

**Title V Operating Permit Program Evaluation
North Carolina Department of Environmental Quality**

Division of Air Quality

Final 2021 Evaluation Report



United States Environmental Protection Agency, Region 4

Air and Radiation Division

Atlanta, Georgia

Acknowledgements

The U.S. Environmental Protection Agency (EPA) Region 4 would like to acknowledge the dedication and commitment of the staff and management of the North Carolina Division of Air Quality (NCDAQ or the Division). NCDAQ staff addressed numerous challenges to keep their program operating smoothly during the pandemic, including remote work, public notice and comment, and public meetings and hearings.

The EPA Region 4 permitting staff have had considerable engagement with NCDAQ this year through this program evaluation, as well as revisions to their fee schedule, their Title V Operating Permit Program (“Title V” or “Part 70”) rule re-submittal, permitting related updates to the state implementation plan, engagement on several permits with significant community involvement, the EPA’s new electronic permitting system, and preliminary work related to offshore permitting. In every instance, the EPA found the management and staff to be very knowledgeable, professional, and dedicated to their mission. The EPA appreciates NCDAQ’s cooperation and willingness to respond to our information requests.

Title V Operating Permit Program Evaluation Findings
North Carolina Department of Environmental Quality (DEQ), Division of Air Quality
FINAL 2021 Evaluation Report; July 2021

Executive Summary

Positive Findings

- NCDAQ has maintained qualified, experienced staff and management resources, with limited turn-over, for successful implementation of the Title V program. NCDAQ has implemented succession planning, employee development, and a Salary Administration Plan to address retention and hiring needs and in anticipation of future retirements.
- In 2019, NCDAQ conducted an internal review of Title V permitting program funding and workload and in 2020 proposed revised permitting fee schedule regulations to address a projected FY21 Title V program funding deficit. The fee rulemaking process included an extensive internal State fee review, workload analysis, benchmarking to adjacent states, incorporation of State salary needs, a commendable stakeholder engagement process with industry representatives that provided recommendations for the State's proposed rulemaking, and the required public notice and comment.
- NCDAQ implements an enhanced public notice permitting process, including tools and processes for identifying sensitive populations and providing meaningful engagement with the public and communities, with the goal of ensuring that potentially impacted communities are aware of their ability to participate in the permitting process.
- NCDAQ has an excellent record of timely issuance of Title V initial permits and significant and minor permit modifications, issuing more than 20 significant modifications in the last year.
- NCDAQ permits are generally thorough and well written and are also reviewed by compliance staff prior to issuance.

Areas to Monitor

- At the time of the program evaluation survey, NCDAQ had a backlog of 11 Title V permit renewal applications older than 18 months past the Title V permit expiration date. These applications were certified by NCDAQ as being timely, so these existing permits are extended and not expired, and represent less than 4 percent of the total of 296 sources that

must receive renewal permits on a 5-year basis. NCDAQ should continue to monitor the renewal backlog and report progress on the monthly permit calls with the EPA.

Action Items

- Given that the NCDAQ Title V program is projecting a significant fee deficit this year and substantial deficits during the next several years, and the delay in passage of amended fee schedule 15A NCAC 02Q .0203, the current fee schedule does not meet the Part 70 program requirements at 40 CFR § 70.9. It is the EPA's understanding that North Carolina is in the process of taking immediate legislative action to adopt a revised fee schedule in compliance with Title V, which will be effective this year.
- The additional full time equivalent (FTE) identified from the Title V fee schedule workload analysis as supporting the Title V program needs to be properly included as Title V expenditures in the FY22 budget cycle.
- NCDAQ should proceed to revise the provisions of 15A NCAC 02Q .0525, .0527, and .0516 to clarify and ensure that final actions on initial and renewal permits take place within the 18-month timeframe outlined in 40 CFR § 70.7(a)(2) and that the majority of significant modifications are processed within 9-months per 40 CFR § 70.7(e)(4)(ii), including a corresponding update to the North Carolina Attorney General's opinion, which is related to these provisions.

Recommendations

- The EPA recommends that NCDAQ conduct a periodic review and an update, as necessary, of FTE associated with Title V implementation, to determine if any adjustment in expense reporting and Title V accounting is necessary. The EPA conducts such internal assessments annually, with a mid-year check. Title V expenses must include all FTE needed to implement the program, regardless of the position description. Given that salaries and benefits are the largest expense in program implementation, the EPA suggests that NCDAQ may also want to carry forward a contingency or build into the fee schedule adjustments for salary increases and increases in healthcare costs.
- The EPA recommends that the State's Salary Administration Plan continue to benchmark competitive salaries, including consideration of the need for qualified air quality engineers given the demand specifically in the Raleigh-Durham area. DEQ should identify targeted recruitment or special salary adjustment factors, as necessary. The EPA has had success in recruiting and training entry level hires that have taken courses in air pollution and control technology fundamentals from top environmental science and engineering programs.

NCDAQ should consider targeted recruitment from these courses, student environmental groups, and university job fairs from nearby universities.

- The EPA recommends that NCDAQ consider including a recommendation on the NCDAQ website and with permit application instructions that applicants make use of the Community Mapping System tool and engage with the community around their facility as part of preapplication activities.
- Based on the EPA's in-depth review of 10 selected Title V permits, the EPA is making recommendations to improve permit clarity and enforceability and to ensure all applicable permit terms are included in the Title V permit. These recommendations are provided in Section VI, Selected Permit Reviews and address the following topics: the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP); practical enforceability of potential to emit (PTE) limits; NCDAQ's insignificant activities attachment; general permit conditions related to the EPA reporting, compliance certification, deviations, and the General Duty Clause; statement of basis considerations; Compliance Assurance Monitoring (CAM) applicability; authority citations; and permit record completeness.

I. Background

In response to the recommendations of a 2002 Office of Inspector General (OIG) audit, the EPA developed an action plan for performing reviews of Title V programs for each air pollution control agency beginning in fiscal year (FY) 2003.

Following the initial Title V program reviews, the EPA committed to conduct ongoing periodic Title V program reviews for state and local programs that have at least 20 Title V major sources within their jurisdiction. These follow-up evaluations may target specific areas of the program, follow-up items from previous evaluations, or overall implementation. In addition, at the request of the OIG, the EPA formally added a Title V fee audit component in 2018.

The EPA Region 4 oversees 8 state and 10 local air permitting authorities with Title V operating permit programs. Eleven of these programs have at least 20 Title V major sources (the remaining 7 programs have 10 or fewer sources). Resources allowing, the EPA Region 4 typically commences two Title V program evaluations annually, with the goal of reviewing each of these eleven programs on a five to six-year cycle. The purpose of these evaluations is to ensure the ability of the permitting authority to carry out its duties and responsibilities, as required, to effectively run the Title V program, to document good practices and to identify if there are any ways the EPA can assist the permitting authority in meeting their Title V commitments.

The initial evaluation of NCDAQ's permitting program was conducted in March 2005, with subsequent onsite evaluations being conducted in May 2010 and April 2014. The final report for the 2014 program evaluation was issued in July 2015. The 2014 program evaluation consisted of a review of NCDAQ's Title V budgeting and accounting process, a permit file review, and a follow-up of findings from previous evaluations, which were focused primarily on incorporation of CAM plans into Title V permits. The 2015 program evaluation report recognized NCDAQ for its actions to retain experienced permitting staff, development of a strategic plan to preserve continuity of operations, well-prepared permit review documents and statements of basis, allocation of human resources and efficiency of operations, and budgeting of Title V permit fees. The program evaluation identified two areas of concern: (1) management of a growing backlog of Title V permits, particularly renewal permits and significant modifications, and (2) maintenance of complete permit record files that include draft and proposed permits and proof of publication of public notices for permitting actions.

The 2021 NCDAQ program evaluation consisted of a review of staffing resources and internal management support, Title V revenue and expenses, public participation, environmental justice (EJ) in permitting, permit issuance rates, and a detailed review of 10 issued permits. This information was gathered through NCDAQ's response to the EPA's program evaluation survey questions, review of selected permit files, a virtual visit with interviews and discussions on May 28, 2021, a fee review based on additional information provided to the EPA for NCDAQ's FY17-FY21 budget cycles and fee rulemaking process, and permits issuance rates reported to the federal Title V

Operating Permit System (TOPS) data through December of 2020. In a separate, parallel process during FY21, Region 4 conducted an in-depth review of the State’s Title V regulations, due to NCDAQ’s re-adoption and submittal of their full rules (15A NCAC 02Q .0500). Findings from our review in these areas are given below. Preliminary findings from our rule review were discussed with NCDAQ on February 23, 2021. Preliminary findings of our fee review were provided in a letter to NCDAQ on March 23, 2021. Preliminary results of our review of selected permit reviews were provided on May 21, 2021 and discussed with NCDAQ on May 28, 2021. NCDAQ was provided with our draft FY21 program evaluation report on July 30, 2021.

II. Program Overview and Staffing Resources

NCDAQ is a division of the DEQ (also referred to as the Department). Headquartered in Raleigh, North Carolina, NCDAQ “*works with the State’s citizens to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all*” (<https://deq.nc.gov/about/divisions/air-quality>). The ambient air quality across the state of North Carolina (NC) is currently in attainment with all National Ambient Air Quality Standards (NAAQS), *i.e.*, there are no non-attainment areas in the state at the time of this program evaluation. NCDAQ’s permitting regulations are codified at 15A NCAC 02D (Air Pollution Control Requirements) and 02Q (Air Quality Permit Procedures). The NAAQS, various emission standards, and Prevention of Significant Deterioration (PSD) permitting provisions are contained within the 02D rules, and the Title V major source permitting provisions are contained within the 02Q rules.

NCDAQ has jurisdiction over the permitting of air emission sources throughout North Carolina, except for Buncombe, Mecklenburg, and Forsyth counties; facilities located in these areas receive permits issued by the respective local air pollution control agencies.

NCDAQ is comprised of the following sections and seven (7) regional offices:

- Administrative Section & Business, 17 staff
- Ambient Monitoring Section, 30 staff
- Permitting Section, 28 staff (19 FTE dedicated to Title V)
- Planning Section, 21 staff
- Technical Services Section, 23 staff
- Regional Offices: Asheville, Mooresville, Winston-Salem, Raleigh, Fayetteville, Wilmington, and Washington, 89 staff (12-13 per office)

The Permitting Section consists of three branches: Title V Permits Branch, New Source Review Permitting Branch, and Air Quality Analysis Branch. NCDAQ is responsible for 2,517 regulated sources, of which 296 are Title V sources (as of May 2021). The Permitting Section has 19 Title V FTE, supported by three meteorologists, one Environmental Specialist, one Administration and Data Technician, and section and branch supervisors. The regional offices assist the Permitting

Section with permitting of non-major sources and perform most of the compliance inspections. In addition, in March 2020, NCDAQ initiated a “pilot” permitting program in which 7 regional staff assisted with reviewing Title V renewal permit applications, with the goal of providing career growth, as well as addressing permit backlog. The pilot approach, which NCDAQ reports requires some restructuring of resources and staff training, presents an additional option for addressing Title V workload.

NCDAQ reports that they have experienced, well-qualified staff and have limited staff turnover (approximately 10 percent over the past 5 years), due largely to dedicated staff and efforts to maintain a desirable work environment. However, NCDAQ is expecting an increase in retirements. In anticipation of this loss of “institutional knowledge,” the management has engaged in succession planning, including cross-training and job-shadowing.

When NCDAQ has had to fill a position, they report difficulty in finding qualified candidates. Their air quality engineer positions require experience beyond an engineering degree and there is significant competition in the area for air quality environmental professionals given proximity to the EPA’s Office of Air Quality Planning and Standards, Office of Research and Development, and consulting firms. NCDAQ reports that the state offers relatively lower salaries. NCDAQ reports that DEQ has developed a Salary Administration Plan to create and maintain competitive salaries and address recruitment and retention issues. NCDAQ is concerned that similar hiring problems in the future, would impact permit issuance.

Overall, NCDAQ reports that they currently have adequate staff and management resources for implementation of the Title V program. This is supported by their permit issuance rates and quality of permits and associated rulemaking. NCDAQ reports, however, that they are seeing an increased need for resources, especially management resources, to respond to communities and citizens interested in specific air permits or in local air quality. Explaining the technical and often esoteric air quality rules to citizens requires different skills than the air quality permit engineers have typically needed and takes additional resources. NCDAQ is trying to determine how to best address this need in cooperation with DEQ’s EJ and public relations personnel.

Finding: NCDAQ currently has qualified, experienced staff and management resources, with limited turnover for successful implementation of the Title V program. Predicted retirements will continue to require NCDAQ’s focus on succession planning, training, and a Salary Management Plan to address retention and hiring needs.

Recommendation: The Salary Administration Plan should continue to benchmark competitive salaries, including consideration of the need for qualified air quality engineers given the demand specifically in the Raleigh-Durham area. DEQ may want to identify targeted recruitment or special salary adjustment factors, as necessary. The EPA has had success in recruiting and training entry level hires that have taken courses in air pollution and control technology fundamentals from top environmental science and engineering programs. NCDAQ may want to consider targeted

recruitment from these courses (*i.e.*, speaking to the class), student environmental groups, and university job fairs from nearby universities.

EPA Follow-up: Following our in-person interviews, Region 4 provided NCDAQ with Region 4's permit training checklist, based on the draft EPA Learning Management System (LMS) air permitting curriculum, as well as a list of recommended air permitting fundamental and core courses. OAQPS retired the Air Pollution Training Institute (APTI) website in May 2021 and opened the new LMS website last year for state and local agencies. Permitting is one of the focus areas of the new curriculum. The old APTI content is still available for use by permitting authorities and SESARM-Metro 4 to conduct in-person and web-based training. The new LMS site has a training calendar and registration portal for SESARM-Metro 4. Per the LMS training plan and permitting curriculum developed with the assistance of states/local agencies and the multijurisdictional air pollution control organizations, such as SESARM-METRO 4, the EPA is reworking old content and developing new content for the site. Courses currently available include *Intro to Permitting* SI-460, *Air Pollution Control Orientation* SI-422, and the new *Setting Potential to Emit in New Source Review* SI-NSR201. New courses in NSR/PSD Applicability, Best Available Control Technology (BACT), Control Cost Analysis, and Plantwide Applicability Limits (PALs) are expected soon. The EPA provides Clean Air Act (CAA) section 105 pass-through grants to SESARM-Metro 4, which decides which in-person courses are offered. If NCDAQ would like a specific course offered, such as the intro to Title V course offered by SESARM-Metro 4 last year, the EPA suggests that NCDAQ let SESARM-Metro 4 know, so that the necessary courses are prioritized on the training agenda.

III. Title V Fees

Title V permitting authorities are required by section 502(b)(3) of the CAA, and the corresponding Title V regulations at 40 CFR § 70.9, to collect permit fees from sources subject to Title V sufficient to cover all costs necessary to develop and administer their Title V permit programs. Permitting agencies must collect Part 70 fees that are sufficient to cover both direct and indirect Part 70 permit program costs. These fees must be used solely to cover the costs of the Title V program and states must provide periodic demonstrations that they meet these fee requirements. 40 CFR § 70.9(d). Accordingly, air agencies (or state legislatures, as applicable) may need to revise fee schedules periodically to remain in compliance with the requirement that permit fees cover all Part 70 permit program costs. Changes in costs over time may be due to many factors, including but not limited to: inflation, implementation costs, salary and healthcare cost increases, changes in the number of sources required to obtain Part 70 permits, declining emission rates (especially reductions in coal-fired emission sources); complexity of permitting actions being performed; and promulgation of new emission standards, such as new Maximum Achievable Control Technology (MACT) standards, New Source Performance Standards (NSPS), and Waste Incineration rules under CAA sections 111, 112, or 129 respectively.

The EPA established a 2021 presumptive minimum fee of \$52.79 per ton of regulated pollutant. States may charge less than the presumptive minimum, and use alternative fee structures, if they provide a demonstration that they have adequate fees to fully cover the direct and indirect costs of adequately implementing and enforcing the Title V program. 40 CFR § 70.9(b)(2) & (3). The Title V regulations at 40 CFR § 70.9(b)(2)(i) indicate that the Administrator will presume that the fee schedule meets the fee schedule requirements of Part 70 if the program would result in the collection and retention of an amount not less than the presumptive minimum. 40 CFR § 70.9(b)(1) & (2).

The fee regulations for NCDAQ air quality permits are found in North Carolina fee rule 15A NCAC 02Q .0203. For Title V major sources, the fee charged, for each ton of pollutant emitted each year, is intended to cover the direct and indirect costs associated with issuing and modifying those permits, as well as small business assistance required by section 507 of the CAA. The State of North Carolina currently charges a fee rate of \$34.75 per ton, plus a base flat fee and a small application fee, resulting in an effective fee rate ranging from \$47.95 to \$52.51 over the past 5 years, as billable emissions have declined.

States may charge less than the presumptive minimum and use alternative fee structures, if they provide a demonstration that they have adequate fees to fully cover the direct and indirect costs of adequately implementing and enforcing the Title V program. 40 CFR § 70.9(b)(2) & (3). NCDAQ collects less than the presumptive minimum allowed by 40 CFR § 70.9(b)(2) and at the time of this evaluation cannot demonstrate that the fees collected are sufficient to cover the Title V program implementation costs. In particular, the program is projecting a deficit this year of approximately \$1.1 million and substantial deficits during the next several years. *Fiscal Note for Revision of 15A NCAC 02Q .0203* (October 2020). The EPA discussed our concerns in a letter to NCDAQ from Caroline Freeman, dated March 23, 2021.

NCDAQ Title V revenue has steadily declined since approximately 2019, and expenses have exceeded revenue since approximately 2017. Since that time, the state has drawn down their Title V reserve funds, which will be depleted in 2021. *NC Program Evaluation Survey Response*, February 2021. As with other permitting agencies in Region 4, NCDAQ reports a steady decline in billable emissions as new rules, cleaner fuels, and use of control technologies have reduced emissions. In addition, regulatory complexity of numerous sources, inspection requirements, and public engagement have increased.

In July 2020, NCDAQ initiated the rulemaking process to amend the State's Title V fee rule 15A NCAC 02Q .0203 to increase fee revenue to cover the identified fee gap. With stakeholder input, NCDAQ proposed revisions of the Title V fee structure to include the addition of a complexity fee that is more closely related to workload than emissions. This rulemaking was developed after an extensive internal state fee review, workload analysis, benchmarking to adjacent states, incorporation of State salary needs, a commendable stakeholder engagement process with industry representatives that provided recommendations for the State's proposed rulemaking, and the

required public notice and comment period. It was NCDAQ’s intent and the EPA’s understanding that the necessary fee increases to cover the implementation and enforcement of NCDAQ’s Title V program would become effective in the spring of 2021. The rule changes were approved by the North Carolina Environmental Management Commission, however, due to adverse comment from third parties (NCDAQ reports the comments were not from members of the regulated community), the effective date has been delayed. Subsequent action by the legislature is underway and the rule is expected to be effective by the end of 2021. Without approval in 2021, NCDAQ is projecting an annual deficit of Title V fees of as much as \$2,000,000 annually by Fiscal Year 2023.

In follow-up to our initial survey, NCDAQ’s accounting office provided the EPA with a summary of direct and indirect expenses and revenue from FY17-FY20 and projected for FY21, per the EPA’s 2018 fee guidance. In addition, the EPA staff met with the NCDAQ’s financial officer as part of our May 28, 2021, interviews to go over the NCDAQ process for ensuring Title V revenues are used solely for Title V purposes. Table I, below, includes a summary of NCDAQ’s Title V expenses, revenue, and billable emissions.

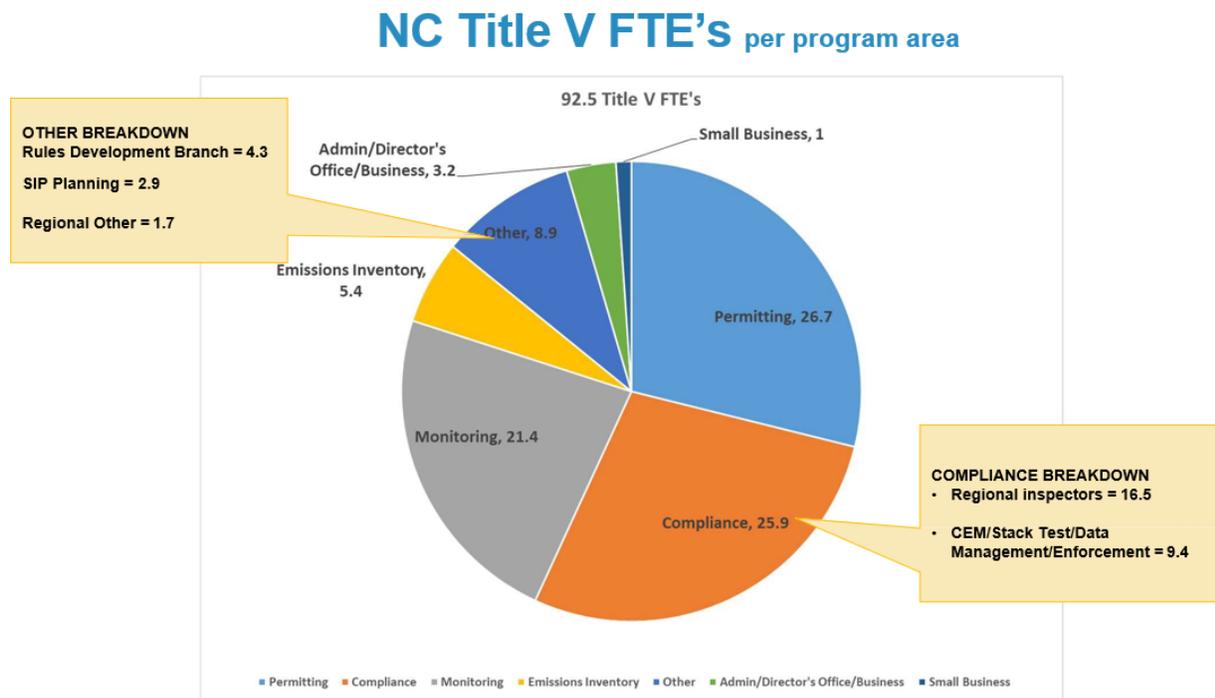
Table I: Summary of FY17-FY20 Title V Fee Expenditures, Revenue and Billable Emissions

REVENUE FOR TITLE V FUND	FY 17	FY18	FY 19	FY20	PROJECTED FY21
TOTAL REVENUE (\$)	6,392,205	6,191,037	6,403,589	6,380,440	5,724,718
TOTAL EXPENSES (\$)	6,614,534	6,686,687	6,693,900	6,834,143	6,886,114
TOTAL TITLE V ACCOUNT FUNDS REMAINING (\$)	1,239,872	744,222	453,912	209	(1,161,188)
TOTAL BILLABLE EMISSIONS (Tons)	131,372	129,124	124,787	121,500	111,154

As part of NCDAQ’s fee schedule rulemaking process, in early 2019, NCDAQ conducted a workload analysis to determine what portion of each position in the Division, including the regional offices, includes activities implementing and/or supporting the Title V program (including permitting, compliance, emissions inventories, ambient monitoring, modelling, management, administration and other support). NCDAQ had not conducted a periodic review and update of FTE associated with the Title V implementation in several years. The result of the workload analysis indicated that approximately 20.5 additional FTE should be billed to Title V program implementation than are currently being billed to Title V. NCDAQ reports that they intend to make the necessary accounting shift when the fee change becomes effective and the Title V account can support these additional positions.

To ensure that Title V funds are used solely for the Title V program, NCDAQ maintains a separate fund (2333) for Title V. Title V staff report the hours not spent on Title V on coded timesheets, and NCDAQ maintains Title V revenue and expense accounts separate from other program funds. Monthly reports on expenses and revenues are reconciled by the NCDAQ budget office and

provided to the Director’s Office for review to ensure Title V expenses and revenues are properly attributed to the Title V account. NCDAQ also funds small business assistance with Title V fees, as required by section 507 of the CAA, as well as Title V rule development, planning, emissions inventory, compliance, and monitoring. A breakdown of NCDAQ’s Title V FTEs per program area was provided by NCDAQ in their February 2021 survey response and is included below:



From: *NCDEQ Title V Program Evaluation Questionnaire Response*, February 11, 2021

Findings: The EPA commends the state for their internal audit of the Title V permitting program funding and workload and proposed 2020 regulations, including stakeholder engagement to address the projected Title V program funding deficit. However, given that the NCDAQ program is projecting a significant deficit this year and substantial deficits during the next several years, and the delay in passage of amended fee schedule 15A NCAC 02Q .0203, the current fee schedule does not meet the Part 70 program requirements at 40 CFR § 70.9. It is the EPA’s understanding that North Carolina is in the process of taking immediate legislative action to adopt a revised fee schedule in compliance with Title V, which we understand will be effective this year.

Action Items: 1) North Carolina must proceed to adopt a fee schedule that ensures the program meets the Title V fee requirements to fully fund the program with Title V revenue. 2) The additional FTE identified from the Title V fee schedule workload analysis as supporting the Title V program needs to be properly included as Title V expenditures in the FY22 budget cycle.

Recommendation: The EPA recommends a periodic review and an update, as necessary, of FTE associated with Title V implementation, to determine if any adjustment in expense reporting and

Title V accounting is necessary. The EPA conducts such internal reviews annually, with a mid-year check. Title V expenses must include all FTE needed to implement the program, regardless of the position description. Given that salaries and benefits are the largest expense in program implementation, the EPA suggests that NCDAQ may also want to carry forward a contingency or build into the fee schedule projected salary increases and healthcare costs.

IV. Public Participation & Community Engagement

Title V public participation procedures apply to initial permit issuance, significant permit modifications, and permit renewals. Adequate public participation procedures (*see* 40 CFR § 70.7(h)) must provide for public notice, including an opportunity for public comment and public hearing on the draft permit. Draft permit actions may be noticed through email and on a website (e-notice) or through a newspaper of general circulation. The permitting authority must keep a record of the public comments and respond to the significant issues raised during the public participation process.

NCDAQ offers an extensive online records depository where the public and regulated community can access electronic versions of documents related to air permitting actions, including performance tests, and compliance actions at <https://deq.nc.gov/about/divisions/air-quality/air-quality-permitting> and https://xapps.ncdenr.org/aq/docs/FDOcs_Search.jsp. Additionally, NCDAQ posts public notices for proposed rule changes and permitting actions at <https://deq.nc.gov/about/divisions/air-quality/air-quality-public-engagement>. An online version of its air quality regulations, including the permitting requirements, are on its website at <https://deq.nc.gov/about/divisions/air-quality/air-quality-rules/rules#2D>. Records of permitting actions taken since March 2020 are also available through the public dashboard of the EPA's national Electronic Permits System database (EPS) at <https://www.epa.gov/caa-permitting/north-carolina-proposed-title-v-permits>.

NCDAQ continues to use newspaper notification, in addition to electronic postings, for initial Title V permit notifications, PSD construction permits, those permits determined to be in proximity to a community that meets DEQ's EJ criteria, including those posted in non-English newspapers. In addition to the on-line and newspaper notification, NCDAQ has developed an email list of those who have requested individual notification for public notices. NCDAQ provides translation services on an as needed basis.

DEQ has developed an Enhanced Participation Plan at the Department level. (*see* <https://files.nc.gov/ncdeq/EJ/Public-Participation-Plan>). NCDAQ's process is to request an EJ review the first time a major facility is permitted, for PSD construction permit modifications, and for other projects at the director's discretion. When sensitive populations are identified, NCDAQ conducts the recommended enhanced outreach to ensure fair treatment and meaningful involvement of community members that, when combined with its public notice process, ensures communities know that they have an opportunity to provide public input.

For identified communities, the EJ group within DEQ is responsible for evaluating the socio-economic demographics near a facility following the EPA guidance. Recent DEQ EJ Reports may be found at <https://deq.nc.gov/outreach-education/environmental-justice/environmental-justice-reports>. NCDAQ reports that increased public interest and EJ report preparation are requiring a significant increase in resources, and they are exploring options to address the best use of limited resources. One option discussed with the EPA is to encourage applicants to run the Community Mapping System tool and engage with the public during the pre-application permitting process.

DEQ has community outreach materials, as well as their Community Mapping System (similar to the EPA's EJScreen), (<https://deq.nc.gov/outreach-education/environmental-justice/deq-north-carolina-community-mapping-system>) available on their website (*see* <https://deq.nc.gov/outreach-education/environmental-justice>). In August of 2020, NCDAQ conducted a well-received training on their permitting process at the request of the Anderson Community, which was concerned about new industrial development in their area. A recording of the public meeting and permit training is also available on NCDAQ's website for access by other citizens seeking additional information on the permitting process in an accessible format.

DEQ has also established the Secretary's Environmental Justice and Equity board. The sixteen board members were selected from across the State *"to assist NCDEQ in achieving and maintaining the fair and equal treatment and meaningful involvement of North Carolinians regardless of where they live, their race, religion or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."* (<https://deq.nc.gov/outreach-education/environmental-justice/secretarys-environmental-justice-and-equity-board>).

Additional EJ resources can be found at <https://www.epa.gov/environmentaljustice>. The EPA's "Activities To Promote Environmental Justice in the Permit Application" (<https://www.federalregister.gov/documents/2013/05/09/2013-10945/epa-activities-to-promote-environmental-justice-in-the-permit-application-process>) summarizes additional useful tools for community engagement, many of which NCDAQ is currently using.

Finding: The EPA commends NCDAQ for their enhanced public notice permitting process, including tools and processes for meaningful engagement with the public and communities, with the goal of ensuring that potentially impacted communities are aware of their ability to participate in the permitting process.

Recommendation: The EPA recommends that NCDAQ consider including a recommendation, on the NCDAQ website and with application instructions, that applicants' access and make use of the Community Mapping System tool and engage with the community around their facility as part of preapplication activities.

V. Permit Issuance Rates

The Title V regulations require air permitting agencies to “take final action on each permit application (including a request for permit modification or renewal) within 18 months, or such lesser time approved by the Administrator, after receiving a complete application.” 40 CFR § 70.7(a)(2). Ensuring that Title V permits are renewed and subject to public review every five (5) years is an important aspect of every Title V program. Delayed permit issuance reduces the ability of the public to review and provide comments on a permit and can result in a delay in the incorporation of new applicable requirements.

As part of the program evaluation, the EPA reviewed NCDAQ’s Title V program permit issuance rates submitted by NCDAQ through the EPA’s TOPS reporting database to ensure that permits are issued in a timely manner and renewed on a five-year cycle. NCDAQ reported timely issuance of 21 significant permit modifications and has only one application in backlog status, which has been through notice and comment.

At the time of the FY21 program review, NCDAQ had a backlog of 11 Title V permit renewal applications, *i.e.*, older than eighteen (18) months past the Title V permit expiration date. This represents less than four (4) percent of NCDAQ’s Title V universe. The applications for these permits were certified by NCDAQ as being timely, so they are extended and not expired (*i.e.*, the facilities may continue to operate in compliance with their permits). NCDAQ reports that those permits in backlog status typically involved those with the most complexity, including pulp and paper and chemical processing, and those being consolidated with a number of modifications. NCDAQ management reports that 90-day modifications tend to take priority over the permits with longer deadlines. However, NCDAQ is prioritizing the backlogged permits and will be monitoring their progress on decreasing the backlog.

Finding: NCDAQ has an excellent record of timely issuance of initial permits and significant and minor permit modifications. NCDAQ and the EPA will continue to monitor progress on the renewal backlog and discuss NCDAQ’s progress on monthly/quarterly permit calls with the EPA.

VI. Selected Permit Reviews

As part of the program evaluation, the EPA reviewed ten (10) recent NCDAQ Title V permitting actions to ensure consistency with Title V requirements. These reviews are in addition to the real-time reviews that the EPA Region 4 conducts for targeted permit actions. The ten (10) permitting actions were selected as examples of different types of permitting actions (*e.g.*, initial permits, renewal permits, significant modifications), different source categories, varying applicable requirements (*e.g.*, NSPS, NESHAP, case-by-case MACT, CAM, BACT, PSD avoidance, etc.), and differing compliance history (*e.g.*, consent decrees). The EPA acknowledges that due to the small sample size, the Agency’s comments may not be indicative of any systemic inconsistencies. In

general, the EPA found NCDAQ's Title V permits to be well written and consistent with Title V regulatory requirements. The EPA's findings and general recommendations are below:

1. Asbestos NESHAP

The EPA recommends including a reference to the NESHAP for Asbestos, 40 CFR 61 subpart M, in the General Permit Conditions of NCDAQ permits. The Asbestos NESHAP is an "applicable requirement" for Title V purposes. If a facility undertakes a demolition or renovation project, and this provision is included, the permit will not have to be revised to add this applicable requirement. Suggested example permit language is below:

The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

2. Practical Enforceability of Potential to Emit (PTE) Limits

Several of the permits reviewed contained applicability avoidance PTE limits that are set right at the major source or significant emissions rate thresholds. For those sources where emission estimates and/or emission limits are relatively close to the major source thresholds, the EPA encourages monitoring, recordkeeping and reporting that ensure continuous compliance. One approach to ensure that major source thresholds are not exceeded is to provide an advanced reporting mechanism for trends that could result in an exceedance of an avoidance limit or when monitored emissions reach a buffer within 5 to 10 percent of the applicable major source or standard's threshold.

3. Insignificant Activities Attachment

NCDAQ includes a list of insignificant activities in table format as an attachment to the final permit. The insignificant activities table has a link to permit requirements for most NSPS/NESHAP applicable to insignificant activities, which is referred to as the *Specific Permit Conditions Regulatory Guide*. The cover letter indicates that "any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." "For informational purposes" appears to indicate, which NCDAQ confirmed, that this attachment is not an enforceable part of the permit. In addition, the attachment is inconsistently labeled as an attachment to the cover letter for some permits and as an attachment to the permit for others. The insignificant activities table has a link to permit requirements for most NSPS/NESHAP applicable to insignificant activities. However, two of the permits reviewed have insignificant activities subject to standards for which specific permit conditions are not listed in the *Specific Permit Conditions Regulatory Guide*. Our concern is that applicable requirements for insignificant activities could be overlooked by the applicant and inspectors, or applicants may assume that they are not

required to comply with requirements that are not in the guide. The EPA recommends that NCDAQ use consistent procedures for attaching and referencing the regulatory guide and that, at a minimum, the permit include an enforceable permit term indicating that insignificant activities must comply with all applicable requirements that apply to those units (*i.e.*, insignificant activities are not exempt from applicable requirements), such as those included in, but not limited to, the *Specific Permit Conditions Regulatory Guide*.

4. General Conditions Related to the EPA Reporting

Condition 3.P in NCDAQ's Title V permits references the EPA's Air and EPCRA Enforcement Branch. This reference should be changed to the EPA's Air Enforcement Branch to reflect Region 4's reorganization. In addition, we recommend adding language to this permit condition to indicate that any reports/certifications that need to be submitted to the EPA can be submitted through the EPA's Compliance and Emissions Data Reporting Interface, [CEDRI](#), rather than the Regional Office. Off-permit changes pursuant to CAA § 502(b)(10) should be submitted to CEDRI or Region 4's Air Permits Section, and not to the EPA's Air Enforcement Branch.

5. General Permit Conditions/Compliance Certification/Deviations

The Part 70 regulations provide that permits shall include a requirement stating that the compliance certification identify each deviation and take it into account in the compliance certification and that the certification shall also identify, as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under part 64 (CAM) occurred (*See* 40 CFR § 70.6(c)(5)(iii)(C)). NCDAQ General Permit Condition 3.P cites to .0508(n) which contains these requirements; however, the requirements are not stated in the permit condition itself. We recommend including the language from .0508(n) in condition 3.P consistent with the requirements of the Title V regulations at 40 CFR § 70.6.

6. General Permit Conditions/General Duty Clause (GDC)

NCDAQ General Permit Condition 3.EE incorporates the requirements of the CAA section 112(r)(1) GDC into the Title V permit. The GDC is not considered to be an "applicable requirement" for Title V purposes and should be removed from NCDAQ Title V permits when they are reopened (*See* [Hazlehurst](#) order responding to petition). In addition, Title V permits should not include any permit conditions that are "federally enforceable only" because this would be contrary to the Part 70 provisions at 40 CFR § 70.4(b)(3), which require that states must have authority to enforce Title V permits.

7. Statements of Basis (SOB)/Application Reviews

NCDAQ's "Application Review" document is intended to serve as the SOB required by 40 CFR § 70.7(a)(5) and the "permit application summary form" required by § 70.8(a). The NCDAQ application review documents are, in general, thorough, and well organized.

However, during our review of the application review documents, we observed varying levels of detail and completeness. The EPA recommends referring to our summary form guidance related to the initial title program implementation agreements (*See Appendix A*). The EPA also has guidance regarding the content of an adequate SOB. *See [SOB Guidance Document](#)*. This guidance is intended to ensure the SOB is complete, hence, reducing the incidence of Title V petitions. The following are observations and recommendations for improvements to the SOB to enhance the understanding of permitting actions by citizens, the EPA reviewers, and the regulated community:

- In general, the completeness/level of detail of the SOBs for renewals, does not include past permitting actions that go beyond the most recent renewal. In some cases, applicability determinations (for PSD, NSPS, MACT) or decisions regarding the basis for periodic monitoring were not included and the document simply states that they haven't changed since they were originally made. The EPA recommends that these past decisions be cross-referenced (if the cross-referenced document is readily available to the public) or explained again in the current renewal to ensure that the rationale and factual basis for the renewal permit conditions are included in the permit record.
- Details of why a particular source is subject to Title V should be identified in the application summary form and permit review document. An emissions summary table that includes PTE (*See Appendix A*) would provide this information at a glance. The emissions table near the beginning of the NCDAQ's application review document, however, only provides information on recent actual emissions (some NCDAQ SOB's have a table of potential emissions near the end of document, in the section on regulatory applicability, although this is not uniform). A summary could also be presented with a section of check boxes that address applicability, as detailed in 40 CFR § 70.3. Appendix B provides an example of this approach. In addition to meeting the obligation to provide a permit summary form under Part 70, providing context for the public regarding the applicable requirements is a best practice for community engagement that increases transparency and may reduce public inquiries to NCDAQ as to why certain procedures and requirements do or do not apply in a specific permit action.

8. CAM Applicability, Non-Exempt Emission Limits and Presumptively Acceptable Monitoring

Based on the EPA's review, we found that NCDAQ permits may state that CAM is not applicable because a MACT applies. In this case, the unit and other emission limits are not exempt from CAM. Rather, a CAM plan may be required if the emissions unit is subject to other applicable emission limits that are not exempt under 40 CFR § 64.2(b)(1). CAM applicability must be evaluated for each applicable emission limit. More than likely, the MACT standard monitoring provisions will qualify as "presumptively acceptable monitoring" pursuant to 40 CFR § 64.4(b). As part of the submittal requirements under 40

CFR § 64.4(b), if an owner or operator relies on presumptively acceptable monitoring, no further justification for the appropriateness of that monitoring should be necessary other than an explanation of the applicability of such monitoring to the unit in question, unless data or information is brought forward to rebut the presumption. This distinction and consistent documentation of the determination is important to avoid CAM requirements being dropped if the unit, for example, is no longer subject to MACT monitoring requirements. In cases where NCDAQ receives the required determination of presumptively acceptable monitoring, the EPA recommends that the determination be documented in the SOB, along with mention of the potentially CAM applicable emission limits included in the analysis/determination, to ensure a complete record of CAM applicability and proper re-analysis should applicability change.

9. Citations and Authority

For all Title V permits, the EPA recommends that NCDAQ General Condition H.1 include a citation of origin and authority.

10. Permit Record Completeness

NCDAQ's web portals are complete with respect to readily providing access to many documents typically relevant to the application and permit status and compliance status of a facility. These resources include: an online calendar for public notice and hearing information; interactive maps that display the geographic locations of permitted sources and sources with pending applications; an email list for permitting actions involving public notices; daily publication of pending permit application information in both quick-look and comprehensive formats; published lists of all permitted facilities and all Title V permitted facilities; and public records search portal.

The public records search portal provides multiple fields with which to filter and search for information and documents for specific sources or groups of sources. Records available in this search portal include such things as: final issued permits; inspection reports; notices of violation; stack testing reports; continuous emissions monitoring reviews; MACT correspondence; and malfunction reports. None of these resource tools, however, including the public records search portal, provide access to certain public records relevant to the permitting of facilities, such as: final statements of basis; responses to public comments; hearing officer memos; EJ reports; and past public notices or documentation such as legal ad tear sheets to indicate how and when public notices were posted. Additionally, certain interim documents such as those that are proposed to the EPA (e.g., permit applications, proposed permits, and draft statements of basis) are also not accessible through these online resources.

The EPA recommends that NCDAQ retain recordings or transcripts from public hearings as part of the permit record. This allows confirmation that specific comments were raised by a

given commenter for the purpose of administrative appeals and petitions. In addition, for efficiency of storage and transmittal, the EPA recommends that NCDAQ consider making more permitting-related documents, such as permit applications, hearing officer memos, and EJ reports available via the public records search portal. In the interests of promoting public access to information and facilitating remote work, the EPA further recommends that NCDAQ consider the development of an online Title V permit application based on a relational database platform.

VII. Title V Rule Review

In a separate, parallel process, the EPA Region 4 conducted an in-depth review of the State's Title V regulations, due to NCDAQ's re-adoption of their full Title V rule (15A NCAC 02Q .0500). This re-adoption is unique to North Carolina and occurs every 10 years. Overall, NCDAQ's rules are well written and meet the requirements of Title V. The EPA Region 4 discussed several recommendations with NCDAQ in early 2021 to address rule clarity and consistency with 40 CFR part 70, given changes that have occurred to the Title V program over time. NCDAQ is in the process of revising their regulations based on the EPA's recommendations, and to address other updates, and proposed a rulemaking concept to the Environmental Management Commission in May 2021. Based on the EPA's review of the State's Title V regulations, the Agency is including the following action item related to timely permit issuance:

Action Item: NCDAQ should proceed to revise the provisions of 15A NCAC 02Q .0525, .0527, and .0516 to clarify and ensure that final actions on initial and renewal permits take place within the 18-month timeframe outlined in 40 CFR § 70.7(a)(2) and that the majority of significant modifications are processed within 9-months per § 70.7(e)(4)(ii), including a corresponding update to the North Carolina Attorney General's opinion, which is related to these provisions.

VIII. Conclusion

Based on the permit files reviewed, Title V survey results, TOPS data, fee documents, interviews and discussions, and follow-up information received, the EPA concludes that:

- NCDAQ has an excellent grasp of the requirements of Title V and is continually working to find impactful ways to increase their staff's ability to meet all the varied program elements of Title V. Reviews of NCDAQ permits noted that they are generally complete and well written. Based on the EPA's in-depth review of a selection of 10 permits, the EPA has made recommendations to improve permit clarity and enforceability and to ensure all applicable permit terms are included in the Title V permit.

- The EPA acknowledges the ongoing nationwide challenge of maintaining a fully funded Title V program with significantly declining emissions and fees. However, NCDAQ is facing a significant funding shortfall starting in FY21, which the State must take immediate action to address. It is the EPA's understanding that the State is in the process of revising the fee schedule, which will be effective this year. In addition, NCDAQ should develop a process for ongoing periodic review of the actual FTE necessary to implement the Title V program.
- The EPA Region 4 is committed to providing any needed assistance with respect to permit reviews and public engagement, including permitting projects with EJ implications. Specifically, the EPA Region 4 is committed to providing prompt feedback to NCDAQ regarding any rule and guidance interpretation inquiries and any general or specific permitting questions raised, and to keep NCDAQ informed of any future agency actions, such as rulemaking, that may have an impact on permitting programs.

Appendix A: EPA Sample Permit Application Summary Form

Permit Application Summary Form

General Facility Information

Facility name	AFS(9-digit) or CDS (10-digit) Plant ID
Facility address	Date application received
Source description	Application number
SIC code of major product	Permit number(s)

Application Type/Permit Activity

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> Permit renewal
<input type="checkbox"/> Significant modification	<input type="checkbox"/> Administrative Amendment
<input type="checkbox"/> Minor Modification	<input type="checkbox"/> General permit

Facility Emissions Summary

Pollutant	Actual (tpy)	Potential (tpy)
PM		
SO ₂		
NO _x		
CO		
VOC		
LEAD		
Individual HAP (by CAS)		
Total HAPs		

Compliance Summary

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

Applicable Requirements list

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input type="checkbox"/> SIP	<input type="checkbox"/> CAM
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> BART	<input type="checkbox"/> Other

Miscellaneous

- Acid rain source
- CAIR source
- Source subject to 112(r)
- Source requested synthetic PTE limit to avoid major source requirement (e.g., PSD, MACT)
- Source applied for federally enforceable emissions cap
- Source provided terms for alternative operating scenarios
- Source subject to a MACT standard
- Source requested case-by-case 112(g) or (j) determination
- Source applied for a plant-wide applicability limit (PAL)
- Source requested terms for operational flexibility
- Source requested streamlining of multiple applicable requirements
- Source requested monitoring plan to establish periodic monitoring
- Application proposes new control technology
- Certified by responsible official
- Diagrams or drawings included
- Confidential business information (CBI) included

STATEMENT OF BASIS / SUMMARY

Title V, Construction / Operating
Permit:

SOURCE ID:

AGENCY INTEREST:

ACTIVITY:

APE20190004

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SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 2429, Special Product Sawmills, Not Elsewhere Classified (cooperage stock)

Single Source Det. Yes No If Yes, Affiliated Source AI:

Source-wide Limit Yes No If Yes, See Section 4, Table A

28 Source Category Yes No If Yes, Category:

County: xx

Nonattainment Area N/A PM₁₀ PM_{2.5} CO NO_x SO₂ Ozone Lead

If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant Yes No

If yes, for what pollutant(s)?

PM₁₀ PM_{2.5} CO NO_x SO₂ VOC

PTE* greater than 250 tpy for any criteria air pollutant Yes No

If yes, for what pollutant(s)?

PM₁₀ PM_{2.5} CO NO_x SO₂ VOC

PTE* greater than 10 tpy for any single hazardous air pollutant (HAP) Yes No

If yes, list which pollutant(s):

PTE* greater than 25 tpy for combined HAP Yes No

*PTE does not include self-imposed emission limitations.

Description of Facility:

The facility manufactures oak bourbon barrels. The manufacturing process proceeds from raw logs to finished barrels and includes debarking, sawing, kiln-drying, planing, assembly, and charring.

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: Activities: APE20190004

Received: Application Complete Date(s):

Permit Action: Initial Renewal Significant Rev Minor Rev Administrative

Construction/Modification Requested? Yes No NSR Applicable? Yes No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action Yes No

Description of Action:

- *The facility's name was changed from xx Co to xx, LLC.*
- *A performance test on the barrel (08-04) and head (08-07) charring operation was performed on November 14-15, 2018 to determine an applicable CO emission factor. The Division determines that the PTE of CO for the facility is over the threshold of 100 tpy and requires the facility to obtain a Title V or Conditional Major permit.*
- *Emission Unit 01 (03-01), Wood Gasification Indirect Heat Exchanger, was removed from the permit. The unit remains on site but was decommissioned in December 2017. The boiler would require construction and a capital cost in order to operate, so the Division accepts Company xx, LLC's proposal to remove the emission unit from the permit. It is not included in the Title V permit #.*
- *The maximum rated heat input capacity of Emission Unit 11 (03-02), Wood-fired Indirect Heat Exchanger, was amended from 12.35 to 8.7 MMBtu/hr in the state origin permit issued on April 25, 2018, S-12-063 R2. Adjustments to the PM and SO₂ emission limitations on this unit and the PM emission limitations on Emission Units 08-13 and 08-23 are made accordingly with the issuance of V-19-029.*
- *Emission Unit 06, the Old Barrel Shop's barrel (01-02) and head (01-08) charring area, was taken out of service permanently on September 26, 2019 and is not included in the Title V Construction/Operating permit, V-19-029.*
- *Emission Unit 10-03 (05-03) Stockpile 05 no longer exists and is not included in the Title V Construction/Operating permit, V-19-029.*
- *Company XX, LLC requests the addition of the following Emission Units:*
 - *EU 04-10: 1.104 MMBtu/hr Wood-Fired Indirect Space Heat 03 (Saw Mill)*
 - *EU 01-11: 1.104 MMBtu/hr Wood-Fired Indirect Space Heat 04 (Old Barrel Shop)*
 - *EU 01-12: 1.104 MMBtu/hr Wood-Fired Indirect Space Heat 05 (Old Barrel Shop)**The Division includes these units in the Title V Construction/Operating permit, V-19-029.*
- *Company XX, LLC requests the removal of the following Insignificant Activities:*
 - *EU 05 (01-03): 16 Infrared Gas Burners (Barrel Shop)*
 - *EU 12-01 (06-01): Toaster 01 (Toaster Building)*
 - *EU 12-02 (06-02): Toaster 02 (Toaster Building)**The Division amends the list of Insignificant Activities accordingly.*

- *Company XX, LLC requests the addition of the following Insignificant Activities:*
 - EU 01-14 (01-14): Bullsaw 03 (Old Barrel Shop)
 - EU 01-15 (01-15): Stockpile 06 (Old Barrel Shop)
 - EU 03-09 (03-09): 8 Lumber Kilns (near Boiler Building)
 - EU 05-04 (05-04): 0.501 MMBtu/hr Wood-Fired Indirect Space Heater 01 (Export Building)
 - EU 02-08 (02-08): 0.813 MMBtu/hr Wood-Fired Indirect Space Heater 02 (Stave Mill)

The Division adds these units to the list of Insignificant Activities.

- *Emission Unit 03-03 (02-02) Bull Saw 01 is now listed under Fugitive Wood Operations rather than Non-Fugitive Wood Operations, as this unit is located outdoors and is not routed through a baghouse or other control device.*
- *The Division determines that 401 KAR 63:010 is not applicable to the insignificant activity EU 08-05 Heat Tunnel 02 and removes the generally applicable requirement from this unit.*

Permit # Emission Summary		
Pollutant	2018 Actual (tpy)	Revised PTE* V-19-029 (tpy)
CO	45.22	192.58
NO _x	1.57	17.76
PT	15.24	37.88
PM ₁₀	10.98	25.44
PM _{2.5}	6.44	14.07
SO ₂	0.31	1.62
VOC	31.01	1.35
Lead	N/A	0
Greenhouse Gases (GHGs)		
Carbon Dioxide	4160	16,024
Methane	0.02	1.54
Nitrous Oxide	0	0.92
CO ₂ Equivalent (CO ₂ e)	4161	16,337
Hazardous Air Pollutants (HAPs)		
Hydrochloric Acid	N/A	1.38
Combined HAPs:	0.00	4.19

*Includes the 2 Wood-Fired Indirect Space Heaters that are classified as Insignificant Activities