Clean Air Act Title V Program Evaluation Report Virginia Department of Environmental Quality – FY2020

Prepared By: EPA Region 3
August 31, 2020

I. Executive Summary

For fiscal year 2020, Environmental Protection Agency Region 3 (EPA) evaluated Virginia Department of Environmental Quality's (VADEQ) title V permit program. Due to the COVID-19 pandemic, the evaluation was conducted via remote means and assessed the program more broadly. Areas of review included permit preparation and content, public participation and outreach, permit issuance, and resources and internal management support.

EPA found that VADEQ's prepares title V permits in accordance with title V rules and regulation. Across the offices, implementation of electronic resources, extensive draft permit review, and collaboration result in the development of high-quality permits. However, EPA also found that VADEQ's program faces interrelated issues of staffing vacancies and a backlog of initial and renewal title V permits. To address these issues, VADEQ will develop a workload assessment, staffing plan, and corrective action plan for backlogged actions.

II. Introduction

For fiscal year 2020, Environmental Protection Agency Region 3 (EPA) evaluated Virginia Department of Environmental Quality's (VADEQ) title V permit program.¹ Title V program evaluations are part of EPA's routine oversight of state programs with the intent of identifying best practices, areas for improvement, and ways in which EPA can improve its oversight role.

VADEQ's air permit program is divided between six regional offices and one central administrative office. Historically EPA has conducted title V program evaluations of VADEQ on a regional basis, evaluating two of the six offices in depth with onsite interviews of regional air permit managers (APMs). Most recently, EPA's 2013 report evaluated Valley Regional Office (VRO) and Blue Ridge Regional Office (BRRO). However, due to the travel constraints of the COVID-19 pandemic, the format of this evaluation was modified. This evaluation considers VADEQ's title V permit program more broadly across all regional offices, and was conducted through remote means of written questionnaires, phone calls, and email correspondence. Areas evaluated include title V permit preparation and content, public participation and outreach, permit issuance, and resources and internal management support.

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¹ Approved 12/14/2001 at <u>66 FR 62961.</u>

Office	APM	Location
Office of Air Permit Programs (OAPP)	Tamera Thompson	Richmond, VA
Tidewater Regional Office (TRO)	Laura Corl	Virginia Beach, VA
Piedmont Regional Office (PRO)	James Kyle	Glen Allen, VA
Northern Regional Office (NRO)	Justin Wilkinson	Woodbridge, VA
Valley Regional Office (VRO)	Janardan Pandey	Harrisonburg, VA
Blue Ridge Regional Office (BRRO)	Paul Jenkins	Salem, VA
Southwest Regional Office (SWRO)	Rob Feagins	Abingdon, VA

III. Evaluation

To gather information, EPA provided VADEQ's APMs with a questionnaire on May 22, 2020 (Appendix A). Written responses were requested and received by June 12, 2020. On July 1, 2020 EPA's Mary Cate Opila (Air Permits Branch Chief) and Riley Burger (Virginia Air Permits Contact) held a follow up call with VADEQ OAPP's Tamera Thompson (Manager), Stanley Faggert (Guidance & Regulation Coordinator), and Patrick Corbett (Guidance and Regulation Coordinator). The content of this report is based on the written questionnaire responses, the follow up phone call with VADEQ OAPP, subsequent correspondence with VADEQ, publicly available information on VADEQ's website, and EPA's experience working with VADEQ's title V permit program during routine oversight. File review was not conducted during the evaluation process because EPA routinely reviews draft and proposed title V permits prepared by VADEQ.

A. Title V Permit Preparation and Content

From receipt of application to public notice of the draft permit, the basic permit preparation process is consistent across VADEQ. Within 60 days of receipt, VADEQ enters the application into internal tracking systems and determines if the application is timely and administratively complete. The permit writer evaluates the application, equipment list, applicable requirements, and compliance status to prepare the draft permit and statement of basis. Following internal review and review by the source, the permit is noticed for public comment. If revisions are necessary, a response to comments documents is developed, approved by management, and disseminated to commenters. Following the end of the 45-day EPA comment period, the permit is issued, distributed to relevant parties, and posted to the VADEQ public-facing website.

The APMs identified the <u>Title V Air Permits Guidance Manual</u>² as a key tool in developing permits. The manual was developed by VADEQ and provides a comprehensive guide to title V permitting processes and common issues as well as template letters for various communication with the public and source regarding the permit action. Through time, the manual has been continually updated by OAPP to match current regulation and policy. Five of the twelve chapters were updated in the last five years. The consistency of VADEQ's permits is further enhanced by use of boilerplate permit condition language

-2-

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 $^{^2} https://townhall.virginia.gov/L/GetFile.cfm? File=C:\TownHall\docroot\GuidanceDocs\440\GDoc_DEQ_2183_v11.$ pdf

developed by OAPP and the regions. These permit development resources and others are accessible to permit writers across the state on an internal permitting webpage. Through time, EPA staff have noted the consistency of permit formatting and content, indicating successful implementation of these tools.

A high level of management and peer engagement contributes to the development of quality title V permits as well. Most notably, there is extensive internal review of the draft permit prior to public notice. With some variation in order depending on the regional office, review is conducted by peer permit writers, the regional air permit manager, the regional air compliance manager and inspector assigned to the facility, and the applicant.

Regional offices also engage with title V staff outside of their region to resolve permitting issues that arise during development. Regional office staff reach out to permit writers in other regions if they have experience with a similar issue or source type as the project at hand. OAPP may also provide permit development support when facility-specific issues arise. For TRO, where staff experience with title V permitting is low, OAPP currently supports the permit writers by reviewing all draft title V permits. This culture of collaboration and teamwork allows VADEQ permit staff to build upon existing knowledge and develop title V permits with consistent quality.

B. Public Participation and Outreach

VADEQ provides public participation opportunities for title V permit actions consistent with title V rules and regulations. When a permit begins a public comment period, notice is posted in a local newspaper in accordance with state regulation³ and the following parties are emailed: the source, persons signed up for VADEQ's Title V mailing list, affected states, and EPA. Although not required by federal or state regulation, VADEQ maintains public facing webpages with information on active permit applications, permit actions in public comment periods, and issued permits.

Upon receipt of a hearing request and in accordance with state regulation, VADEQ determines whether a hearing will be held. Upon receipt of a public comment, permit writers develop a written response to comments document and provide the responses to the commenters. The response is also entered into a spreadsheet of all comments received and responses provided on title V actions. EPA staff have consistently received written responses to comments when comments are provided on a draft title V permit.

VADEQ is currently re-evaluating its interaction with environmental justice communities across media. An outside contractor was hired to evaluate VADEQ's interactions with environmental justice communities and gather stakeholder input. Recommendations are expected to be provided in August 2020 and may affect how VADEQ interacts with environmental justice communities in the context of the

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³ 9VAC5-80-270

⁴https://www.deq.virginia.gov/Programs/Air/PermittingCompliance/Permitting/ActiveAirPermitApplicationListings .aspx

⁵https://www.deq.virginia.gov/Programs/Air/PublicNotices/AirPermits.aspx

⁶https://www.deq.virginia.gov/Programs/Air/PermittingCompliance/Permitting/IssuedTitleVPermits.aspx

⁷ 9VAC5-80-35

title V permit program. Currently there are no title V regulations or practices established regarding environmental justice outreach for title V operating permits.

Virginia also has 7 federally recognized tribes. Although Virginia's New Source Review regulations require tribal notification of projects, there is not an equivalent requirement for title V permitting. VADEQ is in the process of establishing standard practices for tribal notification of relevant title V permit actions.

C. Permit Issuance

Currently, title V applications appear to outpace permit issuance. Across all air permitting programs, VADEQ processes approximately 350 actions a year. Of these actions, 20 to 30 are issued title V renewal permits and initial permits. Assuming the number of title V sources in Virginia remains at 229⁹ and the renewal cycle of facilities is split evenly across five years, VADEQ would need to issue approximately 45 renewals a year to keep all title V permits up to date. At current title V issuance rates, VADEQ is on track to increase the number of title V sources with backlogged permits by about 20 a year or 8.7% of Virginia's title V source universe.

The existing permit backlog is substantial as well. For purposes of this discussion, initial title V permits and title V permit renewals with applications older than 18 months are considered backlogged (note: this does not include significant modifications). As of July 2020, there were 89 active permit applications older than 18 months (received before 2/1/2019), which equates to a backlog of approximately 39%. A subset of these 89 actions have been drafted, noticed, and remain unissued for compliance or other facility-specific reasons; however, a majority have not yet been noticed. Although the 2013 program evaluation focused on just two regional offices, that evaluation also found the permit backlog was cause for concern and that regions should develop plans to reduce their title V renewal backlogs.

Permitting Workload

	Title V Permits Issued	Active Title V	Backlogged Title V	Active Preconstruction
	(6/1/19 to 5/31/20) ¹⁰	Applications	Actions (7/20/20) ⁸	Applications (7/20/20)8
		$(7/20/20)^{11}$		
TRO	0	44	26	31
PRO	11	33	17	42
NRO	2	25	14	23
VRO	7	13	4	11
BRRO	9	41	26	10
SWRO	0	5	2	6
Total	29	161	89	123

⁹ Semiannual Title V Operating Permits System Report (TOPS), July-December 2019

-4-

^{8 9}VAC5-80-1775(F)(2)

¹⁰ Central Office Questionnaire Response, provided by VADEQ to EPA 6/12/2020

¹¹ Active Air Permit Applications Spreadsheet, accessed on VADEQ website 7/20/20; backlogged actions include only initial and renewal title V permit actions with applications received before 2/1/2019

VADEQ identified two main challenges that delay issuance of title V permit actions and contribute to an increasing backlog: regulatory priorities and staffing. Virginia regulation requires the issuance of preconstruction permits under the new source review program take precedence over issuance of title V permits. ¹² As of July 2020, there were 123 active preconstruction permit applications. This permit workload is separate from and, per VA DEQ regulation, is given a higher priority than the 89 backlogged title V actions, 72 other pending title V actions, acid rain permit actions, synthetic minor permit actions, and other natural minor source permit actions. Staff resources are only allocated to title V work when preconstruction permitting is adequately staffed and still must be balanced with other air permit actions.

APMs identified staffing resources as a significant challenge to permit issuance as well. VADEQ has historically had difficulties filling air permit writer vacancies, some regions lack staff with title V experience, and some regions expect their most experienced staff to retire in coming years. Currently 50 full-time equivalents (FTEs) are allocated to permit writers, but only 37.25 FTE are filled. See Section D below for further discussion of staffing. Staffing and subsequent title V permit issuance will need to increase significantly to meet the estimated workload and begin reducing the existing backlog.

Despite these challenges, regional offices have leveraged resources to continue to complete title V work in several ways:

- When permit writers in a region have capacity, they may complete title V work for a facility in a different region
- TRO has used interns to complete the administrative work of updating boilerplate language to the latest templates in preparation for the lead permit writer to complete the more technical work of the renewal
- PRO sets a goal for each permit writer to issue 1-2 title V permits per year
- BRRO formed a group of permit writers to review applications and prioritize for timely completion

D. Resources and Internal Management Support

Fees

VADEQ collects title V fees for emissions, applications, and annual maintenance:

- Emissions fees are charged annually for the previous calendar year on a dollar per ton basis for each pollutant. For 2019 emissions (charged in 2020), the fee is \$85.43 per ton.
- An application fee is charged based on the type of action (initial, renewal, modification)
- Annual maintenance fees are charged to active title V sources, with fees based on the
 complexity of the source. Complexity is determined by the number of applicable subparts in 40
 CFR Parts 60, 61, and 63 (New Source Performance Standards and National Emission Standards
 for Hazardous Air Pollutants for Source Categories).

¹² (9VAC5-80-150C)

Title V fees are held in a designated fund and tracked by VADEQ's Office of Finance. Use of funds is limited to title V expenses per EPA guidance. Any fee use outside of normal procedures is subject to approval by the Title V Fund Manager. VADEQ indicated current title V fees are adequate to fund title V activities. However, VADEQ projects a decline in emissions fees due to the COVID-19 pandemic and noted a fee structure update may be necessary in the next couple years. Most recently VADEQ conducted a stakeholder engagement process to update fees in 2016, with the final fee update effective as of January 1, 2018.

Staffing

50 FTEs are allocated to air permit writers with 37.25 currently filled and 12 vacancies. OAPP has 6 staff FTEs with 3 filled and 3 vacancies including the positions of a title V coordinator, PSD coordinator, and auditor. At current levels, the air permit program has a 27% vacancy rate. Historically the program has operated at a 20-30% vacancy rate for many years. As was found in the 2013 title V program evaluation report and discussed in Section C above, unfilled vacancies significantly impact VADEQ's ability to issue timely title V permit actions. Four of the six APMs indicated staffing of their regional office was not sufficient in relation to permitting workload and many noted that staffing was the greatest challenge facing the program.

The approval for filling staff vacancies takes places outside of the air permit program by an executive management team. This team establishes staffing priorities for all VADEQ programs, not just air permitting. In order to fill a vacancy, OAPP must elevate and advocate for a job posting. Priorities for which vacancies are put forth to the executive management team are generally established during APM meetings and based on permitting workload. Once approved by the executive management team, the Secretary of Natural Resources must sign off on any listing. Due to competing priorities of other programs across VADEQ and budgetary constraints, a limited number of vacancies for air permit writers are posted each year.

Title V Permitting Staff ¹	Title	٧	Per	mit	ting	Sta	ff13
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	Staff	Vacancies	Years of experience in role
TRO*	5	3	8.5, 1.5, 1.5, <1, <1
PRO*	7	3	28, 26, 22, 17, 5, 1, <1
NRO	7	1	33, 23, 15, 4, 5, <1, <1
VRO	6.25	2	22, 22^, 12, 12, 12, 9, 0.5
BRRO*	6	3	24.5, 13.5, 5~, 5~, 2, 1
SWRO*	6	0	33, 32, 39, 21, 21, 3
OAPP	3	3	28, 16, 8
Totals	40.25	15	

^{*} At least 1 permit staff retirement anticipated by end of 2021; 3 expected at BRRO

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[^] Currently 0.25 FTE

[~] Additional 10 years of experience in air compliance

¹³ Staff information provided to EPA by VADEQ 7/1/2020

In recent years multiple hiring freezes have exacerbating difficulties in filling vacancies. Currently a hiring freeze is in effect due to the COVID-19 pandemic and associated budget concerns. Two permit writer positions planned to be noticed were halted as a result. Although title V activities are self-funded, permit writers conduct both title V and non-title V work and are therefore subject to state budget constraints. As discussed in the fees section above, title V fees funding program activities may also decrease due to the COVID-19 pandemic. Additionally, VADEQ indicated difficulty in obtaining qualified candidates. Vacancies, once approved by the Secretary of Natural Resources, have on occasion remained unfilled because no candidate could be found. Most recently this occurred in February 2020 with the vacancy announced for the title V permit coordinator position in OAPP. Moreover, newly hired permit writers rarely have prior experience in air permitting, resulting in a several year lag until they can complete title V work independently.

The distribution of staff experience across regions is another challenge facing VADEQ. At the start of the title V program in the 1990s VADEQ increased title V staffing. Many hired at that time are close to or have already reached retirement age. Vacancy rates have often increased during hiring freezes due to attrition from retirement. The regional offices have at least 5 of their most experienced staff retiring by the end of 2021. If the hiring freeze continues and retirements are not backfilled, the air permit program vacancy rate would increase to 36%.

The effects of staffing changes have been particularly difficult at TRO. In 2015 the office had 6 experienced title V permit writers and one new permit writer. Currently the remaining experienced permit writer is expected to retire in December 2021 and the other four permit writers were hired less than 2 years ago. The regional APM is planning to retire in December 2020 as well. To mitigate the effects of the loss of staff experience, the regional APM, more experienced permit writers in other regions, and OAPP staff have been able to support permit issuance at TRO. However, the loss of experienced staff is anticipated to occur in other regions like SWRO in the future and VADEQ has not developed robust succession planning to prepare for these projected events.

<u>Databases</u>

VADEQ makes extensive use of electronic databases to support title V permitting work. The three main resources are the Comprehensive Environmental Data System (CEDS), Electronic Content Management System (ECM) and a VADEQ intranet site:

- CEDS tracks emissions inventories, inspections, and permit data. This includes the date the
 application was received, dates of correspondence to and from the source and EPA, and
 regulatory deadlines. Information on due dates and regulatory deadlines can be summarized in
 custom reports on command as well as autogenerated letters from established templates. The
 system has been in use for many years and was updated within the last 5 years.
- ECM houses the associated documents for the dates tracked in CEDS. Final permits and correspondence are all accessible digitally. This provides a repository to permit writers to learn from previous permit actions.
- The VADEQ permitting intranet site houses a wealth of resources including the Title V Permit Air Permits Guidance Manual, permit language boilerplates, state guidance, EPA guidance, links to federal and state regulations, and meeting minutes from APM calls. VADEQ also maintains a list

of comments received from EPA and the public on title V permit actions to ensure consistency of responses and learn from previous permit actions.

Training

Training for permit writers has both a centralized and regional component. New permit writers and air inspectors are provided an in-person Air Permitting 101 Training Course by OAPP staff in Richmond as part of onboarding. Permit writers may also attend low and no-cost classroom trainings hosted by MARAMA (Mid Atlantic Regional Air Management Association) and APTI (Air Pollution Training Institute). APMs noted some difficulty in utilizing these trainings as they are not held at regular intervals and may not cover topics at a level of detail that increases the technical skills of newer staff.

On a regional level, training takes a variety of forms. Most regional offices encourage mentorship of newer staff by more experienced permit writers or the APM. Staff may also make use of individual employee development plans and BRRO staff regularly hold mini training sessions on technical topics.

By nature of the title V program and the content of title V permits, experience with preconstruction permits and a particular facility are often essential before conducting title V work. Across regional offices, newly hired permit writers generally are not assigned independent title V work until their second or third year.

Regional Office and OAPP Relationship

The core work of VADEQ's title V permit program is carried out in the six regional offices. Each office has an APM and a team of permit writers that prepare title V and all other air permits for facilities in that region's counties. OAPP in VADEQ's central office in Richmond provides overall air permit program coordination, develops guidance documents, supports facility-specific permitting issues, manages online permitting resources, and serves as a Virginia's air permit representative in communications with multistate organizations, local government, EPA, and VADEQ senior leadership.

Regular communication between the regions and OAPP is facilitated through phone calls held every other week. The office leading the discussion rotates each meeting. In-person meetings also occur on a quarterly basis. Topics for discussion include facility-specific issues, guidance and regulation, staffing, and other updates relevant to title V permitting.

All APMs highlighted the strong working relationship between the regional offices and OAPP. They further indicated that although staff resources are limited, requests made to OAPP for support and guidance are always met with helpful and well thought out responses.

IV. Conclusions

EPA would like to thank VADEQ for its responsiveness and cooperation through the evaluation process. EPA appreciates VADEQ's flexibility in accommodating this year's alternative format.

Below is a summary of findings: both best practices and areas for improvement. To begin addressing identified areas of improvement, an action plan with deliverables follows. EPA notes that action plan

activities, particularly pertaining to staffing, may be affected by developments of the COVID-19 pandemic. Though areas for improvement are identified in this report, they do not amount to a determination of a finding of deficiency.

A. Summary of Best Practices

Electronic Resources

VADEQ effectively utilizes online digital platforms to provide the public access to extensive information about the title V program and its activities and to provide permit writers access to abundant resources for tracking and preparation of permit actions.

Extensive Permit Review

VADEQ maintains a high level of management and peer engagement prior to notice of draft permit, leading to development of consistently high-quality permits.

Collaboration Across Offices

VADEQ's culture of collaboration and teamwork across regional offices and OAPP is a key strength of its title V permit program. Resources and knowledge are shared freely, allowing for continual improvement.

Title V Fees

In addition to following relevant guidance, VADEQ recently updated its fee structures and is proactively anticipating the need for further updates.

B. Areas for Improvement

Staffing

- Title V staffing levels are not adequate to complete title V permitting work and should be increased to an adequate level for timely completion
- Low staffing levels affect VADEQ's ability to issue timely title V permit actions

Permit Issuance and Backlog:

- The title V permit backlog is at 39% of Virginia's title V source universe and currently on a trajectory to increase further
- Rates at which VADEQ received applications for initial and renewal title V actions outpace title V permit issuance

C. Action Plan

Staffing

VADEQ will complete a workload assessment to calculate the staffing necessary to sufficiently
complete estimated annual title V permit workload and begin reducing the title V permit
backlog. As a starting point, VADEQ may use a previous workload analysis conducted that
estimates permit writer's time spent on each type of permit action.

VADEQ will develop an implementation plan that identifies the dates by which VADEQ will aim
to acquire appropriate staff to achieve the staffing levels identified as adequate in the workload
assessment report.

Permit Issuance and Backlog:

- VADEQ will compile a list of backlogged title V permit actions with relevant information, including the date the application was deemed complete, its status in the permitting process, and any other factors affecting issuance.
- For backlogged title V sources, VADEQ will develop a corrective action plan. This should include an overall strategy for eliminating the title V backlog and identify how backlogged actions will be prioritized for development and issuance.

The deliverables described above shall be submitted to EPA within <u>270 calendar days</u> of the issuance of this report.

Appendix A

FY 2020 VA DEQ Title V Program Evaluation Central Office and Regional Office Questionnaire

Questions for Central Office:

A. Title V Permit Preparation and Content

- A.1. Please describe the permit development process, from receipt of an application to final issuance.
- A.2. Please describe efforts DEQ has made over the last five years to improve the efficiency of internal processes for issuing title V permits: revisions of internal procedures and policies, standard operating procedures, etc.
- A.3. Please describe any quality assurance processes for title V permits.
- A.4. Please describe the process for developing monitoring requirements within title V permits.

B. Public Participation and Outreach

- B.1. Please describe the process for public participation from receipt of an application to final permit issuance.
- B.2. When are hearings held? How does DEQ decide whether or not to hold a hearing?
- B.3. Please describe how DEQ interacts and engages with the public when comments are made.
- B.4. How does DEQ engage with environmental justice communities as related to title V permit issuance?
- B.5. How does DEQ engage with recognized tribes as related to title V permit issuance?

C. Permit Issuance

- C.1. Please provide title V issuance and backlog data for each regional office level
- C.2. According to DEQ's most recent Title V Operating Permit System (TOPS) report, the statewide renewal backlog has remained relatively steady at or below the average for EPA Region 3 permit authorities. How have regional offices addressed title v permit backlogs through time? What factors cause delays? What factors prevent the remaining permits from being issued?

- C.3. Do any of the following impact ability to issue timely title V permits (initial or renewal)?
 - D. SIP gap/backlog
 - E. Pending revisions to underlying NSR/PSD permits
 - F. Compliance/enforcement issues
 - G. EPA rulemaking
 - H. Lack of EPA guidance
 - I. Competing internal priorities
 - J. Other (please specify)
- C.4. Please describe the permit appeals process. How often are TV permits appealed?

 Does DEQ have a process to inform EPA when permits are appealed?

D. Resources and Internal Management Support

- D.1. Please describe tracking systems used for the title V program. How do the tracking systems contribute to the efficiency of your title V program?
- D.2. Please describe current staffing levels. Are staffing levels sufficient in relation to permitting workload? What is the process for determining sufficient staffing?
- D.3. Title V Fees
 - a. Please describe your title V fee structure.
 - b. How does DEQ track title V fee usage and ensure that title V fees are used in accordance with 40 CFR Part 70 fee requirements?
 - c. Are fees adequate to fund title V activities?
 - d. Describe any recent activities DEQ taken to ensure title V fees are adequate.
- D.4. Please describe the process for ensuring new and current permit writers have access to adequate training.
- D.5. How does Central Office ensure consistency among regional offices? Are there any significant differences between regional offices that central office is aware of?

Questions for Regional Offices:

- R.1. Please describe any quality assurance processes for title V permits.
- R.2. How has the regional office addressed title v permit backlogs through time? What factors cause delays? What factors prevent the remaining permits from being issued?

- R.3. How is consistency ensured between regional offices?
- R.4. Please describe the relationship between the regional office and central office.
- R.5. Are staffing levels sufficient in relation to permitting workload? What is the process for determining sufficient staffing?
- R.6. Please describe the process for ensuring new and current permit writers have access to adequate training?
- R.7. Are there any best practices you would like to highlight?