Environmental Management Commission Annual Report

Statutory Authority: G.S. 143B-282(b)

Due Date: January 1, 2022

Receiving Entities:

Environmental Review Commission

Submitting Entity:

Environmental Management Commission



ENVIRONMENTAL MANAGEMENT COMMISSION

NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY

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ANNUAL REPORT TO THE ENVIRONMENTAL REVIEW COMMISSION

Covering the period from January 2021 to December 2021

Per the requirements of General Statutes (G.S.) 143B-282(b), the Environmental Management Commission (Commission or EMC) is submitting this annual report covering the period from January 1, 2021 to November 18, 2021 on EMC's operations, activities, programs, and progress. This report is drawn from agendas and actions published by the Committee. For more information, visit the <u>NC Environmental Management Commission webpage</u>.

I. Overview

Notwithstanding the ongoing challenges of Covid 19, the EMC met regularly either virtually or in person with limited public attendance. With the technical assistance of DEQ staff, the public could attend all EMC meetings and public hearings virtually. As a result, the pandemic did not affect the ability of the EMC to conduct business and respond in a timely way to legislative mandates and the needs of the state's citizens. Some of the most significant issues addressed by the EMC in 2021 are summarized below.

Unregulated contaminants in drinking water supplies. Unregulated contaminants remained a significant focus of the EMC in 2021. Since 2016, DEQ has responded to unpermitted releases of Gen-X and other per-and polyfluoroalkyl substances (PFAS) from the Chemours facility in Fayetteville to the Cape Fear River. The river serves as a drinking water source for water systems in Brunswick County and New Hanover County. Dr. David Collier from the Department of Pediatrics at East Carolina University's Brody School of Medicine gave a presentation to the EMC in May 2021 on the health effects of exposure to PFAS. Dr. Collier also described East Carolina

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University's role in the North Carolina State University Gen-X study, which involves citizens in the Cape Fear River basin, and some of the study results.

In 2021, the EMC took action on another contaminant, 1,4-Dioxane, for which there is not yet a federal standard. The chemical, used in solvents and a wide range of other products, completely dissolves in water. The U.S. Environmental Protection Agency (EPA) classifies 1,4-Dioxane as a substance likely to increase the incidence of cancer in people. EPA has set a health goal of no more than 35 micrograms per liter (Ug/L) of water, but has not adopted an enforceable national drinking water standard for 1,4-Dioxane. Wastewater treatment plants generally do not have the capability to remove 1,4-Dioxane, so the chemical can enter surface waters in the wastewater discharge. Downstream drinking water systems also lack the ability to treat for 1,4-Dioxane so if the surface water used as a drinking water source contains 1,4-Dioxane, it may be found in the drinking water delivered to customers. At present, the most effective way to reduce the concentration of 1,4-Dioxane in municipal wastewater discharges is to work with industrial sources to reduce their contribution before it reaches the wastewater treatment plant.

A 2013-2015 program to monitor for 1,4-Dioxane in drinking water found it to be most prevalent in water produced by water systems relying on surface water intakes in the Cape Fear River Basin. In 2014, DEQ instream sampling found 1,4-Dioxane in waters downstream of the treated wastewater discharged from Greensboro's T.Z. Osborne wastewater treatment plant. The Osborne plant has a permitted discharge to South Buffalo Creek in the Cape Fear River Basin. In 2015, the City of Greensboro began to work with an industrial discharger determined to be a likely source of 1,4-Dioxane to improve the industry's pretreatment. Those efforts reduced the level in the Osborne wastewater effluent by 50%. In 2019, however, DEQ found levels of 1,4-Dioxane in the Osborne effluent that would cause downstream water systems to produce finished water exceeding EPA's 35 Ug/L health standard and issued a notice of violation to the City of Greensboro.

In March 2021, the EMC approved a Water Quality Special Order by Consent (SOC) to address the 1,4-Dioxane levels in the Osborne plant's effluent. (An SOC sets out a plan and timeline for a facility to come into compliance with discharge limits.) The Greensboro SOC required more frequent monitoring for 1,4-Dioxane; measures to identify and address industrial sources contributing 1,4-Dioxane to the wastewater system; and imposed limits on the concentration of 1,4-Dioxane in the Osborne plant's effluent. An appeal of the SOC by Haw River Assembly and the Fayetteville Public Works Commission led to a settlement agreement that further strengthened some of the original SOC conditions. The EMC approved the settlement agreement, including the revised SOC, in November. While the SOC appeal was pending, monitoring detected two significant spikes in 1,4-Dioxane in the Osborne wastewater effluent. In response, the EMC has authorized DEQ to investigate the causes and continue to update the EMC on the results of its investigation.

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A citizen petition to adopt rules limiting carbon dioxide emissions from the electric power sector. The state's Administrative Procedures Act (APA) allows anyone to petition the EMC to adopt a rule. In January 2021, the EMC received a petition on behalf of Clean Air Carolina and the N.C. Coastal Federation requesting adoption of rules to reduce carbon dioxide emissions from the electric power sector. The petition included a set of draft rules. The APA requires the EMC to first decide whether to grant the petition. Under the APA, granting a rulemaking petition does not commit the agency to adopt the proposed rules; it just means the agency has agreed to start a rulemaking process by developing a regulatory impact analysis of the proposed rules and inviting public comment on both the proposed rules and the analysis. The EMC granted the rulemaking petition in July 2021. DEQ's Division of Air Quality is responsible for preparing an analysis of the proposed rules which will require technical modeling of the rule impacts. There will be opportunity for public comment once the regulatory impact analysis has been completed and approved by the EMC. An EMC decision on adoption of the proposed rules will only be made after all of those steps have been completed.

Adoption of temporary rules in response to changing federal wetlands jurisdiction. Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to issue permits to place fill material in waters and wetlands under federal jurisdiction. Federal jurisdiction only extends to waters (a term that includes wetlands) affecting interstate commerce, which are referred to in federal laws and rules as "navigable waters" or "waters of the United States". In 2020, EPA amended the rule defining "waters of the United States" in a way that removed federal jurisdiction over some waters that had previously been regulated by the Corps of Engineers. The affected waters included streams and wetlands that had not previously been categorized as "isolated" waters under either federal or state rules. The change in federal jurisdiction meant those waters would be regulated exclusively by the state just as isolated waters/wetlands have been. The temporary rules approved by the EMC created a permitting process for this new category of waters/wetlands exclusively under state permitting jurisdiction. The rules include permitting standards that are very similar to those already applied to isolated waters and wetlands.

Note: On August 30, 2021, the U.S. District Court for the District of Arizona vacated the Navigable Waters Protection Rule (NWPR). As a result of this order, the EPA and USACE halted implementation and are interpreting "Waters of the United States" consistent with the pre-2015 regulatory regime. On November 18, 2021, the EPA and the USACE announced the signing of a proposed rule to revise the definition of "Waters of the United States", which was in turn published in the Federal Register on December 7, 2021. The EMC is scheduled to consider these developments in its rule adoption process in 2022.

II. EMC Rulemaking Actions

January 14, 2021 EMC Meeting

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Approved the Falls Lake Model Program for Existing Development Stormwater [Agenda Item 21-01]

The EMC approved the Falls Lake Model Program for Existing Development Stormwater following a presentation about the program. The purpose of this program is to serve as a guide to help implement existing requirements.

Approved the Hearing Officer's Report on Proposed Rule Amendments to Permit and Application Fees, 15A NCAC 02Q .0203 and Granted Final Approval of the Fiscal Note [Agenda Item 21-04]

The EMC approved the hearing officer's report on proposed rule amendments to permit and application fees, 15A NCAC 02Q .0203, and granted final approval of the fiscal note.

March 11, 2021 EMC Meeting

Approved the Hearing Officer's Report and Regulatory Impact Analysis, Repealed 15A NCAC 13B Rules .1701 - .1710, and Adopted Rule .1713 "Requirements for Existing Structural Fills" [Agenda Item 21-06]

The EMC approved the Hearing Officer's Report and Regulatory Impact Analysis on readoption of rules related to use of coal ash in structural fill. As recommended by the hearing officer, the EMC repealed 15A NCAC 13B Rules .1701 - .1710 because criteria for approval of new structural fill projects had been superseded by standards in the 2014 Coal Ash Management Act (CAMA). The EMC readopted rule sections still necessary to address structural fill sites that existed prior to CAMA, but moved those sections into a new Rule 13B.1703 "Requirements for Existing Structural Fills."

Approved the Neuse/Tar-Pamlico New Development Stormwater Model Program [Agenda Item 21-07]

The EMC approved the Neuse/Tar-Pamlico New Development Stormwater Model Program. This model program was developed in collaboration with local governments and provides guidance and information templates to assist local governments in development of their own local programs to implement the new Neuse and Tar-Pamlico New Development Stormwater Rules.

Approved Proceeding to Public Notice and Hearing with Proposed Surface Water Triennial Review Amendments to Select Rules in 15A NCAC 02B .0200 and .0300 and Regulatory Impact Analysis [Agenda Item 21-10]

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The EMC approved proceeding to public notice and hearing with proposed Surface Water Triennial Review Amendments to select rules in 15A NCAC 02B .0200 and .0300 and regulatory impact analysis.

May 13, 2021 Meeting

Approved Hearing Officer's Report on Adoption of Final Emission Guidelines for Existing Landfills [Agenda Item 21-14]

The EMC approved the hearing officer's report on Adoption of Final Emission Guidelines for Existing Landfills and adopted the rules as proposed. These rules revise the municipal solid waste landfill rules, incorporating the final EPA Emission Guidelines for existing landfills. (Additional materials on the landfill emissions rules can be found under Agenda Item 21-03 for the March 11, 2021 EMC meeting,)

Approved the Proposed Removal of the Swamp Classification and Proposed Removal of a Part of a Water Quality Management Plan for a Portion of the Cape Fear River in New Hanover and Brunswick Counties (Cape Fear River Basin) [Agenda Item 21-15]

The EMC approved the proposed rulemaking for 15A NCAC 02B .0311 and 15A NCAC 02B .0227 in order to remove the swamp classification and part of a water quality management plan for a portion of the Cape Fear River.

Approved the 2022 303(d) Listing and Delisting Methodology [Agenda Item 21-16]

The EMC approved the proposed clarifications to the 2022 303(d) listing and delisting assessment methodology.

Approved the Hearing Officer's Report and Adopted Temporary Rules 15A NCAC 02H .1401-1405 "Discharges to Federally Non-Jurisdictional Wetlands and Federally Non-Jurisdictional Classified Surface Waters" and Temporary Rule Amendments for 15A NCAC 02H .1301 "Discharges to Isolated Wetlands and Isolated Waters: Purpose and Scope"

[Agenda Item 21-17]

The EMC approved the hearing officer's report and adopted 15A NCAC 02H .1401 – 02H .1405 "Discharges to Federally Non-Jurisdictional Wetlands and Federally Non-Jurisdictional Classified Surface Waters" as temporary rules. The EMC also adopted temporary rule amendments to 15A NCAC 02H .1301 "Discharges to Isolated Wetlands and Isolated Waters, Purpose and Scope." (Additional materials on these rules can be found under Agenda Item 21-11 on the March 11, 2021 EMC agenda.) The rule amendments responded to changes in federal Clean Water Act jurisdiction by providing a state process for permitting impacts to waters/wetlands that were no longer under federal permitting jurisdiction, but were not

considered "isolated" waters/wetlands. The rules include permitting standards similar to those applied to isolated waters/wetlands which were already exclusively under state jurisdiction.

July 8, 2021 EMC Meeting

Approved Proceeding to Public Notice and Hearing with Proposed Amendments to 15A NCAC 02B .0211 for a Site-Specific Chlorophyll-a Surface Water Quality Standard for the High Rock Lake Reservoir and the Associated Regulatory Impact Analysis [Agenda Item 21-19]

The EMC approved proceeding to public notice and hearing with proposed amendments to 15A NCAC 02B .0211 for a site-specific chlorophyll-a surface water quality standard for the High Rock Lake Reservoir and the associated regulatory impact analysis.

July 13, 2021 Special EMC Meeting

Granted Petition for Rulemaking Pursuant to North Carolina General Statutes § 150B-20 and 15A NCAC 02I .0500 to Adopt Rules to Limit CO2 Pollution from the Electric Power Sector

[Agenda Item 21-20]

The EMC granted a petition for rulemaking submitted by Clean Air Carolina and North Carolina Coastal Federation pursuant to North Carolina General Statutes § 150B-20 and 15A NCAC 02I .0500 to adopt rules to limit CO2 pollution from the electric power sector. The decision to grant the petition means that a rulemaking process can begin based on the draft rules submitted by the petitions which means preparation of a regulatory impact analysis followed by public comment opportunities. Granting the petition does not commit the EMC to adopt the rules as proposed by the petitioners.

September 9, 2021 EMC Meeting

Approved Proceeding to Public Notice and Hearing with Proposed Permanent Rules 15A NCAC 02H .1401-1405 "Discharges to Federally Non-Jurisdictional Wetlands and Federally Non-Jurisdictional Classified Surface Waters" and Permanent Rule Amendments for 15A NCAC 02H .1301 "Discharges to Isolated Wetlands and Isolated Waters: Purpose and Scope" [Agenda Item 21-25]

The EMC approved proceeding to public notice and hearing with proposed permanent rules 15A NCAC 02H .1401-1405 "Discharges to Federally Non-Jurisdictional Wetlands and Federally Non-Jurisdictional Classified Surface Waters" and permanent rule amendments to 15A NCAC 02H .1301 "Discharges to Isolated Wetlands and Isolated Waters: Purpose and Scope." The permanent rules would replace temporary rules adopted by the EMC in May 2021. The EMC will act on the proposed permanent rules in 2022.

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Approved Proceeding to Public Hearing on 15A NCAC 02L .0100 "Groundwater Classification and Standards – General Considerations" [Agenda Item 21-27]

The EMC approved proceeding to public hearing on 15A NCAC 02L .0100 "Groundwater Classification and Standards – General Considerations."

Approved Proposed Rule Revisions and Regulatory Impact Analysis and to Proceed to Public Hearing on the Amendments to Nitrogen Oxide State Implementation Plan Rules, 15A NCAC 02D .1400 (552) [Agenda Item 21-29]

The EMC approved proposed rule revisions and regulatory impact analysis and to proceed to public hearing on the amendments to Nitrogen Oxide State Implementation Plan Rules, 15A NCAC 02D .1400 (552).

November 18, 2021 EMC Meeting

Approved Proceeding to Public Notice and Hearing on Amendments to 15A NCAC 13B Rule .0832 "General Provisions" for Septage Management [Agenda Item 21-30]

The EMC approved proceeding to public notice and hearing on amendments to 15A NCAC 13B Rule .0832 "General Provisions" for septage management.

Approved Hearing Officer's Report, Regulatory Impact Analysis, and Adoption of Rule Amendments for 15A NCAC 02N "Underground Storage and Approved a Technical Change in the Rule Language [Agenda Item 21-31]

The EMC approved the hearing officer's report, regulatory impact analysis, and adoption of rule amendments for 15A NCAC 02N "Underground Storage." The EMC also approved a technical change to the rules as published in the NC Register following publication and public comment. The technical change eliminated existing language in 15A NCAC 02N. 0406 that suggested the state rule had the effect of rewriting a federal rule, which was not the intent and would exceed EMC authority. The change did not alter the meaning of the rule as it went to public notice.

Approved Hearing Officer's Report on Proposed Rule Readoptions to 15A NCAC 02E Water Use Registration and Allocation Rules [Agenda Item 21-32]

The EMC approved the hearing officer's report on proposed rule readoptions to 15A NCAC 02E water use registration and allocation rules. (Additional materials on the rule readoption can be found under Agenda Item 21-09 on the March 11, 2021 agenda.)

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Approved Hearing Officer's Report on Proposed Rule Amendments to 15A NCAC 02L .0202 "Groundwater Quality Standards" with One Modification [Agenda Item 21-33]

The EMC approved the hearing officer's report on proposed rule amendments to 15A NCAC 02L .0202 "Groundwater Quality Standards." Additionally, the EMC added language to 15A NCAC 02L .0202 (c) that states: "The Director shall provide an annual update to the Commission on the status of IMAC requests."

Approved Proceeding to Public Hearing on the Amendments to the Title V Rules, 15A NCAC 02Q .0103 and .0500 and Accompanying Regulatory Impact Analysis (553) [Agenda Item 21-35]

The EMC approved proceeding to public hearing on proposed amendments to the Title V Rules, 15A NCAC 02Q .0103 and .0500 and the accompanying regulatory impact analysis (553). These rule amendments have been proposed in response to a routine U.S. EPA review of the state's Title V program. EPA comments on the state Title V rules included corrections of minor typographical and rule reference errors; suggested wording changes to ensure consistency with federal rules (40 CFR Part 70); and procedural updates related to permit processing timeframes and final actions, public participation, and submittal of documents to EPA.

Approved Technical Corrections to 15A NCAC 02D .1204, Sewage Sludge Incineration Units (539) [Agenda Item 21-36]

The EMC approved technical corrections to 15A NCAC 02D .1204, sewage sludge incineration units.

III. Other EMC Activity

This section includes EMC actions other than rulemaking (such as approval of river basin plans, declaratory rulings, and special orders by consent); reports; and issue presentations to the EMC.

January 14, 2021 EMC Meeting

Approved the Final Report on the Consideration of Establishing a Regulatory Program for the Management and Decommission of Renewable Energy Equipment [Agenda Item 21-05]

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The EMC approved the final report on the Consideration of Establishing a Regulatory Program for the Management and Decommission of Renewable Energy Equipment.

March 2021 EMC Meeting

Approved the 2021 Chowan River Basin Water Resources Plan [Agenda Item 21-08]

The EMC approved the 2021 Chowan River Basin Water Resources Plan.

Wetland Shoreline Protection and Enhancement with Focus on Nature Based Solution [Agenda Item 21-IF-06]

Anne Deaton of the Division of Marine Fisheries gave a presentation on wetland protection and enhancement with a focus on nature-based methods. She reviewed ecosystem services provided by wetlands, changes in wetland cover over time, and current and future threats. The purpose of the presentation was to provide background information on two issue papers that would be included in the DEQ 2021 Coastal Habitat Protection Plan amendment.

Habitat Monitoring to Assess Status, Trends and Regulatory Effectiveness [Agenda Item 21-IF-07]

Casey Knight of the Division of Marine Fisheries gave a presentation on habitat monitoring to assess status and regulatory effectiveness. She reviewed the latest science on the extent and condition of the six coastal fish habitats in N.C., including water column, and existing monitoring of those habitats.

Issued a Water Quality Special Order by Consent (SOC) S19-010 to Address 1,4-Dioxane in the Effluent Discharge at City of Greensboro's T.Z. Osborne Wastewater Treatment Plant [Agenda Item 21-12]

The EMC issued a Water Quality Special Order by Consent (SOC) S19-010 to address 1,4-dioxane in the effluent discharge from the City of Greensboro's T.Z. Osborne Wastewater Treatment Plant. An SOC is a consent agreement between the EMC and a wastewater system operator setting out requirements intended to bring the wastewater plant into compliance with water quality standards

and permitted discharge limits within a specified time period.

May 13, 2021 Meeting

Approved Appointments of Members to the Water Pollution Control System Operators Certification Commission Model Program [Agenda Item 21-13]

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The EMC approved the appointment of one new member, Steven M. Barry, and the reappointment of three members, Mr. Jonathan M. Russell, Mr. C. Kenneth Stines, and Dr. Albert Robert Rubin, to the Water Pollution Control System Operators Certification Commission.

Environmental Justice and North Carolina DEQ [Agenda Item 21-IF-08]

Jennifer Mundt, senior Policy Advisor at DEQ and leader of DEQ's Environmental Justice program, gave a presentation explaining the concept of environmental justice. She outlined 4 main topics and covered them in the presentation, beginning with defining environmental justice and briefly describing its history. She stated that environmental justice (EJ) was defined by the U.S. Environmental Protection Agency as the fair treatment and meaningful involvement of all people, regardless of race, color or national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

Per- and Polyfluoroalkyl Substances (PFAS): A Look at Emerging and Legacy Contaminants and Human Health in NC's Cape Fear River Basin [Agenda Item 21-IF-09]

Dr. David Collier from the Department of Pediatrics at East Carolina University's Brody School of Medicine discussed Gen-X and other per- and polyfluoroalkyl substances. These substances are generally referred to as PFAS and they were going to look at the emerging and legacy contaminants, human health and North Carolina's Cape Fear River basin. His main topics for discussion were describing what per- and polyfluoroalkyl substances were and identifying some health effects of PFAS exposure. He also explained East Carolina University's role in and the findings of North Carolina State University's Gen-X study, which involves citizens in the Cape Fear River basin.

July 8, 2021 EMC Meeting

2021 Status Report: Falls Lake Nutrient Strategy [Agenda Item 21-IF-10]

John Huisman of the Division of Water Resources stated that now, in their tenth year of implementation, the Falls Lake nutrient management strategy rules required the Division of Water Resources to report to the Commission on specific aspects of progress in the Falls Lake watershed beginning in January 2016 and every five years thereafter. Mr. Huisman presented an overview of the second Falls Lake Status Report under that requirement and provided an update on implementation of the rules, an assessment of nutrient loading to the lake, details on watershed activities, assessments of progress towards achieving the chlorophyll a water quality standard and characterizes advancements in scientific understanding and treatment technology.

Mr. Huisman indicated that this second five-year report benefited from data collected and analyzed not only by the Division, but also from an extensive, four-year data collection effort conducted by the Upper Neuse River Basin Association to support a full remodeling of the watershed and lake,

as well as early results of a three-year UNC collaborative study of the lake and its nutrient management strategy. He stated that once completed, recommendations from both these efforts would inform the content of the Division's next five-year report and the EMC's re-adoption of the Falls Lake nutrient management strategy rules, which has been scheduled to begin in 2024.

July 13, 2021 Special EMC Meeting

Authorized Investigation of Discharges of 1,4 Dioxane [Agenda Item 21-21]

The EMC directed DEQ to investigate the circumstances and likely causes of a recent discharge of 1,4-Dioxane from the TZ Osborne Wastewater Treatment Plant that exceeded the limit established by the SOC. The EMC delegated its authority to conduct and direct the investigation, including the authority provided in N.C. General Statute Sections 143-215.3 and 143B-282. The Department will report its findings and any recommendations it might have related to its investigation to the Commission.

September 9, 2021 EMC Meeting

Request UNC School of Government Review of Revised Draft Water Supply Watershed Protection Ordinance [Agenda Item 21-22]

The EMC requested that the UNC School of Government (SOG) review the draft model ordinance and provide input prior to EMC approval. The UNC SOG has local government expertise and experience with development of the first WSWP ordinance. Paul Clark agreed to share the draft model ordinance with UNC SOG for their review. After incorporating UNC SOG review comments, Paul Clark will seek EMC approval of draft model ordinance in 2022.

Approved the 2021 Pasquotank River Basin Water Resources Plan [Agenda Item 21-23]

The EMC approved the 2021 Pasquotank River Basin Water Resources Plan.

Approved the 2021 Annual Report on the Progress in Developing and Implementing Basinwide Water Resource Management Plans to the Environmental Review Commission (ERC) [Agenda Item 21-28]

The EMC approved the 2021 Annual Report on the Progress in Developing and Implementing Basinwide Water Resource Management Plans to the Environmental Review Commission (ERC).

November 18, 2021 EMC Meeting

Reviewed Public Input and Approved the 2021 Coastal Habitat Protection Plan [Agenda Item 21-34]

The EMC reviewed public input and approved the 2021 Coastal Habitat Protection Plan.

Approved the 2021 White Oak River Basin Water Resources Plan [Agenda Item 21-37]

The EMC approved the 2021 White Oak River Basin Water Resources Plan.

Approved Petition for Declaratory Ruling, Optima TH, LLC [Agenda Item 21-38]

By majority vote, the Commission granted the Petition for Declaratory Ruling with respect to subpart (a) of the petition and issued a decision on the rule interpretation issue raised in subpart (a) of the petition. Specifically, the Commission determined that "15A NCAC 2D.0516(a) does not prohibit the use of supplemental fuels, including natural gas purchased from a utility, to increase the heating value of flared waste biogas to enhance oxidation and to comply with 2D.0516." In making its ruling, the Commission specifically noted that the decision does not prohibit DAQ from regulating the amount of supplemental fuel as part of the permit and did not intend to limit or prohibit DAQ's ability to issue permits. Optima's request for relief in subpart (b) of the petition had been deemed incomplete by Chair Meiburg prior to the meeting and was not considered by the Commission.

Haw River Assembly and Fayetteville Public Works v. NCEMC and The City of Greensboro (OAH Case Nos. 21 EHR 01770 and 01771 [Agenda item 21-39]

The Commission moved into closed session to discuss proposed settlement of an ongoing administrative appeal with EMC legal counsel. The case concerned an SOC approved by the EMC in March 2021 to address high levels of 1,4-Dioxane in discharges from Greensboro's T.Z. Osborne wastewater treatment plant. Petitioners Haw River Assembly and the Fayetteville Public Works Commission had reached agreement with the respondent-intervenor (City of Greensboro) on a potential settlement of the case that required EMC approval. The Commission did not take any votes in closed session.

Upon returning to open session, the Commission approved the proposed settlement agreement, including modifications to the Special Order by Consent that were incorporated in the settlement agreement. The revised SOC imposed lower allowable target values for the discharge of 1,4-Dioxane from the City's T.Z. Osborne wastewater facility; required additional monitoring, sampling and reporting; and revised the stipulated civil penalty structure to take both the level and

frequency of exceedances into consideration. The EMC also directed the Department to undertake certain actions regarding ongoing investigation of 1,4-Dioxane levels in the Cape Fear Basin.

IV. Nutrient Control Strategies Sections 2, 3, and 4 of S.L. 2005-190 (as amended by S.L. 2006-259, S.L. 2009-486, S.L. 2017-10, and S.L. 2018-5)

Nutrient Control Criteria - Section 2(b) of S.L. 2005-190

The U.S. Environmental Protection Agency (EPA) requires all states to develop and implement Nutrient Criteria Development Plans to protect surface waters from the impacts of excess nutrients. The North Carolina Division of Water Resources (DWR) and the EPA originally agreed on North Carolina's Nutrient Criteria Development Plan (NCDP) in June 2014. The NCDP was updated in 2019 to incorporate lessons learned, amend criteria development timelines, formally recognize the Criteria Implementation Committee's (CIC) existing role and expand the Albemarle Sound pilot area to include the Chowan River.

The state's Nutrient Criteria Development Plan established an external Scientific Advisory Council (SAC) to assist in the development of nutrient criteria. The SAC consists of 12 members representing complementary scientific backgrounds. The CIC was established to evaluate fiscal and social implications of nutrient criteria.

In 2021, clarity criteria in the Chowan River/Albemarle Sound region have been under review by DWR staff and the SAC as requested. A bio-optical model is being developed through a partnership with DWR, UNC, and the Albemarle-Pamlico National Estuary Partnership (APNEP). DWR staff have also been advancing nutrient criteria recommendations developed for High Rock Lake through the rulemaking process for approval by the Environmental Management Commission.

Information on the N.C. Nutrient Criteria Development Plan and advisory groups is available online at: <u>http://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/nutrient-criteria-development-plan</u>.

Falls Lake - Section 3 of S.L. 2005-190

The EMC is required to report progress in adopting and implementing a nutrient control strategy to reduce excess nutrient loading to the Falls Lake water supply reservoir. Following an extensive stakeholder and rule-making process, the Falls Lake nutrient rules went into effect Jan. 15, 2011, and have been implemented accordingly since. Major reduction actions are being implemented over a 10-year first stage, with additional steps scheduled for a 15-year second stage. In July 2016, the General Assembly passed S.L. 2016-94, calling for an evaluation of the Falls and Jordan nutrient strategies, separating these rules from the rest of the periodic rules re-adoption process, and setting later rulemaking timelines. The legislation called on the University of North Carolina at Chapel Hill to study the Jordan and Falls strategies and report recommendations to guide further rulemaking to the ERC, EMC and DEQ. The EMC was charged with convening a stakeholder working group to consider the findings of the UNC studies and provide rulemaking input. Most recently, S.L. 2018-5 revised the due dates for the UNC Studies to December 2019 and December 2023 for Jordan and Falls respectively and extended the deadline for initiating Falls rules readoption to Dec 31, 2024.

During the December 2020 - December 2021 period, DWR staff:

- Reviewed the Interim Update of the UNC Collaboratory's multi-year Falls Lake study pursuant to Session Law 2016-94 section 14.13(c). The final report is due December 2023. Completed the development of the Existing Development Model Program and presented it to the Environmental Management Commission for approval in January 2021.
- Completed development of the Catalog of Nutrient Reducing Practices, which provides a single, comprehensive listing of all currently approved nutrient practices and applicable sources of design standards and nutrient reduction accounting. An initial draft of the Catalog was revised to incorporated feedback from the regulated community after being released for public comment in November 2020. The final Catalog was approved by the Director and posted to the Division website in April 2021.
- Collaborated with the Upper Neuse River Basin Association (UNRBA) on the development and review of an alternative implementation approach for Stage I of the Existing Development Rule that will provide a group compliance implementation option. This alternative approach was submitted to DWR in July 2021 and will be presented to the Commission for approval in 2022.
- Continued collaborating with the UNRBA on their reexamination process of the Stage II rule requirements. This includes attending monthly path forward committee, and modeling and regulatory support meetings and providing input on the UNRBA's efforts to develop new lake and watershed models for Falls Lake by 2023 in anticipation of the Falls rules readoption process beginning in 2024.

Jordan Lake - Section 4 of S.L. 2005-190

Section 4 requires the EMC to report on progress toward developing and implementing a nutrient management strategy for reservoirs including Jordan Lake. After a multi-year stakeholder process, the Jordan Lake rules went into effect in August 2009. Since then, nine session laws have revised or delayed the rules. Most recently, S.L. 2018-5 added a lake and watershed modeling component to the Collaboratory Study and extended the deadline for the EMC to initiate rules re-adoption to Dec 31, 2019.

During the December 2020 – December 2021 period, DWR staff:

- Continued working with stakeholders on Nutrient Data Standards workgroup for Stormwater Control Measures (SCM).
- Worked with Jordan Lake One Water (JLOW), a collaborative planning team administered by Triangle J Council of Governments, to design an integrative watershed management plan for the Jordan Lake watershed, using triple bottom line approaches of economic, environmental and social factors and stakeholder involvement, to help meet the nutrient reduction requirements of the rule readoption process.
- Assisted with the final JLOW report and recommendations developed from the output of the JLOW workgroups: Integrated Water Management, Strategy Evaluation, Monitoring and Reporting, Organizational Governance, Finances, and Benefits. These workgroups consist of volunteers from throughout the watershed, including elected officials, resource professionals, nonprofit organizations, lay citizens, and the development community.
- Contracted further refinements to the UNC-C Jordan Lake model for regulatory application purposes. Refinements include use of additional data for improved

calibrations, development of nutrient standards curves for both lake arms, peer review and revision.

• Began nutrient rule conceptual planning and stakeholder outreach planning for a 2022 kickoff meeting.

V. Closing

This report has been prepared based on the 2021 EMC agendas and meeting minutes. A more detailed description of information can be found on the EMC website.

To the best of my knowledge the information contained in this report is accurate and complete.

Robin W. Smith Chair, Environmental Management Commission

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