, Frances Gaines-Stabb, Franklin & Rhonda Walton, Fred Denn, George Morartis, Giovanna Govea, Grant LaRouche, Gwyn Williams, Hazel Collie, Herbert Fitzell, Ileana Gonzalez, Ishmael Buckner, Ivy Main, James Steele, Jason Turner, Jeff Painter, Jeff Staples, Jim Scibek, Jim Wright, Jody Lochmiller, Joe Cook, John Kasper, Jon Baker, Jonas Courey, Joseph Greenwell, Josephine Dodt, Juanita Seay, Kate Addleson, Katherine Layton, Kathleen Burns, Kathleen Donovan, Kathy Glass, Kelley Galownia, Ken Schaal, Kenneth Coghill, Kevin Shaw, Lauren Leahowiz, Lee Riggins Rich, Linda Bailey, Linda Muller, Linda Reaves, Lois Carter, Lydia Epp, Lynn Crowder, Mabel Wells, Maggie & Wade Harrell, Marvin Kerby Jr., Mary Dempsey, Mary Rudy, Maryanne Lee, Max Jamison-Lee, Melanie Bennett, Michael Bochynski, Michael Johnson, Michelle Shaw, Mitzi Humphrey, Muriel Smith, Nancy Keslsey, Nancy Vest, Nissa Dean, Patricia VonOhlen, Paul Smith, Paula Chow, Peggy Lankford, Ralph Grove, Rebecca Mitton, Robert Epp, Robert Lowry Jr, Ron Skinner, Rosario Escandor, Rose Frontuto, Sandy Coghill, Sarah Bucci, Seth Heald, Shannon Reynolds, Sharon Slavey, Stephanie Larson, Stephen Ramey, Steve Morton, Steven Bruckner, Susan Belcher, Suzanne Keller, Sylvia Clute, Sylvia Gibson, Tara Sagman, Terry Frontuto, Tess Matteson, Thang Truong, Theresa Sellers, Thomas Ellis, Tiffany Goodson, Tiffany Hall, Tony Singer, Tyla Matteson, Virginia Cowles, William Lee, William Reynolds, William White, WM & Barbara Berry, Zachary Jarjoura, Zane Havens, Zelfia Cobb, John Moncrief, Abbi Easter, Alyssa Freeman, Andrea Burks, Ann McRee, Barbara Jordan, Bob Reardon, Brie Hayden, Candace Graham, Caryl Quinn, Charles Lippy, Chris Banks, Colleen Williams, Corey Lipscomb, Corrina Beall, Cynthia Tanner, David Crighton, Dennis Bussey, Dennis Cary, Diedre Foerster, Dotty Rilee, Eileen Edmonds, Elizabeth Greenberg, Emelia March, Emma Barnes, Erik March, Gill Sigmon, Ginette Bellefeuille, Harry Dell, Hayes Gouger, Inez Fridley, J Alan Schintzius, James McPherson, James Sears, James Taylor, Janet Davidson, Jimmy Cheverius, Jinggjie Zhang, John Coombs, Jonathan Howard, Judy Wyatt, Karen Tootelian, Karena Crutchfield, Kendyl Crawford, Laura Graham, LE Culbreth, Linnea McCarty, Margaret Bridgfork, Mark Whitehead, Mary Crutchfield, Mary Mitchum, Meredith Davis, Natalie Leighty, Nick Kindig, Page Mizell, Rachel Brown, Randie Trestrail, Robert Mefford, Robin Scheu, Rodney Tatum, Roger Pittard, Sandra Darnes, Sandy Cheverius, Sarah Hart, Sarah Kindig, Sharon Klein, Steven Galvis, Steven Heinitz, Sunhwa Yoon, Tamara Smith, Tammy Chamberlain, Thomas Frances, Willard Waples, William Todd, Glen Besa, Marie Winn, Don Wagner, Helen Eggleston, Rod & Susan Tatum, Ken Davidson, Jim Smyers, Jeanette Wagner, Michael Hild, David & Patricia Dalton, Douglas Shackelford, Larry Roussel, Lee Westerman, Deborah Bigdely, Kelly Place, Eric Ecklesdafer, Diana Parker, Quinn Connally, Ann Brummer, Donald & Rose Marie Berberich, Ed Lawton, Thomas Rubino, Hill Wellford Jr., Julia Gary, Marjorie Farquhar, Jacqueline & Cory Hart) Commenters expressed a general concern about “hazardous materials in sludges.” One commenter expressed concern about the effects that such contamination would have on the value of adjoining properties.

Staff Response

The VPA permit application requires screening for contaminants reasonably expected to be present based on the nature of the industrial process. Of the three sources of residuals proposed for land application under this permit, two (Smithfield and Tyson) are derived from the treatment of wastewater associated with livestock slaughtering and processing operations. The nature of pork and poultry processing and associated washdown operations do not introduce hazardous materials into the waste stream. The third source of residuals (Rock Tenn) is a pulping operation and would not pose risks associated with hormones, antibiotics, or pathogens.

For all three of these residuals, the alternative source of disposal is via a sanitary waste landfill. All three of these generators have made “non-hazardous” declarations to the landfills receiving the residuals and have performed the laboratory analysis to support that declaration.

For other contaminants that may have been detected in the residuals through analyses required by the permit application, mere presence does not indicate danger without a toxic concentration. Additionally, the BMPs required in the draft permit are designed to limit transport, so even if it were determined that a particular pollutant was present in a quantity that could cause adverse impact, presence alone would not in itself cause water quality impacts without a means to reach ground or surface waters. DEQ monitors the progress of the fate, transport, and toxicity research conducted and evaluated by EPA in this regard, and if necessary, will respond to relevant findings with additions to the list of regulated substances or required BMPs.

In addition to providing general comments about “hazardous materials”, several commenters expressed specific concern about the following substances:

Dioxin in RockTenn Residuals

Staff Response:

RockTenn uses Chlorine Dioxide in its bleaching process which does not result in dioxin formation. This has become a common practice in the pulp industry.

Water Quality Management Planning Regulations, 9VAC25-720 Final Exempt Action – 2014 HB445 Amendment:

This regulatory amendment to the Water Quality Management Planning Regulation, 9VAC25-720, is presented to the Board for consideration as final regulation. The Water Quality Management Planning Regulation, 9VAC25-720, lists by major river basin the State Water Control Board (SWCB) adopted total maximum daily load (TMDL) waste load allocations (WLAs), stream segment classifications, and effluent limitations including water quality based effluent limitations contained in the existing Water Quality Management Plans. Chapter 202 of the 2014 Acts of Assembly requires that a comprehensive listing of all TMDL WLAs adopted or approved by the State Water Control Board prior to July 1, 2014, be set forth in the Water Quality Management Planning Regulation (9VAC25-720). At the Board meeting scheduled for December 11 and 12, 2014, the Department will request that the Board adopt this amendment as a final regulation, authorize its publication, and affirm that the Board will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Approval of seven TMDL reports and amendment of the Water Quality Management Planning Regulation to incorporate the corresponding TMDL wasteload allocations: Staff will ask the Board to approve portions of seven TMDL Reports and adopt amendments to five sections of the Water Quality Management Planning (WQMP) regulation: 9 VAC 25-720-60.A (James River Basin), 9 VAC 25-720-80.A (Roanoke River Basin), 9 VAC 25-720-100 (Chowan River – Dismal Swamp River Basin), 9 VAC 25-720-110.A (Chesapeake Bay – Small Coastal – Eastern Shore River Basin), and 9 VAC 25-720-120.A (York River Basin). The TMDL Reports to be approved are: *“Benthic Total Maximum Daily Load (TMDL) Development for the North Creek Watershed”*; *“TMDLs for Benthic Impairments in Little Otter River (Sediment and Total Phosphorus), Johns Creek, Wells Creek, and Buffalo Creek (Sediment)”*; *“Bacteria TMDL Development for Hyco River, Aarons Creek, Little Buffalo Creek, and Beech Creek Located in Halifax and Mecklenburg Counties, Virginia”*; *“Sediment TMDL Development for the Coleman Creek Watershed Located in Halifax County, Virginia”*; *“Total Maximum Daily Load Development for the Back Bay, North Landing River, and Pocaty River Watersheds”*; *“Bacteria TMDL Development in Red Bank Creek and Machipongo River, Virginia”*; and *“E. coli TMDL Development for The Pamunkey River and Tributaries, VA”*. The amendments to the regulation consist of adding thirty-six new WLAs. All TMDL reports containing these WLAs have been reviewed by EPA.

Report on Facilities in Significant Noncompliance (SNC): There were no new facilities reported to EPA on the Quarterly Noncompliance Report as being in significant noncompliance for the quarter ending June 30, 2014.

Major Modification of Virginia Pollutant Abatement Permit VPA03010- Recyc Systems, Inc.- Lunenburg County: Recyc Systems, Inc. has applied for a permit modification to add land to their existing VPA biosolids land application permit to include 4439.9 additional acres in Lunenburg County. The existing permit contains 2952.1 gross acres. Because the application for this permit amendment proposed to increase the acreage authorized by the initial permit by 50 percent or more, DEQ treated the application as a new permit application for purposes of public notice and public hearings.

DEQ received an application package from Recyc Systems, Inc. on February 18, 2014. After review and determining that the application package was administratively and technically complete on February 27, 2014, DEQ initiated the public involvement process described below.

Public Meeting: New applications for biosolids land application permits require that a public meeting be held in the locality where land application is proposed to discuss technical details of the application. DEQ advertised a public meeting in the *Kenbridge-Victoria Dispatch* on March 12, 2014 announcing the date, time and location of the meeting. DEQ also notified the Lunenburg County Administrator, the Virginia Department of Health (VDH), and the Virginia Department of Conservation and Recreation (DCR) of the public meeting. DEQ held the public meeting at the Victoria Public Library on March 20, 2014.

Draft Permit: DEQ prepared the draft permit for the permittee to manage the land application of biosolids to additional farmland in Lunenburg County without a discharge to surface waters, in accordance with the VPA Regulation, 9VAC25-32-10 et seq.

Newspaper Public Notice and Adjoining Property Owner Notification: Notice announcing the public's opportunity to comment on the draft permit was published in the *Kenbridge-Victoria Dispatch* on June 18, 2014 and June 25, 2014.

Contemporaneously, DEQ sent approximately 240 letters to adjoining property owners advising them of the draft permit and the opportunity for them to submit comments. A copy of the notice of the draft permit was included with each letter. DEQ's mailing list of adjacent landowners was based on the county tax records that Lunenburg County provided to DEQ.

In addition to the regulatory requirements for notifying localities and adjacent property owners, DEQ staff has taken additional measures to coordinate with the locality and stakeholders. DEQ representatives attended a regular meeting of the Lunenburg County Board of Supervisors on July 10 to provide information on the draft permit and respond to questions and concerns of the Board members.

Public Comments in Response to Public Notice of Draft Permit: During the draft permit public comment period, DEQ-BRRO received comments from citizens via postal mail, email, and fax. The concerns identified in the comments received were largely related to odor, the impacts of land application on ground and surface waters, and public health. A number of the comments reflected citizens' concerns with lung diseases, danger to their horses or bee keeping operations. Several commented on how the spreading will affect the value of their property. There were also a number of calls and emails from citizens who were unclear as to why they had received a letter. Approximately four hundred eighty (480) of the comments received were in the style of two (2) form letter. In addition to the letter, approximately twenty (20) additional written comments requesting a public hearing were received.

The Virginia Department of Health and the Department of Conservation and Recreation made no comments on the draft permit. However, a copy of a letter from the Virginia Department of Health dated August 29, 2014, regarding a review of public health-related provisions of the regulations pertaining to land application of sewage sludge was included in the Board book.

The 30-day public comment period ended on July 18, 2014.

At the close of the comment period, DEQ had received approximately 500 requests for a public hearing.

Authorization of Hearing: On August 7, 2014, based on the requests for hearing received, the DEQ Director authorized the convening of a public hearing for the proposed permit modification.

Public Notice of Public Hearing: Notice of the public hearing and comment period was published on September 24, 2014 in the *Kenbridge-Victoria Dispatch* announcing the date, time, and location of the hearing.

DEQ sent approximately 600 letters to individuals that requested a hearing and to adjoining property owners advising them of the public hearing and the opportunity for them to submit comments. During the comment period on the draft permit, DEQ became aware of additional adjacent property owners that had not been identified by Lunenburg County; these persons were included in those that received letters notifying them of the additional comment period and public hearing. A copy of the public hearing notice was included with each letter. Additionally, DEQ sent letters to the County Administrator, Board of Supervisors, Economic Planning Commissioner, the VDH health district director, DCR and the county monitor. DEQ also notified the town mayor and the town managers for both Kenbridge and Victoria.

Public Hearing: DEQ held the public hearing at 7:00 p.m. on October 29, 2014, at the Lunenburg County Middle School. Mr. Robert Dunn served as the hearing officer. DEQ also provided an informational session prior to the hearing, allowing citizens the opportunity to visit the café style informational booths provided by DEQ, DCR, VDH, Recyc, and the local Extension Agent so that questions could be asked and answered prior to the hearing.

Twenty-one (21) citizens provided oral comments at the public hearing with approximately eighty (80) people in attendance.

The additional public comment period associated with the hearing was open from September 24, 2014, through November 13, 2014.

Summary of Comments and DEQ Response: A summary of the comments received during the comment periods associated with the draft permit as well as the public hearing comment period and DEQ responses to those comments follows. Where possible, comments were grouped and summarized according to issue. A listing of the persons providing comments was included in the Board book and is available upon request.

During the public comment period of the draft permit, DEQ received approximately 530 citizen comments.

During the public hearing comment period, DEQ received 21 verbal comments, and 54 written comments.

The public comments received regarding the modification of VPA Permit No. VPA03010 for Recyc Systems, Inc. – Lunenburg County have been consolidated, are categorized by type below and are followed by the DEQ staff response.

1. Protection of Surface Water, Groundwater and Impaired Streams

Comments were received pertaining to potential impacts to surface and groundwater:

- Concern that there are impaired (listed) waters in the County

- Concern for the potential for contamination from runoff onto adjacent properties

Staff Response:

The VPA Regulation 9VAC25-32-560 describes biosolids utilization methods and includes a requirement for a nutrient management plan (NMP) and minimum setback distances for occupied dwellings, odor sensitive receptors, water supply wells, springs, property lines, streams and other surface waters, drainage ditches, all improved roadways, rock outcrops and sinkholes. These nutrient management and setback requirements along with 9VAC25-32-30.A that prohibits a point source discharge from a VPA permitted facility are protective of human health and the environment. Where impaired waters exist, the implementation of agricultural Best Management Practices (BMPs) is the best method to reduce nonpoint source pollution from farmland in the subject watersheds. In most cases, these BMPs are implemented on a voluntary basis; however, agricultural land that receives biosolids is subject to regulatory requirements mandating key BMPs such as nutrient management and appropriate setbacks. Thus, a farmer's choice to fertilize with biosolids increases the number of BMPs implemented as well as the regulatory scrutiny of the agricultural practices implemented on his or her farm.

2. 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. The comments included concerns regarding:

- Potential risks from unknown pathogens, metals and other contaminants during transportation and application
- Potential health risks from airborne pathogens
- Potential health risks from vapor emissions
- Amount of significant research to assess risks to human health and the environment
- Potential long term effects of biosolids
- Potential toxicity of biosolids material
- Potential risk to domestic and farm animals kept adjacent to, or nearby, application fields
- Questions regarding need for signage and access restrictions
- Proximity of homes to land application fields
- Odors emitted during transport and application.

Staff Response:

The U.S. Environmental Protection Agency (EPA) promulgated the Sewage Sludge Use or Disposal Regulation (40 CFR Part 503) on February 19, 1993. EPA developed this rule to ensure protection of public health and the environment. The rule includes standards that apply to public, private, and federal facilities that generate or treat sewage sludge (to become biosolids) as well as any person who uses biosolids or disposes of sewage sludge. The rule is a product of one of EPA's most comprehensive risk assessments, which in this case evaluated 14 pathways through which a pollutant in biosolids could affect public health or the environment. Each pollutant limit in the regulation is the smallest amount of that pollutant acceptable from entering the pathways. Thus, the concentration limits established in the regulation protect the public and the environment from exposure to these pollutants. Concerns with high concentrations of heavy metals in biosolids were identified before the revision of the federal rules on sewage sludge in 1993, thus the rule imposed new limits on concentrations of nine heavy metals in land-applied biosolids. EPA added access restrictions for humans and animals, and harvest restrictions for crops, to the rule in order to reduce the risk of pathogen (disease causing organism) exposure to humans or animals. The federal rule specifies that biosolids that are sold to the general public must be treated to a higher pathogen reduction standard (Class A). When biosolids are not treated to Class A standards, the additional site management requirements provide an equivalent level of human health protection.

Regarding additional compounds that have been found in sewage sludge, the Clean Water Act requires EPA to review existing sewage sludge regulations at least every two years. The purpose of the review is to identify additional toxic pollutants that may be present in sewage sludge, and if appropriate to develop regulations for those pollutants. At this time, EPA has not identified any additional toxic pollutants for regulation under federal law. Additional information about this ongoing review process and the research regarding biosolids can be found at

<http://water.epa.gov/scitech/wastetech/biosolids>.

The Virginia State Water Control Law requires permits for the application of biosolids, and these permits contain all of the criteria required by the federal rule plus additional requirements such as setbacks from homes and environmentally sensitive features, nutrient management plans, public notification (including signage), financial assurance, local authority,

inspections, training, and fees. 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 DEQ permit and conduct all land application activity in conformance with that permit.

The 2007 Virginia General Assembly commissioned a group of experts to study the issues surrounding biosolids. In accordance with House Joint Resolution No. 694, the Secretary of Natural Resources and Secretary of Health and Human Services convened this Biosolids Expert Panel which published their final report in 2008. This report can be found online at:

<http://leg2.state.va.us/DLS/h&sdocs.nsf/a762cd2685f84d7a85256f030053196e/eae0e82b448c4aab852572b5005b0116?OpenDocument&Highlight=0,biosolids>, or can be obtained by contacting the DEQ Blue Ridge Regional Office (BRRO) in Lynchburg. The Panel found that as long as biosolids are applied in conformance with all state and federal law and regulations, 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. The Panel did make certain recommendations to improve the regulatory program, and DEQ considered the Panel's review when DEQ amended the regulations. 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." DEQ, along with epidemiologists and physicians at VDH, monitor the progress of the research conducted by EPA in this regard, and if necessary, will respond to these findings with additions to the list of regulated substances. Until there is new relevant research to conclude otherwise, DEQ is fully confident that VPA permits protect human health and environmental quality.

DEQ also has developed a standard procedure for working with VDH physicians to consider extended setbacks for citizens with specific health conditions. Where a citizen attests that setbacks from homes and property lines should be extended based on medical reasons, DEQ will double the setback distance upon written request from the citizen's physician. If further extensions are requested, the request is reviewed by VDH. DEQ then establishes a permit requirement based on the resulting VDH recommendation.

Odor issues were a significant topic of review in Biosolids Expert Panel Report. Recognizing that odor could potentially cause some of the health symptoms reported by citizens, the Panel suggested that DEQ include requirements for odor control plans for all land applied biosolids. To this end, DEQ revised the applicable regulations to require that any biosolids permit issued after September 1, 2013 include odor control plans, wherein both the facilities generating biosolids as well as the land applier must identify:

- (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.

The draft permit for Recyc Systems includes this requirement for odor control plans.

3. Liability

Comments were received questioning who would hold liability in the event of a failure to meet safeguards and who, specifically, has the financial liability for impact from the biosolids material.

Staff Response:

The VPA Regulation (9VAC25-32-490) sets forth guidelines for compliance with biosolids use practices. The permit holder is responsible for ensuring that all federal, state, and local regulations are met. In addition, the VPA regulation (9VAC25-32-780) requires the permit holder to demonstrate financial responsibility for clean-up costs, personal injury, bodily injury, and property damage resulting from the transport, storage, and land application of biosolids in Virginia. Should impacts due to non-compliance with the regulation be determined, the permit holder would be liable and subject to enforcement action.

4. DEQ's Public Notification

DEQ received comments that questioned the DEQ's public notification for the proposed permit action prior to the public hearing.

Staff Response:

Because the application for this permit amendment proposed to increase the acreage authorized by the initial permit by 50 percent or more, DEQ treated the application as a new permit application for purposes of public notice and public hearings and fulfilled those requirements found in the VPA Permit Regulation at 9VAC25-32-140. DEQ held an informational public meeting at the Victoria Public library to discuss technical issues related to the proposal, and DEQ provided public notice of the date, time, and place of this meeting in the *Kenbridge-Victoria Dispatch* between seven and fourteen days prior to the meeting. DEQ obtained a list of adjacent landowners from Lunenburg County, notified these landowners by mail, and received any written comments from those persons for at least 30 days. DEQ identified additional adjacent landowners during the technical review of the permit, and DEQ also notified these persons by mail and received any written comments from those persons for at least 30 days. Public notice of the draft permit was published in the *Kenbridge-Victoria Dispatch* once per week for two consecutive weeks, and DEQ received public comment and requests for hearing for at least 30 days following the date of the initial newspaper notice. Once DEQ determined that a public hearing would be held, citizens that had previously commented were notified of the pending hearing.

5. Property Values

DEQ received comments that alleged that there would be a decrease in property values if the application is approved.

Staff Response:

In 2007, HJR 694 required the Biosolids Expert Panel to respond to the question of whether odors from biosolids could affect property values. 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 looking at critical control points to minimize odors, reducing the potential that odor would impact adjacent properties. The draft permit includes a requirement for odor control plans from both the generators of the biosolids land applied as well as the land applier.

6. Inaccuracies in the Application

DEQ received comments that alleged the application was inaccurate.

Staff Response:

DEQ staff has carefully reviewed the application, made multiple visits to the proposed fields, and worked with multiple stakeholders to ensure that the permit application (including the site maps) is accurate. This work has resulted in the identification of additional site features on several site maps but has not identified any fields that would be ineligible to receive biosolids based on the regulations nor led to the identification of significant deficiencies in the application document. Therefore, the DEQ considers the application to be substantially in compliance with the biosolids regulation.

7. Age of Research

The DEQ received comments contending that the research upon which the regulations are based is out of date, and that current diseases, such as Ebola, are not addressed.

Staff Response:

Research into the safety and use of biosolids as an agricultural soil amendment is ongoing. Recognizing this, the Clean Water Act requires EPA to review existing sewage sludge regulations at least every two years. The purpose of the review is to identify additional toxic pollutants that may be present in sewage sludge, and if appropriate to develop regulations for those pollutants. At this time, EPA has not identified any additional toxic pollutants for regulation under federal law. Additional information about this ongoing review process and the research regarding biosolids can be found at <http://water.epa.gov/scitech/wastetech/biosolids>.

The DEQ and VDH monitor the status of this ongoing research and, if necessary, and in coordination with other state agencies, will respond to significant findings with recommendations to modify the VPA permit regulation. During the summer of 2014, VDH performed a follow-up review of the DEQ regulations pertaining to biosolids land application in light of research that had been conducted since 2007. Analogous with earlier reviews, VDH's recent literature review did

not find any causal associations between biosolids exposure and adverse health effects. Until there is new relevant research to conclude otherwise, DEQ is fully confident that VPA permits protect human health.

When emergent health issues arise, such as Ebola cases in the United States, DEQ consults with VDH to determine if any additional steps are necessary to ensure public health is protected. DEQ also considers any additional directives from the United States EPA or Centers for Disease Control (CDC) regarding emergent health threats.

8. Adherence to the Biosolids Regulations and Regulatory Oversight.

The DEQ received comments regarding adherence to the biosolids regulation and comments regarding the level of regulatory oversight of land application activities by:

- DEQ
- DCR in respect to review of Nutrient Management Plans
- the local biosolids monitor assigned to Lunenburg.

Staff Response:

The National Academy of Science's audit of EPA's regulatory program in 2002 (and echoed by the Virginia Biosolids Expert Panel in 2008) noted that adherence to the regulatory limits was critical to ensure protection of the environment and public health, and noted that EPA provided minimal compliance oversight. Acknowledging this, the Virginia General Assembly authorized the collection of fees on land-applied biosolids to fund Virginia's biosolids regulatory program. Since this fee law was passed in 2007 and the regulatory program was shifted to DEQ, Virginia has been able to maintain more biosolids inspectors than any state in the country. During this time, DEQ has inspected an average of 88 percent of the farms in Virginia where biosolids were land-applied to ensure compliance with the regulations. The DEQ Blue Ridge Regional Office (BRRO) has two (2) inspectors who are tasked with inspection of biosolids application sites. This level of staffing has resulted in a DEQ inspection presence on 95% of the farms on which biosolids is land applied in the BRRO region. In addition, DEQ coordinates closely with federal, state and local officials in a comprehensive strategy to thoroughly investigate reports of violation.

A portion of the biosolids land application fees collected are used to ensure that DCR has adequate resources to implement the nutrient management program for biosolids. While all nutrient management plans (NMPs) are required to be written by planners that are certified by DCR, the VPA permit regulation does not require that NMPs be written by a DCR employee. Some NMPs prescribing biosolids application rates are required to be approved by DCR prior to land application. These include plans for land owned or leased by the owner or operator of an animal feeding operation, plans for land application rates greater than 50 percent of the agronomic rate of nitrogen more often than every three years, plans for fields with elevated phosphorous levels, and plans for land reclamation. DCR conducts plan reviews as a component of the biosolids program, but also as part of their nutrient management certification program. A plan writer must write plans that meet DCR standards and criteria, and if the planner writes a deficient plan, the DCR training and certification regulations contain provisions to address that ([See 4VAC50-85-110](#)).

Lunenburg County has a biosolids local monitor trained by DEQ who evaluates compliance with the biosolids regulations. The Lunenburg local monitor routinely inspects biosolids land application sites, responds to citizen complaints, and conforms with all requirements of DEQ regulations pertaining to submitting documentation of monitoring activity. Submission of such documentation is a prerequisite for reimbursement to the locality by DEQ pursuant to Part IV of 9VAC25-20 which details requirements for reimbursable costs to localities employing a local monitor. The local monitor has the authority to order the abatement of any violation of the law or regulations pertaining to biosolids, and coordinates with DEQ regarding any alleged non-compliant activity.

If DEQ identifies activity non-compliant with the permit, DEQ may use administrative, civil and criminal enforcement actions to promote environmental stewardship. DEQ uses a broad range of enforcement options and selects the most appropriate enforcement method for each action.

9. Support of Permit Modification and Biosolids use.

The DEQ received comments that supported the permit modification. These comments included:

- General support of the use of biosolids
- Contention that the practice is safe

- Contention that the practice has benefits for the land and crops
- Statement describing support of the permit modification by the Lunenburg County Farm Bureau

Staff Response:

The draft permit has been prepared in accordance with the VPA Permit Regulation (9VAC25-32-10 et seq.), which contains operational standards to ensure that the land application of biosolids is protective of human health and the environment.

Draft Permit Changes in Response to Public Comments: Eight (8) persons requested extended setbacks from their homes and/or property lines and submitted the requisite DEQ form and physician's statement. DEQ modified the setback restrictions on the affected land application fields. Two (2) of the persons requesting extended setbacks were not adjacent landowners, and the extended setbacks had no effect on land application fields proposed in the permit.

Staff revisited the proposed land application sites on August 14, 2014, in response to comments received that indicated inaccuracies in the maps. DEQ requested that the permit applicant submit a number of minor map revisions as a result of the site visits, but none of the sites were excluded from being eligible for biosolids land application. The permit applicant provided the requested revisions, and DEQ added these revisions to the permit application materials that become an enforceable component of the VPA permit.

DEQ did not make any changes to the text of the draft permit conditions in response to the comments. DEQ prepared the draft permit in accordance with all applicable regulations and agency practices, and DEQ believes that the conditions in the permit will protect the water quality standards of the receiving streams in the county.

FY 2015 Virginia Clean Water Revolving Loan Fund Authorizations: Title IV of the Clean Water Act requires the yearly submission of a Project Priority List and Intended Use Plan in conjunction with Virginia's Clean Water Revolving Loan Fund Capitalization Grant application. Section 62.1-229 of Chapter 22, Code of Virginia, authorizes the Board to establish to whom loans are made, the loan amounts, and repayment terms. The next step in this yearly process is for the Board to set the loan terms and authorize the execution of the loan agreements. At its September 2014 meeting, the Board targeted 24 projects totaling \$83,965,578 in loan assistance from available and anticipated FY 2015 resources and authorized the staff to present the proposed funding list for public comment. A public meeting was convened on November 12th. Notice of the meeting was posted on the Virginia Regulatory Town Hall, the DEQ public calendar, and DEQ's Clean Water Financing and Assistance Program websites as well as being mailed to all loan applicants. No comments were received during the public review/comment period.

The staff has conducted initial meetings with the FY 2015 targeted recipients and has finalized the recommended interest rates and loan terms in accordance with the Board's guidelines. There are no changes being proposed to the loan recipients or loan amounts, therefore the 2014 funding list remains at 24 projects being recommended for final authorization at a total amount of \$83,965,578.

The loan terms listed below are submitted for Board consideration. In accordance with Board guidelines, a residential user charge impact analysis was conducted for each wastewater and stormwater project. This analysis determines the anticipated user charges as a result of the project relative to the affordable rate as a percentage of the applicant's median household income. Projects involving higher user charges relative to community income generally receive lower interest rates than those with relatively lower user charges. In accordance with Board guidelines, the interest rate for land conservation projects with 10 year terms is 3% below the prime rate, which is currently 3.25%, resulting in an interest rate of 0.25%.

Previously, the Board has set the VCWRLF ceiling rate on wastewater loans at 1% below the current municipal bond market rate. However, Congress recently passed new legislation which added additional conditions on revolving loan projects, specifically Davis Bacon Act and American Iron and Steel requirements. These requirements increase the construction and administrative costs of these projects and the staff believes that an additional 0.5% decrease in the ceiling rate is now warranted to account for these additional costs. Based on discussions with VRA, we are recommending that the ceiling rate be set at 1.5% below market based on VRA's evaluation of the market conditions that exist the month prior to each loan closing.

Since the Board’s September meeting, Congress has still not finalized the federal SRF appropriation for FY 2015. As such, we are unsure as to the amount, if any, that could be made available as principal forgiveness in FY 2015. The staff has analyzed the projects with regard to the program’s hardship affordability criteria and will be prepared to work with the Director on providing principal forgiveness to some projects as allowed by previous delegations if it is provided for by the appropriation.

FY 2015 Proposed Interest Rates and Loan Authorizations

	<i>Locality</i>	<i>Loan Amount</i>	<i>Rates & Loan Terms</i>
1	City of Norfolk	\$6,000,000	0%, 20 years
2	City of Waynesboro	\$1,723,401	CR, 20 years
3	Rivanna WSA	\$3,418,174	CR, 20 years
4	Buchanan County PSA	\$16,204,121	0%, 25 years
5	Town of Surry	\$2,020,400	0%, 20 years
6	Middle Peninsula PDC	\$200,000	0%, 10 years
7	Alleghany County	\$1,612,720	CR, 20 years
8	Town of Broadway	\$6,565,000	CR, 20 years
9	Town of Rural Retreat	\$862,550	CR, 20 years
10	Washington County SA	\$1,171,550	0%, 20 years
11	Harrisonburg/Rockingham RSA	\$8,995,500	CR, 20 years
12	Alleghany County	\$1,000,000	CR, 20 years
13	Town of Honaker	\$396,171	0%, 20 years
14	Tazewell County PSA	\$10,586,691	CR, 20 years
15	Alleghany County	\$145,000	CR, 20 years
16	City of Norfolk (stormwater)	\$1,195,000	0%, 20 years
17	Virginia Conservation Legacy Fund	\$5,160,000	0.25%, 10 years
18	Virginia Conservation Legacy Fund	\$5,169,000	0.25%, 10 years
19	Virginia Conservation Legacy Fund	\$5,215,000	0.25%, 10 years
20	Virginia Conservation Legacy Fund	\$3,103,000	0.25%, 10 years
21	Virginia Conservation Legacy Fund	\$597,000	0.25%, 10 years
22	Virginia Conservation Legacy Fund	\$2,073,000	0.25%, 10 years
23	Town of Marion	\$127,300	0.25%, 10 years
24	Virginia Conservation Legacy Fund	\$425,000	0.25%, 10 years
	Total Request	\$83,965,578	
			CR= Ceiling Rate