

DRAFT Meeting Minutes
Wednesday, March 4, 2020

Eastern Shore Surficial Aquifer General Permit Regulatory Advisory Panel (RAP)
DEQ Tidewater Regional Office
5636 Southern Blvd, Virginia Beach, Virginia

Members Present: Sue Mastyl, Paul Muhly, Dave Lovell, Brett Mariner, Jessica Steelman, Curtis Consolvo, John Coker, Jay Ford, and Britt McMillan.

Members Absent: Ed Tankard, Holly Porter, and Steve Levitsky.

Other Participants: Scott Kudlas (facilitator), Tony Cario, Gary Graham, Shannon Alexander, Mark Patterson, Craig Nicol, and Tony Banks.

The meeting convened at 1:17 p.m. and adjourned at 3:50 p.m.

1. Welcome and Introductions [Scott Kudlas and Craig Nicol, DEQ]. Mr. Kudlas welcomed the RAP members to the second meeting of the RAP and introduced Craig Nicol, the DEQ Regional Director. Mr. Nicol welcomed the members to the Tidewater Regional Office and oriented the participants with respect to the regional office facility. The tentative agenda for the meeting had previously been emailed to members (Attachment 1). Meeting materials (Attachments 2 and 3) had also been emailed to the members and copies were available in the meeting room for public attendees. The Base Regulation Proposal (Attachment 4) had been emailed to the members prior to the first meeting and copies were available for members of the public attending this meeting.
2. Review and discussion of the DRAFT minutes of the 2/20/20 Meeting [Scott Kudlas, DEQ]. Members were polled for comments on the DRAFT minutes.
 - a. A member suggested that Minute 2 e be changed to reflect discussions concerning support for technical issues that posed a barrier to the increased use of the surficial aquifer. If not previously mentioned in Meeting 1, the possibility of providing support to address the technical challenges of drilling in the surficial aquifer should be considered by DEQ and the RAP as a possible incentive for using the surficial aquifer.
 - b. Another member expressed concern that the Notice of Intended Regulatory Action (NOIRA) for this regulatory action just addressed one of the SB 1599 options for incentives to use the surficial aquifer and was therefore too narrow to properly address the legislation. Mr. Kudlas responded that this regulatory action responds to options within DEQ's authority. Other options that are identified later by the RAP and that are within DEQ's authority may be addressed through other regulatory actions.

3. Review and Discussion of the Base Regulation Proposal [Scott Kudlas, DEQ].
 - a. 9VAC25-610-95. General permits, Subsection B. DEQ included language here for aquifer protection purposes to be able to require that an individual permit be issued instead of operating under a general permit under certain specified conditions.
 - i. Several members thought that the three subdivisions would adequately cover all situations seen to date, but one member thought that the situation where a surficial aquifer well was affecting nearby wells or ponds was missing. Consultants felt that this condition was more perception than reality because the width of the cone of influence in the surficial aquifer is usually very small.
 - ii. Another member suggested that the RAP err on the side of flexibility and include a condition limiting the effects on surface water and that “surface water” be added to subdivisions 2 and 3.
 - iii. A member felt that “impacting water resources” might be better language. Also, “ecosystem” should be deleted, and “services” and “overdrawn” may have to be defined in this regulation with respect to the surficial aquifer.
 - iv. There was a general consensus that these changes to subdivisions B 2 and B 3 would be acceptable.
 - b. 9VAC25-610-95. General permits, Subsection C. Protection of the aquifer is ensured by allowing coverage be revoked under certain specified conditions listed in subsection 300 A.
4. Review of the Strawman for 9VAC25-910 General Permit [Scott Kudlas, DEQ]. The proposed changes to 9VAC25-610 include:
 - a. Section 10. Definitions. Most general permit (GP) regulations include some special definitions unique to the GP. Other GP regulations repeat definitions in the chapter so that the GP regulation can be read without referring to definitions elsewhere in the regulations. There was general consensus that repeating definitions in the General Permit Regulation (Chapter 910) would make the regulation much more useful to readers. Also, the statutory definition of “surficial aquifer” needs to be included. DEQ will work on definitions and send the updated section for review prior to the next meeting.
 - b. Section 15. Informational requirements. There was general consensus that DEQ should include the authority to remove incomplete applications from consideration after a period of time. DEQ will research this and report back at the next meeting.
 - c. Section 20. Purpose. There was general consensus among members that the purpose language should be general and allow DEQ maximum flexibility.
 - d. Section 25. Delegation of authority. This section is boilerplate from other regulations.
 - e. Section 30. Effective date of the permit. This section is boilerplate from other regulations with a permit term of 15 years. The RAP generally agreed that a 15 year permit term was appropriate.

- f. Section 35. Continuation of coverage. This section is boilerplate from other regulations.
 - g. Section 40. Authorization to withdraw groundwater from the surficial aquifer. Subsections A, B and C are boilerplate from other regulations. For the next meeting, consider:
 - i. Should this section mention the Eastern Shore or the Management Area?
 - ii. Should there be a minimum or maximum withdrawal rate for coverage under the general permit?
 - iii. If there were certain conditions that would require monitoring or testing, this would be the place to include it. A few members indicated that a general permit with the fewest conditions possible would be the best incentive (referring to adding testing or monitoring conditions) so the options should be (1) use the surficial aquifer and treat the water or (2) get an individual permit. Overuse of the surficial aquifer is unlikely, and overuse and up-coning have been addressed by the proposed changes to the base regulation. So additional conditions should be unnecessary.
 - h. Section 45. Exceptions to coverage. This section is standard in other GPs. Geologists on the RAP have no concerns about quantity of withdrawals, but the well depth might be of concern since the bottom of the surficial aquifer varies. There was general consensus that Driller's logs should be sufficient down to 80 feet. Geophysical logs might be required between 80 feet and 100 feet, but that was not part of the consensus. Fewer logging requirements above 80 feet provides more incentive to use the surficial aquifer.
 - i. Next Meeting [Scott Kudlas, DEQ]. The next meeting is Wednesday, March 18, 2020 at 10:00 a.m. at the Cape Charles Civic Center, 500 Tazewell Avenue, Cape Charles, VA.
5. Flip chart notes for further consideration:
- a. Driller Incentives: Discuss ways which well drillers can be encouraged to drill wells that utilize the surficial aquifer.
 - b. Alternate Incentives: Aside from this general permit, discuss other possible incentives to encourage the use of the surficial aquifer.
 - c. Surface water (pond) impacts: Include permit conditions or regulatory language to address possible impacts to surface water supplies by withdrawals from the surficial aquifer.
 - d. Automatically withdraw applications: Explore including regulatory language to allow DEQ to automatically withdraw an application if no action is taken by applicant to complete the application after a certain time period.
 - e. Examples of general permit conditions: Provide examples of conditions or parameters that can be included in the regulations for this general permit.
6. Action Items:
- a. DEQ will make changes to the base regulation and general permit regulation and bring them back to the RAP at the next meeting.
 - b. Members will think about additional conditions that would be necessary to protect the surficial aquifer and bring ideas to the next meeting. Members will

review the General Permit Regulation strawman sections 50 and beyond and be ready to discuss them and suggest changes at the next meeting.

Attachments:

1. Tentative Meeting Agenda.
2. Strawman for the General Permit Regulation (9VAC25-910).
3. DRAFT Minutes of the February 20, 2020 RAP Meeting
4. Strawman for Base Regulation Changes (9VAC25-610).

TENTATIVE AGENDA
ESGWMA Surficial Groundwater General Permit Regulatory Advisory Panel
Meeting #2, March 4, 2020

Welcome and Introductions

Review and Discuss Base Regulation Proposal(s)

- A. Review proposals for language changes from the panel
- B. Objective is to reach consensus on final language

Begin Review of Strawman for 9 VAC 25-910 General Permit

- C. Review 9 VAC 25-910-10
- D. Review 9 VAC 25-910-15
- E. Review 9 VAC 25-910-20
- F. Review 9 VAC 25-910-25
- G. Review 9 VAC 25-910-30
- H. Review 9 VAC 25-910-35
- I. Review 9 VAC 25-910-40
- J. Review 9 VAC 25-910-45
- K. Review 9 VAC 25-910-50
- L. Review 9 VAC 25-910-55
- M. Review 9 VAC 25-910-60

If time permits, the Panel may move through additional sections.

Wrap up for the day and discussion of next meeting

Attachment 2

CHAPTER 910 General Permit for Use of Surficial Aquifer on the Eastern Shore

9VAC25-910-10. Definitions.

The words and terms used in this chapter shall have the meanings defined in § 62.1-44.2 et seq. of the Code of Virginia (Ground Water Management Act of 1992) and 9VAC25-610 (Groundwater Withdrawal Regulation) unless the context clearly indicates otherwise, except that for the purposes of this chapter:

[To be determined if specific definitions need to be added]

9VAC25-910-15. Information requirements.

Pursuant to 9VAC25-610-380, the board may request (i) such plans, specifications, and other pertinent information as may be necessary to determine the effect of an applicant's groundwater withdrawal (ii) such other information as may be necessary to accomplish the purposes of this chapter. Any owner, permittee, or person applying for a general permit coverage shall provide the information requested by the board.

9VAC25-910-20. Purpose

The purpose of this chapter is to establish a General Permit for Use of Surficial Aquifer on the Eastern Shore Applications under 9VAC25-610. Applications for coverage under this general permit shall be processed for approval, **approval with conditions**, or denial by the board. Coverage, **coverage with conditions**, or application denial by the board, shall constitute the general permit action and shall follow all provisions in the Ground Water Management Act of 1992 (§ 62.1-256 et seq. of the Code of Virginia), except for the public comment and participation provisions, from which each general permit action is exempt.

[REVIEW "COVERAGE WITH CONDITIONS" DISCUSS WITH THE RAP]

9VAC25-910 25. Delegation of authority.

The director, or an authorized representative, may perform any act of the board provided under this chapter, except as limited by § 62.1-44.14 of the Code of Virginia.

9VAC25-910 30. Effective date of the permit [Review and discuss permit term with RAP]

The general permit in 9VAC25-910-65 is effective XXX, 2020 and expires XXXX, 2035. Any coverage that is granted pursuant to 9VAC25-910-65 shall remain in full force and effect until 11:59 p.m. on XXXX, 2035, unless the general permit coverage is terminated or revoked on or before this date.

9VAC25-910-35. Continuation of Coverage.

Where a permittee that has received general permit coverage desires to continue the authorized activities, the Permittee shall reapply for new general permit coverage or for an individual permit, including payment of any required permit application fee before XXXX, 2035. Activities using groundwater requiring a permit shall not commence or continue until a general permit or administrative continuance is granted, or an individual permit is issued by the board.

9VAC25-910-40. Authorization to withdrawal groundwater from the surficial aquifer of the Eastern Shore.

A. Any person granted coverage under the general permit, may withdrawal groundwater from the surficial aquifer of the Eastern Shore, as defined in this chapter, provided that:

1. The applicant submits an application in accordance with 9VAC25-910-50.
2. The applicant remits any required permit application fee.
3. The applicant receives general permit coverage from the Department of Environmental Quality under 9VAC25-910-65 and complies with the limitations and other requirements of the general permit; the general permit coverage letter; and the Ground Water Management Act of 1992 and attendant regulations.
4. The applicant has not been required to obtain an individual permit under 9VAC25-610 for the proposed project withdrawals. The applicant, at his discretion, may seek an individual permit, in lieu of coverage under this general permit.

B. Application may be made at any time for an individual permit in accordance with 9VAC25-610.

C. Coverage under general permit does not relieve the Permittee of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.

Discuss options for including conditions to a general permit for water level, water quality monitoring, or other situations]

9VAC25-910-45. Exceptions to coverage.

A. Coverage under this general permit is not required if the activity is excluded from permitting in accordance with 9VAC25-610-50.

1. This general permit cannot be used for an activity that would cause the aggregate withdrawal of **XXX** million gallons per day. *[TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]*
2. This general permit cannot be used for any well with a maximum depth greater than **XX** feet below land surface. *[TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]*

B. The activity to withdrawal water shall not have been prohibited by state law or regulations, nor shall it contravene applicable Groundwater Withdrawal Regulations.

C. The board shall deny application for coverage under this general permit to any applicant conducting activities that cause, may reasonably be expected to cause, or may be contributing to cause more than minimal degradation of the Yorktown Eastover Aquifer, water quality, stream or wetland hydrology, or other ecosystem services. The board may require an individual permit in accordance with 9VAC25-610-95 B rather than granting coverage under this general permit.

D. Coverage under this general permit shall not be granted for:

1. Any activity outside the Eastern Shore groundwater management area.
2. Any activity in an aquifer other that the Eastern Shore surficial aquifer.

9VAC25-910-50. Application.

A. The applicant shall file a complete application in accordance with this section for coverage under this general permit for Use of the surficial aquifer on the Eastern Shore.

B. A complete application for general permit coverage, at a minimum, consists of the following information, if applicable to the project:

1. The permit fee as required by the Fees for Permits and Certificates Regulations (9VAC25-20);
2. A groundwater withdrawal permit application completed in its entirety with all maps, attachments, and

addenda that may be required. Application forms shall be submitted in a format specified by the board. Such application forms are available from the Department of Environmental Quality;

3. A signature as described in 9VAC25-610-150 ;
 4. A completed well construction report for all existing wells associated with the application submitted on the Water Well Completion Report, Form GW2;
 5. Locations of all wells associated with the application shown on United States Geological Survey 7-1/2 minute topographic maps. The applicant shall provide the latitude and longitude coordinates in a datum specified by the department for each existing and proposed well. The detailed location map shall be of sufficient detail such that all wells may be easily located for site inspection;
 6. A map identifying the service areas for public water supplies;
 7. Information on surface water and groundwater conjunctive use systems as described in 9VAC25-610-104 if applicable;
 8. ~~A water conservation and management plan as described in 9VAC25-610-100;~~ **[Specific conservation and management conditions to be added to permit]**
 9. The application shall include notification from the local governing body in which the withdrawal is to occur that the location and operation of the withdrawing facility is in compliance with all ordinances adopted pursuant to Chapter 22 (§ 15.2-2200 et seq.) of Title 15.2 of the Code of Virginia. If the governing body fails to respond to the applicant's request for certification within 45 days of receipt of the written request, the location and operation of the proposed facility shall be deemed to comply with the provisions of such ordinances for the purposes of this chapter. The applicant shall document the local governing body's receipt of the request for certification through the use of certified mail or other means that establishes proof of delivery;
 10. Documentation justifying volume of groundwater withdrawal requested as described in 9VAC25-610-102 A and B;
 11. **[TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]** A complete suite of geophysical logs (16"/64" Normal, Single Point, Self Potential, Lateral, and Natural Gamma at a scale of 20 ft per inch) shall be obtained from boreholes at the locations and depths approved by the Department. At least two months prior to the scheduled geophysical logging, the Permittee shall notify the Department of the drilling timetable to receive any further guidance needed on performing the geophysical logging and to allow scheduling of Department staff to make a site visit during the drilling of the borehole and/or the geophysical logging. Geophysical log data collected without the oversight of the Department will not be accepted.
 12. Other relevant information that may be required by the board to evaluate the application. **[TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]**
 - a. The installation of monitoring wells and the collection and analysis of drill cuttings, continuous cores, water quality samples, or other hydrogeologic information necessary to characterize the aquifer system present at the proposed withdrawal site.
 - b. The completion of pump tests or aquifer tests to determine aquifer characteristics at the proposed withdrawal site.
- C. The board may waive the requirement for information listed in section B to be submitted if it has access to substantially identical information that remains accurate and relevant to the permit application.
- D. Incomplete application. Where an application is not accepted as complete by the board under the requirements of subdivision B of this section, the board shall require the submission of additional information pursuant to 9VAC25-610-98.

9VAC25-910-55. Notice of planned changes; modifications to coverage. [TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]

- A. The permittee shall notify the board in advance of a planned change, and an application or request for modification to coverage shall be reviewed according to all provisions of this chapter. The applicant may submit a new permit application for consideration under an individual permit.
- B. General permit coverage may be modified under the following circumstances:

9VAC25-910-60. Termination of coverage. [TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]

- A. The permittee shall submit a request for termination by consent within 30 days of completing or canceling all authorized activities requiring notification under 9VAC25-610-290.
- B. General permit coverage may be revoked in accordance with 9VAC25-610-290, 9VAC25-610-290 and § 62.1-44.15:02 of the Code of Virginia.

9VAC25-910-65. General Permit.

Any owner whose registration statement is accepted by the board will receive coverage under the following permit and shall comply with the requirements therein and be subject to all requirements of 9VAC25-610

GENERAL PERMIT FOR GROUNDWATER WATER WITHDRAWALS FROM THE EASTERN SHORE
SURFICIAL AQUIFER

Effective date: XXXX, 2020

Expiration date: XXXX, 2035

Pursuant to Section 62.1-256 of the Ground Water Management Act of 1992 (§ 62.1-254 et seq. of the Code of Virginia) and the Groundwater Withdrawal Regulations (Regulations) (9VAC25-610), the State Water Control Board (Board) hereby authorizes the Permittee to withdraw and use groundwater in accordance with this permit.

The authorized withdrawals shall be in accordance with the information submitted with the application, this cover page, Part I – Operating Conditions and Part II - Conditions Applicable to all Groundwater Withdrawal Permits, as set forth in this general permit.

Part I. Operating Conditions.

A. Authorized Withdrawal

The withdrawal of groundwater shall be limited to the wells identified Groundwater Withdrawal application submitted in accordance with 9VAC25-910-50.

B. Reporting [TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]

1. Water withdrawn from each well shall be recorded monthly at the end of each month and reported to the Office of Water Supply, in paper or electronic format, on a form provided by the Department by the tenth (10th) day of each January, April, July and October for the respective previous calendar quarter. Records of water use shall be maintained by the Permittee in accordance with Part III.F, 1 through 5 of this permit.

2. The Permittee shall report any amount in excess of the permitted withdrawal limit by the fifth (5th) day of the month following the month when such a withdrawal occurred. Failure to report may result in compliance or enforcement activities.

C. Water Conservation and Management Plan

[TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP] Create standard WCMP conditions for this General Permit]

D. Mitigation Plan *[TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]*

1. In cases where the area of impact does not remain on the property owned by the applicant or existing groundwater withdrawers will be included in the area of impact, the applicant shall mitigate all adverse impacts on existing groundwater users in accordance with the following process:
 - a. The permittee will review any claim within five (5) business days. If the Permittee determines that no rebuttal will be made and accepts the claim as valid, the Permittee will so notify the claimant and will implement mitigation within **thirty (30) business days**. If the claim is not accepted as valid, the Permittee will notify the claimant that (a) the claim is denied **or** (b) that additional documentation from the claimant is required in order to evaluate the claim. Within **fifteen (15) business days** of receiving additional documentation from the claimant, the Permittee will notify the claimant (a) that the Permittee agrees to mitigate adverse impacts or (b) the claim is denied. If the claim is denied, the claimant will be notified that the claimant may request the claim *.....[Next measures to be determined]*

G. Well Tags

Each well that is included in this permit shall have affixed to the well casing, in a prominent place, a permanent well identification plate that records, at a minimum, the DEQ well identification number, the groundwater withdrawal permit number, the total depth of the well, and the screened intervals in the well. Such well identification plates shall be in a format specified by the Board and are available from the Department.

H. Well Abandonment

The Permittee shall permanently abandon out of service wells in accordance with the Virginia Department of Health's Regulations and submit documentation to the Department of Environmental Quality within 30 days of abandonment. At least two weeks prior to the scheduled abandonment, the Permittee shall notify the Department of the scheduled abandonment date.

Part II. Conditions Applicable to All Groundwater Withdrawal Permits.

A. Duty to Comply

The Permittee shall comply with all conditions of the permit. Nothing in this permit shall be construed to relieve the permit holder of the duty to comply with all applicable federal and state statutes, regulations and prohibitions. Any permit violation is a violation of the law and is grounds for enforcement action, permit termination, revocation, modification, or denial of a permit application.

B. Duty to Cease or Confine Activity

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the activity for which a permit has been granted in order to maintain compliance with the conditions of the permit.

C. Duty to Mitigate

The Permittee shall take all reasonable steps to avoid all adverse impacts that may result from this withdrawal as defined in 9VAC25-610-10 and provide mitigation of the adverse impact when necessary as described in 9VAC25-610-110 D 3 g and 9VAC25-610-130 C.

D. Inspection, Entry, and Information Requests

Upon presentation of credentials, the Permittee shall allow the Board, the Department, or any duly authorized agent of the Board, at reasonable times and under reasonable circumstances, to enter upon the Permittee's property, public or private, and have access to, inspect and copy any records that must be kept as part of the permit conditions, and to inspect any facilities, well(s), water supply system, operations, or practices (including sampling, monitoring and withdrawal) regulated or required under the permit. For the purpose of this section, the time for inspection shall be deemed reasonable during regular business hours. Nothing contained herein shall make an inspection time unreasonable during an emergency.

E. Duty to Provide Information

The Permittee shall furnish to the Board or Department, within a reasonable time, any information that the Board may request to determine whether cause exists for modifying or revoking, reissuing, or terminating the permit, or to determine compliance with the permit. The Permittee shall also furnish to the Board or Department, upon request, copies of records required to be kept by regulation or this permit.

F. Monitoring and Records Requirements

1. The Permittee shall maintain a copy of the permit on-site and/or shall make the permit available upon request.
2. Monitoring of parameters shall be conducted according to approved analytical methods as specified in the permit.

3. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
4. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or electronic recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three years from the date of the expiration of a granted permit. This period may be extended by request of the Board at any time.
5. Records of monitoring information shall include as appropriate:
 - a. the date, exact place and time of sampling or measurements;
 - b. the name(s) of the individual(s) who performed the sampling or measurements;
 - c. the date the analyses were performed;
 - d. the name(s) of the individual(s) who performed the analyses;
 - e. the analytical techniques or methods supporting the information, such as observations;
 - f. readings, calculations and bench data used;
 - g. the results of such analyses; and
 - h. chain of custody documentation.

G. Environmental Laboratory Certification

The Permittee shall comply with the requirement for certification of laboratories conducting any tests, analyses, measurements, or monitoring required pursuant to the State Water Control Law (§ 62.1-44.2 et seq. of the Code of Virginia), Environmental Laboratory Certification Program (§ 2.2-1105 et seq. of the Code of Virginia), Certification for Noncommercial Environmental Laboratories (1VAC30-45), and/or Accreditation for Commercial Environmental Laboratories (1VAC30-46), and

- a. Ensure that all samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity;
- b. Conduct monitoring according to procedures approved under 40CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, and
- c. Periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

H. Future Permitting Actions

1. A permit may be modified or revoked as set forth in Part VI of the Groundwater Withdrawal Regulations. 9VAC25-610-290 and 9VAC25-610-130 G
2. If a Permittee files a request for permit modification or revocation, or files a notification of planned changes, or anticipated noncompliance, the permit terms and conditions shall remain effective until the Board makes a final case decision. This provision shall not be used to extend the expiration date of the effective permit.
3. Permits may be modified or revoked upon the request of the Permittee, or upon Board initiative, to reflect the requirements of any changes in the statutes or regulations.
4. The Permittee shall schedule a meeting with the Department prior to submitting a new, expanded or modified permit application.
5. A new permit application shall be submitted 270 days prior to the expiration date of this permit, unless permission for a later date has been granted by the Board, to continue a withdrawal greater than or equal to 300,000 gallons in any month while an application for a renewal is being processed.
6. A new permit application shall be submitted 270 days prior to any proposed modification to this permit that will (i) result in an increase of withdrawal above permitted limits; or (ii) violate the terms and conditions of this permit.
7. The applicant shall provide all information described in 9VAC25-610-94 for any reapplication. 9VAC25-610-96 C
8. The Permittee must notify the Department in writing of any changes to owner and facility contact information within 30 days of the change.

I. Metering and Equipment Requirements

1. Each well and/or impoundment or impoundment system shall have an in-line totalizing flow meter to read gallons, cubic feet, or cubic meters installed prior to beginning the permitted use. Meters shall produce volume determinations within plus or minus 10% of actual flows.
 - a. A defective meter or other device must be repaired or replaced within 30 days.
 - b. A defective meter is not grounds for not reporting withdrawals. During any period when a meter is defective, generally accepted engineering methods shall be used to estimate withdrawals. The period during which the meter was defective must be clearly identified in the groundwater withdrawal report required by Part I, Subsection D of this permit. An alternative method for determining flow may be approved by the Board on a case-by-case basis.

2. Each well shall be equipped in a manner such that water levels can be measured during pumping and non-pumping periods without dismantling any equipment. Any opening for tape measurement of water *levels* shall have an inside diameter of at least 0.5 inches and be sealed by a removable plug or cap. The Permittee shall provide a tap for taking raw water samples from each permitted well.

J. Minor Modifications *[TO BE DETERMINED AFTER REVIEW AND DISCUSSION WITH RAP]*

1. A minor modification to this permit must be made to replace an existing well(s) or add an additional well(s) provided that the well(s) is screened in the same aquifer(s) as the existing well(s), and is in the near vicinity of the existing well(s), the total groundwater withdrawal does not increase, the area of impact does not increase, and the well has been approved by the Department prior to construction.
2. A minor modification to this permit must be made to combine withdrawals governed by multiple permits when the systems are physically connected as long as interconnection will not result in additional groundwater withdrawal and the area of impact will not increase.
3. Minor modifications to this permit must also be made to:
 - a. Change an interim compliance date up to 120 days from the original compliance date, as long as the change does not interfere with the final compliance date.
 - b. Allow for change in ownership when the Board determines no other change in the permit is necessary and the appropriate written agreements are provided in accordance with the transferability of permits and special exceptions.

K. Well Construction

At least two weeks prior to the scheduled construction of any well(s), the Permittee shall notify the Department of the construction timetable and receive prior approval of the well(s) location(s) and acquire the DEQ Well number. All wells shall be constructed in accordance with the following requirements.

1. A well site approval letter or well construction permit must be obtained from the Virginia Department of Health prior to construction of the well.
2. A complete suite of geophysical logs (16"/64" Normal, Single Point, Self-Potential, Lateral, and Natural Gamma) shall be completed for the well and submitted to the Department along with the corresponding completion report.
3. The Permittee shall evaluate the geophysical log and driller's log information to estimate the top of the target aquifer and; therefore, a depth below which the pump shall not be set. The Permittee's determination of the ~~top~~BOTTOM of the target aquifer shall be submitted to the Department for review and approval, or approved on site by the Department's Groundwater Characterization staff,

prior to installation of any pump. **[TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]**

4. The Permittee shall install gravel packs and grout in a manner that prevents leakance between aquifers. Gravel pack shall be terminated close to the top of the well screen(s) and shall not extend above the top of the target aquifer. **[TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]**
5. A completed GW-2 Form and any additional water well construction documents shall be submitted to the Department within 30 days of the completion of any well and prior to the initiation of any withdrawal from the well. The assigned DEQ Well number shall be included on all well documents.
6. In addition to the above requirements, construction of a Water Level Monitoring State Observation Well (SOW) requires: **[TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]**
 - a. The Permittee shall coordinate activities with the Department's Groundwater Characterization Program (GWCP) to determine the appropriate observation well location and construction schedule, along with the needed screen interval(s), and other completion details following review of geophysical logging.
 - b. Prior to preparation of bid documents for construction of the observation well, the Permittee shall notify the Department and shall include any GWCP requirements in the bid documents. At a minimum, the Department will require a pre-bid meeting with interested drilling contractors and a pre-construction meeting with the successful bidder.
 - c. Instrumentation to meet the requirements for real-time data transmission consistent with the State Observation Well Network shall be purchased by the Permittee. The Permittee shall submit a purchase order based on the Department's equipment specifications for review and approval prior to purchase of the equipment. The Permittee shall install the real-time equipment infrastructure with Department oversight. The Department will conduct the installation of the transducer and final hook-up of the equipment.
7. In addition to the above requirements, construction of a Chloride Monitoring SOW requires: **[TO BE DETERMINED AFER REVIEW AND DISCUSSION WITH RAP]**
 - a. The Permittee shall coordinate activities with the Department's Groundwater Characterization Program (GWCP) to determine the appropriate observation well location and construction schedule, along with the needed screen interval(s), and other completion details following review of geophysical logging.
 - b. Prior to preparation of bid documents for construction of the observation well, the Permittee shall notify the Department and shall include any GWCP requirements in the bid documents. At a minimum, the Department will require a pre-bid meeting with interested drilling contractors and a pre-construction meeting with the successful bidder.

- c. Instrumentation to meet the requirements for real-time data transmission consistent with the State Observation Well Network shall be purchased by the Permittee. The Permittee shall submit a purchase order based on the Department's equipment specifications for review and approval prior to purchase of the equipment. The Permittee shall install the real-time equipment infrastructure with Department oversight. The Department will conduct final hook-up of the equipment.
- d. Instrumentation to meet the requirements for continuous measurement of specific conductance from multiple levels within the well screen shall be purchased by the Permittee. The Permittee shall submit a purchase order based on the Department's equipment specifications for review and approval prior to purchase of the equipment. The Permittee shall install the real-time equipment infrastructure with Department oversight. The Department will conduct the final hook-up of the equipment.

L. Permit Reopening

This permit may be reopened for the purpose of modifying the conditions of the permit as follows:

- a. To meet new regulatory standards duly adopted by the Board. 9VAC25-610-140 A 11
- b. When new information becomes available about the permitted withdrawal, or the impact of the withdrawal, which had not been available at permit issuance and would have justified the application of different conditions at the time of issuance. 9VAC25-610-310 B 1
- c. When the reported withdrawal is less than 60% of the permitted withdrawal amount for a five year period.

If monitoring information indicates the potential for adverse impacts to groundwater quality or level due to this

Attachment 3

DRAFT Meeting Minutes
Thursday, February 20, 2020

Eastern Shore Surficial Aquifer General Permit Regulatory Advisory Panel (RAP)
Cape Charles Civic Center
500 Tazewell Avenue, Cape Charles, Virginia

Members Present: Sue Mastyl, Paul Muhly, Dave Lovell, Brett Mariner, Jessica Steelman, Curtis Consolvo, John Coker, Holly Porter, and Britt McMillan.

Members Absent: Jay Ford, Ed Tankard, and Steve Levitsky.

Other Participants: Scott Kudlas (facilitator), Jutta Schneider, Tony Cario, Gary Graham, Shannon Alexander, and Tony Banks.

The meeting convened at 10:03 a.m. and adjourned at 11:49 a.m.

1. Welcome and Introductions [Scott Kudlas and Gary Graham, DEQ]. Mr. Kudlas welcomed the RAP members to the meeting and Mr. Graham reviewed the purpose and pitfalls of the RAP facilities. Members introduced themselves. The tentative agenda for the meeting had previously been emailed to members (Attachment 1). Meeting materials (Attachments 2 and 3) had also been emailed to the members and were available in the meeting room for public attendees. Guidelines for Discussion (Attachment 4) and the RAP membership list (Attachment 5) were also handed out before the meeting.
7. Review and discussion of Senate Bill 1599 (2019) [Scott Kudlas, DEQ]. The legislation SB1599 was handed out at the meeting (Attachment 6). Mr. Kudlas reviewed the legislation and the five categories of incentives that can be used to incentivize the use of the surficial aquifer on Virginia's Eastern Shore.
 - a. An extended permit term up to 20 years. Fifteen years represents is the best permit term. A shorter general permit term provides little incentive and longer terms give less time to adjust the general permit regulation to adjust to adverse or unexpected changes in the aquifers.
 - b. An accelerated permit process. A general permit is a permit-by-rule, so that the terms of the permit are all in the General Permit regulation. Application review is quick compared to other permits (usually about 30 days). Also, the entire General Permit Regulation expires at the permit term and the General Permit Regulation has to be reissued as a new regulation. Facilities covered by the General Permit Regulation operate under the terms of the general permit only for the remainder of the term of the General Permit Regulation. Some members felt that since they operate under a normal permit that a general permit would not be applicable to them, so a General Permit Regulation provides no incentive for them to switch.
 - c. Discounted permit fees. Discounting permit fees pose some challenges for DEQ. Normally permit fees cover 30-40% of the program. Permits for this program cover less than 6% and are relatively small (about \$9000). Many facilities pay no fees. Member discussion indicated that reducing permit fees would provide little incentive to switch to the surficial aquifer, especially since the water treatment costs are usually so much larger than the permit fees.
 - d. Other subsidies. Funding for other subsidies does not exist in the new budget proposals. Therefore, this option is unlikely to provide incentives.
 - e. Other incentives. No other incentive options were identified by the members.

8. Driving Factors for the Legislation [Shannon Alexander, Eastern Shore Groundwater Committee]. Ms. Alexander presented slides (Attachment 6) and discussed the reasons that were the driving force behind the legislation (SB 1599). In summary, the surficial aquifer provides a more easily replenished source of low pressure, good quality water for the Eastern Shore. If used as an alternative to using water from deeper aquifers that do not replenish as easily, then the local water supply becomes more sustainable and the water quality of the deeper aquifers is not as likely to degrade from overuse. Members discussed how the local variability of water quality in both the surficial and deep aquifers (as pointed out in the presentation) might dictate whether using the surficial aquifer is economically feasible. Another concern was that if the choice was to operate under one permit or the other, facilities would choose not to switch to operating under a general permit. Members also discussed the possibility if the General Permit Regulation did not prevent operating under a normal permit also, that mixing water from the deeper aquifer and the surficial aquifer could solve local water quality problems and reduce treatment costs, which could be an incentive to use more of the surficial aquifer.
9. Development of a General Permit [Scott Kudlas, DEQ]. Mr. Kudlas pointed out that the accelerated permit process is the only viable incentive out of the options offered in the legislation and that development of a General Permit Regulation is the best way to accelerate the permit process. Development of a general permit will require:
 - a. An amendment to 9VAC25-610 to authorize a General Permit Regulation. Other State Water Control Board (SWCB) regulations have existing language that work well and that can be adapted for authorizing this general permit.
 - b. A new General Permit Regulation (proposed as 9VAC25-910) to contain the terms and conditions that would normally be in a permit and under which facilities can operate. These terms and conditions need to be selected to protect the water supply yet provide the needed flexibility and incentive to increase the use of the surficial aquifer.
10. Review of a strawman to amend 9VAC25-610 to authorize General Permit Development [Scott Kudlas, DEQ]. A strawman for proposed amendment language to 9VAC25-610 (Attachment 7) was handed out to members at the meeting and made available to members of the public attending the meeting. The proposed changes to 9VAC25-610 include:
 - a. A new definition of "general permit." Language in an existing definition of "General Permit" in SWCB water discharge regulations was revised to apply to groundwater withdrawal instead of discharges.
 - b. A new section "9VAC25-610-95. General Permits."
 - i. Proposed new subsections A, D, F, and G are standard language in other SWCB Regulations that authorize a General Permit Regulation, adapted for groundwater withdrawal.
 - ii. Proposed new subsection B covers situations in which the general permit may not be appropriate or when unintended consequences dictate that an individual permit is more appropriate.
 - iii. Proposed new subsection C is standard language from other SWCB general permit regulations.
11. Action Item: Members will review the strawman and be ready to discuss it and suggest changes at the March 4th meeting in Tidewater.

Attachments:

1. Tentative Meeting Agenda.
2. The Role of the Regulatory Advisory Panel in the Regulatory Process.

3. Public Participation Report for the NOIRA concerning Regulation Amendments Covering the Eastern Shore Surficial Aquifer General Permit.
4. Guidelines for Discussion.
5. Regulatory Advisory Panel. (RAP membership List)
6. Senate Bill 1599 (2019)
7. Eastern Shore Groundwater Committee Presentation Slides: Driving Factors for the Legislation.
8. Strawman for Base Regulation Changes (9VAC25-610).

See the DRAFT minutes on the Virginia Regulatory Town Hall for the attachments.

https://www.townhall.virginia.gov/L/GetFile.cfm?File=meeting\103\30753\Minutes_DEQ_30753_v1.pdf

Attachment 4

Strawman for Base Regulation Changes

9VAC25-610-10. Definitions.

Unless a different meaning is required by the context, the following terms as used in this chapter shall have the following meanings:

"General permit" means a groundwater withdrawal permit authorizing the withdrawal of groundwater in a groundwater management area under specified conditions including the size of the withdrawal or the aquifer or confining unit from which the withdrawal is to be made.

9VAC25-610-94. Application for a new permit, expansion of an existing withdrawal, or reapplication for a current permitted withdrawal.

9VAC25-610-95. General permits.

A. The board may issue a general permit by regulation for withdrawals of groundwater within a groundwater management area, as it deems appropriate in accordance with the following:

1. A general permit may be written to cover

a. withdrawals of a certain size

b. withdrawals from a specific aquifer or confining unit

c. other categories of withdrawals deemed appropriate by the board.

2. A general permit must clearly identify the applicable conditions of this chapter for each category or subcategory of withdrawals covered by the permit.

3. The general permit may exclude specified withdrawals or areas from coverage

B. When the board determines on a case-by-case basis that concerns for the aquifer, water quality and the ecosystem services that depend on the groundwater so indicate, the board may require individual applications and individual permits rather than approving coverage under a general permit regulation. Cases where an individual permit may be required include the following:

1. The wells of two or more groundwater users within the area are interfering or may reasonably be expected to interfere substantially with one another;

2. The available ground water supply has been or may be overdrawn and is impacting ecosystem services that rely on surficial aquifer input;

3. The groundwater in the area has been or may become polluted. Such pollution includes any alteration of the physical, chemical or biological properties of ground water which has a harmful or detrimental effect on the quality or quantity of such waters.

4. Where the applicant or permittee is not in compliance with the conditions of the general permit regulation or coverage; or

5. When an applicant or permittee no longer qualifies for coverage under the general permit.

C. General permit coverage may be revoked from an individual permittee for any of the reasons set forth in 9VAC25-610-300 A subject to appropriate opportunity for a hearing.

D. Activities authorized under a general permit and general permit regulation shall be authorized for the fixed term stated in the applicable general permit and general permit regulation.

E. When an individual permit is issued to a permittee, the applicability of general permit coverage to the individual permittee is automatically terminated on the effective date of the groundwater withdrawal individual permit.

F. When a groundwater withdrawal general permit regulation is issued, which applies to a permittee that is already covered by an individual permit, such person may request exclusion from the provisions of the general permit regulation and subsequent coverage under an individual permit.

G. General permits may be issued, modified, revoked and reissued, or terminated in accordance with the provisions of the Administrative Process Act (Chapter 40 of Title 2.2 of the Code of Virginia, §2.2-4000 et seq.).

9VAC25-610-96. Duty to reapply for a permit.

9VAC25-610-300. Causes for revocation.

A. After public notice and opportunity for a formal hearing pursuant to 9VAC25-230-100 a permit or special exception can be revoked for cause. Causes for revocation are as follows:

1. Noncompliance with any condition of the permit or special exception;
2. Failure to fully disclose all relevant facts or misrepresentation of a material fact in applying for a permit or special exception, or in any other report or document required by the Act, this chapter or permit or special exception conditions;
3. The violation of any regulation or order of the board, or any order of a court, pertaining to groundwater withdrawal;
4. A determination that the withdrawal authorized by the permit or special exception endangers human health or the environment and cannot be regulated to acceptable levels by permit or special exception modification;
5. A material change in the basis on which the permit or special exception was issued that requires either a temporary or permanent reduction, application of special conditions or elimination of any groundwater withdrawal controlled by the permit or special exception.