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SUBMITTED VIA EMAIL

Governor's Environmental Justice Advisory Council

Jeff Hart
Governor's Office
Jeff.Hart@NC.Gov

Elizabeth S. Biser
Secretary, Department of Environmental Quality
elizabeth.biser@deq.nc.gov

**Re: Comments in Response to the Department of Environmental Quality's
Draft Environmental Justice Goals and Measurable Outcomes**

Dear Environmental Justice Advisory Council Members and Secretary Biser:

On behalf of Coastal Carolina Riverwatch, Partners for Environmental Justice, West End Revitalization Association, 7 Directions of Service, Warren County Environmental Action Team, Inc, NC FIELD, Inc., NOTRA, Winyah Rivers Alliance, Down East Coal Ash Environmental and Social Justice Coalition, CleanAIRE NC, Toxic Free NC, Yadkin Riverkeeper, NC Black and Green Network, North Carolina Environmental Justice Network, Environmental Justice Community Action Network, Duplin County Branch of NAACP, Neighbors for Better Neighborhoods, The Lilies Project, First Missionary Baptist Church of Magnolia Ministries, Inc., North Carolina Justice Center, Emancipate NC, North Carolina NAACP, North Carolina Conservation Network, NC Sierra Club, North Carolina League of Conservation Voters, McDowell Local Food Advisory Council, Danielle Koonce, North Carolina Sustainable Business Council, UNC Environmental Justice Action Research Clinic, Wake Forest Environmental Law and Policy Clinic, Waterkeeper Alliance, Dogwood Alliance, Center for Biological Diversity, the Southern Environmental Law Center and the Southern Coalition for Social Justice submit the following comments on the draft Environmental Justice Goals and Measurable Outcomes of the North Carolina Department of Department of Environmental Quality ("DEQ"). Thank you for the opportunity to submit these comments.

On October 24, 2023, Governor Roy Cooper signed Executive Order 292, Advancing Environmental Justice for North Carolina (“EO 292”).¹ Section 7 of the order directed each cabinet agency to develop and submit to the Governor’s Environmental Justice Advisory Council (“EJAC”) and for public comment at least three draft environmental justice goals and measurable outcomes (“EJ goals”).² Contrary to EO 292’s mandate, DEQ’s draft EJ goals are vague and not measurable as they do not contain clear, quantifiable objectives.³ Instead, as explained in detail below, DEQ’s goals are a mixture of ambiguous commitments to evaluate ongoing injustices—evaluations which it does not expressly commit to publishing—or restatements of pre-existing policies or legal obligations. We, the undersigned, request that DEQ’s final EJ goals contain action that are specific, measurable, achievable, relevant, and time-bound.

I. The Draft Goals & Outcomes are Unclear and Unmeasurable

DEQ’s draft EJ goals are vague and unmeasurable. DEQ’s draft goals commit the agency to:

1. Ensure that underserved communities have equitable access to DEQ data and funding opportunities. . . .
2. Incorporate environmental justice, equity and access throughout Department programs to the extent permitted by law. . . .
3. Enhance transparency by informing stakeholders of DEQ regulatory programs and actions, providing access to community level information, and increasing opportunities for public engagement.⁴

There are subgoals under each of these three goals. However, neither the goals nor their subgoals contain measurable goals or outcomes.

EO 292 directs DEQ to create “EJ goals and *measurable* outcomes.”⁵ While the executive order itself does not define measurability or outcomes the U.S. Environmental Protection Agency (“EPA”) documents provide some guidance. Related to environmental justice grants, EPA described measurability as “a sound plan for tracking progress towards achieving the expected outputs, outcomes, and associated

¹ See Office of Governor Roy Cooper, Exec. Order No. 292, Advancing Environmental Justice in North Carolina (Oct. 24, 2023), <https://governor.nc.gov/executive-order-no-292/open>.

² See *id.*

³ See N.C. Dep’t Env’t Quality, Draft Environmental Justice Goals (Feb. 23, 2024), <https://governor.nc.gov/deq-environmental-justice-goals/download?attachment> [hereinafter DEQ Draft EJ Goals].

⁴ *Id.*

⁵ See Exec. Order 292, *supra* note 1 at § 7 (emphasis added).

timeframes for achieving those results.”⁶ EPA defined “outcome” as “the result, effect, or consequence that will occur from carrying out an environmental/public health program or activity that is related to an environmental/public health programmatic goal or objective.”⁷ Moreover, it is widely accepted that goals set by any individual or organization should be “specific, measurable, achievable, relevant, and time-bound,” or “S.M.A.R.T.”⁸ None of DEQ’s draft EJ goals meet these descriptions.

As the state agency tasked with protecting the environment and ensuring clean air and clean water for all North Carolinians,⁹ DEQ should be leading the charge, putting forth EJ goals that are creative and S.M.A.R.T. DEQ’s goals should set the standard for its sister agencies with less environmental expertise who are looking to DEQ for guidance.¹⁰ Instead, DEQ put forth a list of vague commitments that included mostly pre-existing legal requirements. As stated in further detail below, DEQ’s final EJ goals need to include actions to be taken within a certain period of time and a means by which the public can measure the agency’s attainment of those goals.

DEQ’s EJ goals should not include activities that are already required under the law. EO 292 demands that DEQ and other cabinet agencies do more than restate their pre-existing commitments or legal obligations.¹¹ DEQ’s draft Goals 2 and 3, and the proposed actions therein, are all activities already required under federal civil rights law or prior state executive action. We are not asking DEQ to act outside of its statutory authority. However, DEQ’s goal should not be to comply with existing law. Therefore, as described in additional detail below, DEQ should not count draft Goal 2 towards their three minimally required goals.

DEQ’s draft EJ goals lack the appropriate presentation and detail.¹² Once again, DEQ should aim to set the standard for the other cabinet agencies in creating EJ goals. However, whereas almost every other agency provided background or additional

⁶ Env’t Prot. Agency, Environmental Justice Government-to-Government Program 27 (Jan. 10, 2023) <https://www.epa.gov/system/files/documents/2023-02/EJG2G%20Amended%20Request%20for%20Applications%20February%202023.pdf>.

⁷ *Id.* at 12.

⁸ Kimberlee Leonard & Rob Watts, *The Ultimate Guide to S.M.A.R.T. Goals*, FORBES (May 4, 2022) <https://www.forbes.com/advisor/business/smart-goals/>.

⁹ See N.C. GEN. STAT. §§ 143B-279.2(1), 143-211(a)–(c) (2024).

¹⁰ See Leonard & Watts, *supra* note 8.

¹¹ See Exec. Order 292, *supra* note 1 § 7.

¹² Compare N.C. Dep’t of Nat. Cultural Resources, Draft Environmental Justice Goals (Feb. 23, 2024), <https://governor.nc.gov/dncr-environmental-justice-goals/download?attachment> (labeling the agency’s “measurable outcomes” under each draft EJ goal and including the agency logo in the header) and N.C. Dep’t of Transp., Draft Agency Goals for Advancing Environmental Justice in North Carolina (Feb. 23, 2024), <https://governor.nc.gov/transportation-environmental-justice-goals/download?attachment> (providing “background,” “objectives,” and “outcomes” for each draft goal).

context for their goals and specified the outcome of each goal,¹³ DEQ published a bulleted list of incomplete sentences. The measurable outcomes are not clearly indicated. Moreover, DEQ’s goals contain symbols, undefined acronyms, and inconsistent shortening of words.¹⁴ DEQ should follow the lead of many of its fellow cabinet agencies and provide background context and identifiable outcomes for each goal.

II. Issues & Suggestions for Draft Goals & Outcomes

A. DEQ’s First Goal is Vague and Unmeasurable

DEQ must modify draft Goal 1 to meet the measurability requirement in EO 292. DEQ’s first draft goal is vague and unmeasurable. Draft Goal 1 states that DEQ will “[e]nsure that underserved communities have equitable access to DEQ data and funding opportunities.”¹⁵ As written, DEQ’s goal does not provide a definition of “equitable access,” doesn’t describe what “DEQ data and funding opportunities” it is referring to, or provide for metrics by which the agency will measure how it is achieving this goal. The sub-goals, laid out in subheadings a through d, provide no further clarity on the meaning or measure of this goal. Moreover, the draft goal does not state whether or how it will report to the public its findings from the “tracking,” “evaluating,” and “reviewing” it aims to do under Goal 1. Therefore, DEQ must clarify language and provide measurable, achievable outcomes in Goal 1 and its subgoals.

i. Suggested Revisions to Subgoal 1(a)

DEQ must make subgoal 1(a) more clear and include an outcome that is measurable by the public. Subgoal 1(a) provides that the agency will “[t]rack % of applications received from counties/towns in Tier 1 counties or serving Potentially

¹³ See, e.g., *id.*; see also, N.C. Dep’t Health Hum. Servs., Draft Environmental Justice Metrics (Feb. 23, 2024), <https://governor.nc.gov/dhhs-environmental-justice-goals/download?attachment> (providing clearly marked “goals” and “outcomes”); N.C. Dep’t Com., Draft Executive order 292, Advancing Environmental Justice for North Carolina Goals and Measurable Outcomes (Feb. 23, 2024), <https://governor.nc.gov/commerce-environmental-justice-goals/download?attachment> (providing metrics for environmental justice goals and measurable outcomes at the beginning of document); N.C. Dep’t Revenue, Draft Environmental Justice Goals 2024 (Feb. 23, 2024), <https://governor.nc.gov/revenue-environmental-justice-goals/download?attachment> (providing background explanation for each goal); N.C. Dep’t Mil. Veterans Affs., Draft Environmental Justice Goals (Feb. 23, 2024), <https://governor.nc.gov/dmva-environmental-justice-goals/download?attachment> (providing background information for context with each goal); N.C. Dep’t Info. Tech., Draft Environmental Justice Goals (Feb. 23, 2024), <https://governor.nc.gov/dit-environmental-justice-goals/download?attachment> (providing background information for context with each goal).

¹⁴ See, e.g., Subgoal 1(a) (using the percent symbol, “%,” instead of writing out the word); Subgoal 2(a)–(c) (writing the word “December” as “December,” “Dec.,” and “Dec.”); Subgoal 2(c) (failing to spell out the acronym “LMS”).

¹⁵ DEQ Draft EJ Goals, *supra* note 3.

Underserved communities as defined by DEQ Community Mapping System (where specific project data is available).”¹⁶ Firstly, it is unclear what applications DEQ intends to track under subgoal 1(a). DEQ receives several types of applications, from dozens of environmental permit applications to grant applications. In its final draft goals and outcomes, DEQ needs to specify what type of applications it intends to track under this subgoal.

DEQ should set a goal to publish the percentage of applications granted in Tier 1 counties or Potentially Underserved communities. Merely tracking the percent of applications from communities in Tier 1 counties or Potentially Underserved communities does not ensure that environmental justice communities (“EJ communities”), as defined by EO 292, have access to data or funding opportunities. While it would be helpful for DEQ to have data on where permit or grant applications come from, ensuring equitable access to data and funding programs requires more: DEQ must also distribute funds equitably and make data about the number and type of applications received and awarded publicly available. DEQ should commit to publishing this data by October 1, 2024.

DEQ should set a goal of increasing the percent of funding applications granted in Tier 1 counties or Potentially Underserved communities.¹⁷ If the number of applications received from Tier 1 counties or Potentially Underserved communities is disproportionately low, DEQ should also set a goal to conduct outreach, and where possible provide technical assistance, to increase the number of applications submitted by these communities.

Lastly, in its final EJ goals, DEQ must acknowledge that EO 292’s definition of “EJ communities” is more inclusive than, and therefore accounts for communities that may fall outside of, the definition of “Tier 1 counties” and “Potentially Underserved communities.”¹⁸ While these identifiers are acceptable placeholders while the EJAC works to operationalize the definition of EJ communities, DEQ should commit to applying the EO 292 definition of environmental justice and EJ communities in future agency actions.

¹⁶ *Id.* at Subgoal 1(a).

¹⁷ If DEQ intends to track environmental permit applications under subgoal 1(a), it should set a goal to conduct additional application review to ensure the permitting decision will not further contribute to disparate impacts in permits applications received from operations in Tier 1 counties or Potentially Underserved communities.

¹⁸ Whereas a community may be an “environmental justice community,” under EO 292, if it is a community of color or a low-income community, to be considered a “potentially underserved block group,” an area must have both a disproportionately high population of people of color *and* a high poverty rate. N.C. Dep’t Env’t Quality, Community Mapping System: Glossary of Terms and Conditions, <https://www.deq.nc.gov/ej/nccms/nccms-glossary-terms-updated-january-2022/download?attachment>.

ii. *Suggested Revisions to Subgoal 1(b)*

DEQ must clarify subgoal 1(b) and create a measurable outcome. Subgoal 1(b) provides that DEQ will “[e]valuate grant ratings systems/scoring criteria within DEQ’s purview for inclusion of equity criteria by October 1, 2024.”¹⁹ This goal is notably vague. First, it is unclear what grants DEQ considers to be within its purview and whether this goal applies to all of those grants or a subset of those grants. Second, on what basis will DEQ evaluate these systems/scoring criteria? Does DEQ intend to make changes to its rating systems/scoring criteria if the systems/criteria do not account for equity? What will DEQ do if its systems/criteria do not include equity considerations?

The task of evaluating systems and criteria is meaningless and does not advance environmental justice if it is not followed by a revision of the systems and criteria that fail to include equity considerations. DEQ should commit to working with the Office of Strategy Partnerships to identify equity criteria that can be included in its grant evaluation. DEQ should set a goal to evaluate and revise its grant rating system and scoring criteria for inclusion of equity criteria by October 1, 2024.²⁰

iii. *Suggested Revisions to Subgoal 1(c)*

DEQ should clarify Subgoal 1(c) and add a quantifiable goal and outcomes related to emerging contaminants. Subgoal 1(c) states that DEQ will “[e]valuate participation/response rates for emerging contaminants testing and filtration options in underserved communities and conduct enhanced outreach to identified communities and households.”²¹ This goal is relevant to DEQ’s private well sampling initiative in Sampson County, especially around the Sampson County Landfill, and appears to be an attempt to identify and address per- and polyfluoroalkyl (“PFAS”) contamination of drinking water resources in rural, low-wealth communities. However, as written, this subgoal would not protect, or even produce meaningful data for, the impacted community.

DEQ needs to set a quantitative goal for how many private wells it aims to sample for PFAS around Sampson County, and specifically within 2,000 feet of the Sampson County Landfill. It is unclear from this subgoal what additional “evaluation” of “participation/response rates” DEQ must do. DEQ knows, or can easily calculate, approximately how households depend on private wells within a given area of the landfill. DEQ knows how many wells it has already sampled. Further, DEQ knows the

¹⁹ DEQ Draft EJ Goals, *supra* note 3 at Subgoal 1(b).

²⁰ *I.e.*, will the agency consult with other agencies or academia to come up with an equity criteria? Does some level of equity criteria already exist?

²¹ DEQ Draft EJ Goals, *supra* note 3.

results of that sampling. Using these 3 data points, DEQ should set a goal to sample a specific number, or percent, of private wells within a given area of the landfill.

Subgoal 1(c) should also describe the activities that DEQ intends to do as a part of its “enhanced outreach.” DEQ should expressly commit to enhanced outreach to the Spanish-speaking households around the Sampson County Landfill. A disproportionately low percentage of Spanish-speaking households have participated in DEQ’s well sampling program around the Sampson County Landfill. Latino community members have stated that they were unaware of the program’s existence. Translating documents and posted them on a government website is not enough to notify Spanish-speaking households of a program or other available resources. Instead, DEQ should commit resources into working with local communities members to disseminate information.

In addition, DEQ should set a goal to identify, and compensate, local community members and centers of community to disseminate information about the agency’s private well sampling program. Local community members and centers of community are better messengers because they have a degree of trust with the community. Because disseminating this information takes a great deal of time, energy, and emotional capacity, community members should be compensated for this work. The agency should also commit to reaching out directly to churches, especially Spanish-speaking congregations, and other centers of community around Sampson County, especially in the Snow Hill community. DEQ should also commit to working with a minimum number of local community-based organizations and grassroots organizations to share information throughout the community.

When well sampling does occur, DEQ must be clearer about the results that are sent to community members. DEQ should expressly state in the cover letters whether they found elevated levels of *any* PFAS, explain any potential impacts to the community members’ health, and describe next steps that the agency is taking to address any contamination. Further, DEQ should work to ensure that renters, and not just landlords, are notified when PFAS is detected in their well.

DEQ’s current cover letter for well sampling is confusing, obscure, and impossible for members of the public to understand. If the levels for six specific PFAS are below EPA’s proposed maximum containment level (“MCL”), DEQ’s letter states that “no PFAS were detected in the water sample” above EPA’s proposed maximum contaminant level, without providing any explanation of the term “maximum contaminant level” or the significance of that statement.²² The current wording could be misleading and create a false sense of security for families with unsafe levels of PFAS in their well—given that the letter focuses only on PFOA, PFOS, and GenX, and that it is

²² *Id.* (emphasis added).

possible that families could be harmed by numerous other unidentified PFAS in their drinking water.²³

The letter further states that “results *may* show the presence of other PFAS . . .”, also without any explanation of why those other PFAS are not listed or discussed or the significance of that statement.²⁴ For community members who are troubled about the health and safety of their families, encountering a letter like this will only increase their anxiety and confusion about the safety of their well. DEQ must amend its communications to community members, keeping their level of knowledge and familiarity in mind. The agency should not assume that these families understand what PFAS are, what it means for certain PFAS (and not others) to be detected, what maximum contaminant levels are, and what the impacts to their families could be.

The agency should further set a goal to provide and maintain filters for households near the Sampson County landfill that have elevated levels of *any* PFAS. Currently, DEQ offers bottled water to households if the levels of six specific PFAS exceed the proposed MCLs. Other PFAS in found in the wells, including those that do not have proposed MCLs, could also be harmful to human health. DEQ should therefore provide alternative drinking water supplies to households with any elevated PFAS—not just those with proposed MCLs.

Moreover, bottled water is not the solution for families that have been exposed to decades of PFAS pollution. First, it is unclear if the bottled water is free of PFAS. Second, families will continue to be exposed to PFAS contamination when washing their hands, brushing their teeth, bathing, and watering their vegetable gardens with PFAS-laden water.

In-home filtration systems are unaffordable for many households in EJ communities. Point-of-entry or whole-house reverse osmosis filtration systems can cost on average anywhere from \$750 to \$7,500 to install in the home.²⁵ While an affluent family will have funds available to spend on a whole-house system to ensure their water is safe from PFAS at all entry points, such as sinks, bathtubs or showers, hoses, laundry machines, and dishwashers, families living in underserved communities are unlikely to be able to afford a system that removes dangerous contamination under one single

²³ See Letter from Vincent Antrilli, Jr., Bernard Allen Program Manager, N.C. Dep’t Env’t Quality Division of Waste Management (Oct. 24, 2023) (Attachment 1) (“The lab reported that no PFAS were detected in the water sample above the U.S. Environmental Protection Agency’s (EPA) proposed maximum contaminant level (MCL) of 4 nanogram per liter (ng/L) for PFOA, 4 ng/L for PFOS, and/or GenX in public water systems. Your results may show the presence of other PFAS which currently do not have proposed MCLs.”).

²⁴ *Id.* (emphasis added)

²⁵ Chauncey Crail & Corinne Tynan, *How Much Does a Reverse Osmosis System Cost?*, FORBES HOME (last updated Mar. 4, 2024, 12:40 PM), <https://www.forbes.com/home-improvement/home/reverse-osmosis-system-cost/>.

point-of-use, let alone a whole-house system. Therefore, DEQ should set a goal to seek funding to provide and maintain filters for every household with elevated levels of any PFAS.

Lastly, DEQ should commit to keeping the names and addresses of private well sampling participants confidential. Sampling results can be accessed by the public, and releasing private information about participants may deter other households from having their wells sampled. Therefore, DEQ should redact the names and addresses in publicly accessible sampling result documents.

iv. Suggested Revisions to Subgoal 1(d)

DEQ should modify subgoal 1(d) to create a specific, measurable goal and outcome. Draft subgoal 1(d) commits DEQ to “conduct a review of compliance and enforcement data for select regulatory programs comparing data from underserved communities to statewide data to identify potential areas for further examination.”²⁶ DEQ’s final EJ goals and outcomes should include the list of “select” programs the agency will review and what criteria the agency will use to review these programs. We request that, at a minimum, DEQ conduct compliance and enforcement reviews of the Animal Waste Operator Certification program in the Division of Water Resources, the National Pollution Discharge Elimination System (“NPDES”) Industrial Stormwater and NPDES Construction Stormwater programs in the Division of Energy, Mineral, and Land Resources, and the Hazardous Waste and Solid Waste Facility permitting programs in the Division of Waste Management. Moreover, DEQ should specify what it means by “areas for further examination.”

As with the other subgoals under draft Goal 1, DEQ should commit to publishing the findings of this review. Achieving environmental justice requires informing impacted communities about the pollution in their communities and the steps that the agency is taking to address this pollution. DEQ should not hoard data on compliance and enforcement actions. The agency, in its finalized goals, should commit to publishing a report on its compliance and enforcement actions review by October 1, 2024.

B. DEQ’s Second Goal is Unmeasurable and Merely Restates Pre-Existing Obligations

Goal 2 is vague, limited in scope, and merely commits the agency to actions it is required to take under prior executive action or its obligations under EPA’s regulations under Title VI of the Civil Rights of 1964 (“Title VI”).²⁷ Under Goal 2, DEQ purports to

²⁶ DEQ Draft EJ Goals, *supra* note 3 at Subgoal 1(d).

²⁷ See 42 U.S.C. § 2000d (“No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination

“[i]ncorporate environmental justice, equity and access throughout Department programs.”²⁸ This should not be a stand-alone goal. Moreover, the subgoals are all trainings that are required under existing law or prior agency directive and are targeted at too few DEQ staff. Because, as written this goal is merely a restatement of prior commitments, DEQ should replace Draft Goal 2 with one of the suggested goals below.

DEQ committed to take virtually the same actions stated in subgoal 2(a) in its 2020 Limited English Proficiency Language Access Plan (“2020 Language Access Plan”), under EO 246.²⁹ Subgoal 2(a) provides that DEQ will “[p]rovide Language Access and Public Participation Plan training to all staff whose daily job requirements include engagement with the public by Dec. 1, 2024.”³⁰ As an initial matter, this subgoal should apply to all DEQ staff who engage with the public, not just those whose daily requirements include engagement with the public. Moreover, in its 2020 Language Access Plan, DEQ stated that “[t]raining will be offered to DEQ staff, with particular focus on employees who are likely to encounter [Limited English Proficiency] individuals.”³¹ Seemingly, all DEQ staff that engage with the public are likely to interaction with people with Limited English Proficiency, and should have, therefore, already received this training. Therefore, this subgoal does not move the needle forward in advancing environmental justice.

Subgoals 2(b) and 2(c) are likewise vague and largely repetitive of existing agency obligations. These subgoals Subgoal 2(b) states that the agency will “[p]rovide refresher EJ training to all staff who work on permitting and competitive funding programs by December 1, 2024.”³² DEQ should not limit its “refresher EJ training” to “staff who work on permitting and competitive funding programs.” The purpose of Executive Order 292, and DEQ’s stated goal, is to incorporate environmental justice, equity, and access *throughout* DEQ programs, so the training should be offered to staff *throughout* DEQ. The agency’s obligations to pursue environmental justice are not limited to permitting and funding programs.

Subgoal 2(c) commits the agency to “[m]ake Title VI and EJ training available to all staff through LMS by Dec 1, 2024.”³³ As DEQ acknowledges, “[a]ll DEQ employees are required to complete Title VI training.”³⁴ Assuming “LMS,” which DEQ fails to spell out, is

under any program or activity receiving Federal financial assistance.”); see also 40 C.F.R. § 7 (2024) (implementing Title VI).

²⁸ DEQ Draft EJ Goals, *supra* note 3 at Goal 2.

²⁹ N.C. DEP’T ENV’T QUALITY, LIMITED ENGLISH PROFICIENCY LANGUAGE ACCESS PLAN 5 (Feb. 2020) [hereinafter DEQ LANGUAGE ACCESS PLAN].

³⁰ DEQ Draft EJ Goals, *supra* note 3 at Subgoal 2(a).

³¹ See DEQ LANGUAGE ACCESS PLAN, *supra* note 30.

³² DEQ Draft EJ Goals, *supra* note 3 at Subgoal 2(b).

³³ *Id.* at Subgoal 2(c).

³⁴ N.C. DEP’T ENV’T QUALITY, PUBLIC PARTICIPATION PLAN 11 (Feb. 2020, revised Aug. 2023).

a training platform for educating public employees, it is unclear from the draft EJ goals and outcomes how this system differs from the “NC Learning Center” training previously required,³⁵ or how the system would comparatively advance the goals of environmental justice.

DEQ should commit to including impacted community members in environmental justice training (“EJ training”). EJ training should be more than online modules, void of human interaction. DEQ’s EJ training should include at least one in-person session, led by impacted community members. The lived experience of community members would provide valuable perspective to DEQ. DEQ staff could learn, face-to-face, from the individuals bearing the burden of the agency decisions. Like any other third-party facilitator, these community members should be compensated for their time preparing for and travelling to and from these trainings.

As stated above, DEQ should not set a goal to achieve directives under existing law or prior agency action. The agency should, therefore, replace its draft Goal 2 with one or more of the suggested goals below.

C. DEQ’s Third Goal is Vague & Fails to Create Actionable Items

DEQ should modify draft Goal 3 to create specific, measurable actions. Draft Goal 3 provides that DEQ will “[e]nhance transparency by informing stakeholders of DEQ regulatory programs and actions, providing access to community level information, and increasing opportunities for public engagement.”³⁶

DEQ’s subgoal 3(a) is vague and limited in scope. Subgoal 3(a) states that DEQ will “[c]ontinue to increase utilization of translation and interpretation services where resources allow.”³⁷ This goal focuses on resource constraints rather than seeking to address resource constraints. It is unclear whether DEQ has identified or sought additional funding to increase services or actually evaluated the gaps or needs in its translation services. Instead of highlighting its limited resources, DEQ should set a goal to evaluate where its greatest needs for translation services are and pursue additional resources to meet those needs.

Similarly, subgoal 3(b) is unclear. It commits DEQ to “[t]arget translation of additional documents with highest request frequency by October 1, 2024.”³⁸ DEQ does not state where or how DEQ will track translation requests. If a variation of this subgoal

³⁵ See DEQ LANGUAGE ACCESS PLAN, *supra* note 29.

³⁶ DEQ Draft EJ Goals, *supra* note 3 at Goal 3.

³⁷ *Id.* at Subgoal 3(a).

³⁸ *Id.* at Subgoal 3(b).

remains, DEQ must clarify how it will identify the “additional documents with highest request frequency.”

Like the preceding goals, subgoal 3(c) does not commit DEQ to take publicly measurable action. Subgoal 3(c) provides that DEQ will “[e]valuate opportunities to provide educational materials in additional languages by October 1, 2024.”³⁹ Like Goal 1, this subgoal requires merely observing the issue, rather than addressing it. DEQ should instead commit to pursuing opportunities for providing educational materials in other languages.

Finally, to “increas[e] opportunities for public engagement” DEQ must be willing to go into communities and build trust and relationships. Therefore, DEQ should create a goal to spend a certain number of personnel hours in EJ communities. Agency presence at public hearing is not sufficient. To demonstrate a genuine commitment to meaningfully engage EJ communities, DEQ should commit to spending a specific number of hours taking part in listening sessions, meeting with local organizations, and taking part in informal meetings.

III. Suggested Additional Goals and Measurable Outcomes

A. DEQ Should Commit to Settling All Pending Title VI complaints

DEQ should set a goal to settle all of its open Title VI complaints by December 1, 2024. In the future, DEQ should commit to taking reasonable steps to settle all Title VI complaints within one year of their filing date. EPA’s Title VI regulations express a strong preference for settling complaints, and recipients of federal funding who are the subject of a Title VI complaint have substantial discretion in how those complaints are resolved.⁴⁰ DEQ is the subject of three pending Title VI complaints, including one that has been pending for almost three years, and none of these complaints have been resolved.⁴¹ DEQ should set a goal to work closely with the federal government and the

³⁹ *Id.* at Subgoal 3(c).

⁴⁰ 40 C.F.R. § 7.120(d)(2)(i)(2024) (“OCR shall attempt to resolve complaints informally whenever possible.”).

⁴¹ Letter from S. Env’t L. Ctr. to Michael S. Regan, U.S. EPA (Sept. 27, 2021), https://www.epa.gov/system/files/documents/2022-06/05RNO-21-R4%20Complaint_Redacted.pdf (“Complaint under Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d, regarding the North Carolina Department of Environmental Quality’s Issuance of [Individual Animal Waste Digester Permits]”); Letter from Vermont L. & Graduate School to Off. of External Civ. Rts. Compliance, U.S. EPA (Apr. 19, 2023), https://www.epa.gov/system/files/documents/2023-04/06RNO-23-R4%20Complaint_Redacted.pdf (“Complaint under Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d, 40 C.F.R. Part 7” for DEQ’s “failure to adequately regulate the dry litter poultry industry across the State of North Carolina.”); Letter from Duke Env’t L. & Pol’y Clinic to Michael S. Regan, U.S. EPA (Dec. 22, 2022), https://www.epa.gov/system/files/documents/2023-11/04rd-22-r4-complaint-supplement_redacted.pdf (“Supplementary Information Supporting Complaint under Title VI of Civil

complainants to resolve these complaints or withdraw from settlement processes and allow EPA to conduct a full investigation of the alleged discriminatory activity.

B. DEQ Must Commit to Meaningful Involving EJ Communities in Department Decision-making

DEQ's final EJ goals and outcomes should include clearer language and strong commitment to meaningful involvement of all members of the public in agency decision making. DEQ's draft goals make no mention of meaningful involvement, a core component of EO 292's definition of environmental justice.

To meaningfully involve EJ communities, DEQ should explore alternatives to the traditional public hearing format for public engagement opportunities. Standing before one's neighbors and peers in a large gymnasium or conference room to speak can be an intimidating experience for many. Therefore, DEQ should explore public engagement opportunities outside its traditional public hearing model. For example, the agency could consider breakout group discussions and report outs or passing the microphone instead of requiring everyone to stand before the crowd.

DEQ should also meet impacted community members where they are. The agency should engage with local grassroots organizations to build relationships and be willing to be part of the community's team. However, the agency's presence often becomes an extra stressor on impacted communities when agencies come in, shower information via PowerPoint using technical language, build expectations for community members, and then never follow up. DEQ should listen to and build relationships with local grassroots organizations and organizers for a more sustainable relationship with communities.

As part of this goal, DEQ should commit to training all staff on soft skills and authentic community outreach. Staff that interact with the public should be trained to be mindful of how their behavior, body language, tone, and words can have a chilling effect on participation. Communities are left frustrated and burned out when they attempt to present their problems, and solutions, to the agency only to be dismissed without further conversation or explanation.

We recognize that this is a harder way for DEQ to do things. However, if DEQ is truly committed to achieving environmental justice, the agency has to be flexible and work with local experts.

Rights Act of 1964, . . . regarding the North Carolina Department of Environmental Quality's Issuance of Air Permit" for proposed Burlington North asphalt plant).

C. DEQ's Final EJ Goals Should Commit to Addressing Cumulative Impacts

DEQ should commit to publishing guidance on its process for considering cumulative impacts in its permitting programs. We remain disappointed at DEQ's failure to even mention cumulative impacts in its draft goals. Environmental justice cannot be achieved without acknowledging and addressing disparate and cumulative impacts of multiple pollution sources on underserved communities, which are predominantly communities of color, low-wealth communities, and communities with Limited English Proficiency.⁴² DEQ has received reports and recommendations from the public and its, now-dissolved, Environmental Justice and Equity Board about its authority and obligation under federal civil rights law.⁴³ Yet, DEQ has repeatedly claimed that it has no authority to consider cumulative impacts. Until DEQ acknowledges this obligation, any cumulative impacts research produced under EO 292 will likely not be utilized by the agency in permitting decisions.

As repeatedly previously provided to DEQ,⁴⁴ Title VI requires recipients of federal funding must consider the cumulative impacts of their programming decisions. DEQ, as a recipient of EPA funding, must comply with federal civil rights law, which requires considering cumulative impacts when making permit decisions. EPA's implementing regulations state that recipients of EPA funding "shall not use criteria or methods of administering [their] program or activity which have the effect of subjecting individuals to discrimination."⁴⁵ Title VI applies to permitting decisions of environmental state

⁴² Exec. Order 292, *supra* note 1 § 6 (defining "environmental justice" as "the just treatment and meaningful involvement of all people, . . . in agency policies and programming that affect human health, well-being, quality of life, and the environment so that people . . . are protected from disproportionate and adverse human health effects and environmental hazards, *including* . . . the cumulative impacts of environmental and other burdens." (emphasis added)).

⁴³ See Env't Just. & Equity Advisory Bd., Recommendation to Assess and Consider Cumulative Impacts in the North Carolina Department of Environmental Quality Permitting Process (2023), <https://www.deq.nc.gov/ej/ejeab-cumulative-impacts-letter/download?attachment>.

⁴⁴ See, e.g., *id.*; Secretary's Env't Just. & Equity Advisory Bd., Meeting Minutes, Special Meeting on Cumulative Impacts (Mar. 16, 2023) ("Ms. Washington spoke about SELC's perspective on DEQ's requirements to assess cumulative impacts under Title VI of the Civil Rights Act of 1964. Ms. Washington reminded the board that the DEQ is required to consider Title VI in permitting decisions and that the legal obligations of Title IV are separate and distinct from environmental law."); Jasmine B. Washington, Legal Authority for DEQ to Consider Cumulative Impacts at slide 76 (May 10, 2022), <https://www.deq.nc.gov/ej/may-10-special-meeting-presentations/open>; Denise Hayes, Regional Compliance Supervisor, Mooresville Regional Off., Dep't of Env't Quality, Enviva Pellets, LLC – Ahoskie Plant Hearing Officer's Report and Recommendations at 18–21 (Sept. 27, 2022) ("The emailed comments stated, ' . . . in issuing this permit modification DAQ has failed to meet its obligations under Title VI of the Civil Rights Act of 1964.'").

⁴⁵ 40 C.F.R. § 7.35(b).

agencies that receive EPA funding.⁴⁶ Title VI prohibits recipients of federal financial assistance from causing disparate impacts, meaning, state environmental agencies that receive EPA funding cannot act in a manner that has the effect of causing disproportionate negative impacts to communities of color regardless of the agency's intent or whether the action is facially neutral.⁴⁷ Disparate impact can be found where a recipient failed to take action or to adopt a policy.⁴⁸

Cumulative impacts must be considered in determining whether disparate impact has occurred,⁴⁹ as cumulative impacts are considered in establishing harm or adversity.⁵⁰ As stated by EPA, “[i]t will be a rare situation where the permit which triggered the complaint is the sole reason a discriminatory effect exists.”⁵¹ Therefore, the environmental harms, adverse health effects, and non-health harms, “including odors, traffic congestion, [and] noise,” are all considered when determining whether disparate impact has occurred.⁵² Recipients of federal financial assistance must therefore consider these same factors to ensure they are in compliance with their Title VI obligations.

Notably, compliance with state and federal environmental law does not equate to compliance with federal civil rights law.⁵³ Title VI has its own obligations that are separate and distinct from environmental laws.⁵⁴ Recipients of EPA funding are required to consider whether a localized adverse health impact exists even if the project area meets the criteria for receiving an environmental permit.⁵⁵ Specifically, for state

⁴⁶ 40 C.F.R. § 7.35(b), (c); EPA, U.S. EPA'S EXTERNAL CIVIL RIGHTS COMPLIANCE OFFICE COMPLIANCE TOOLKIT 2 (2017), https://www.epa.gov/sites/default/files/2017-01/documents/toolkit-chapter1-transmittal_letter-faqs.pdf [hereinafter Compliance Toolkit] (“permitting decisions, taken by state agencies funded by EPA are subject to federal civil rights law”); see Letter from Lilian Dorka, Dir., EPA External Civ. Right Compliance Off. To Father Phil Schmitter 17–19 (Jan. 19, 2017) <https://www.epa.gov/sites/default/files/2017-01/documents/final-genesee-complaint-letter-to-director-grether-1-19-2017.pdf>; DRAFT NATIONAL PROGRAM GUIDANCE

⁴⁷ Compliance Toolkit, *supra* note 46, at 8

⁴⁸ *Id.* at (citing *Maricopa Cty.*, 915 F. Supp. 2d at 1079).

⁴⁹ A *prima facie* case for disparate impact requires (1) identifying a specific policy or practice by a recipient of federal financial assistance, (2) establishing harm or adversity, (3) establishing significant racial disparity, and (4) establishing causation. Compliance Toolkit, *supra* note 46, at 8.

⁵⁰ *Id.*

⁵¹ Draft Title VI Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs (Draft Recipient Guidance) and Draft Revised Guidance for Investigating Title VI Administrative Complaints Challenging Permits (Draft Revised Investigation Guidance), 65 Fed. Reg. 39650, 39662 (June 27, 2000) [hereinafter Draft Guidance] <https://www.govinfo.gov/content/pkg/FR-2000-06-27/pdf/00-15673.pdf>.

⁵² Compliance Toolkit, *supra* note 46, at FAQ p. 4

⁵³ *Id.* (“Thus if, in a given circumstance, you are complying with applicable environmental laws that fact alone does not necessarily mean that you are complying with federal civil rights laws.”).

⁵⁴ *Id.* at 2 (“It is also important to note that civil rights laws and environmental laws function separately.”).

⁵⁵ *Id.* at 12.

environmental permitting agencies, compliance with Title VI requires preventing or mitigating disproportionate adverse impacts to communities of color, as measured by the cumulative impacts.⁵⁶

EO 292 has directives related to cumulative impacts.⁵⁷ However, given DEQ's mandates under Title VI, DEQ's Environmental Justice Goals should outline how the agency will operationalize these directives related to cumulative impacts.

In fall of 2023, DEQ's EJEAB drafted a 13-page statement to DEQ Secretary Biser, laying out steps the agency could take to address cumulative impacts.⁵⁸ None of those recommendations are reflected in these draft goals. We encourage DEQ to adopt any number of the EJEAB's recommendations related to cumulative impacts, and commit to publishing guidance on its process for considering cumulative impacts in its permitting programs.

D. DEQ Should Commit to Addressing Legacy Sites/Pollution

DEQ should commit to identifying, mapping, and seeking funding to remediate legacy pollution⁵⁹ sites in environmental justice communities. There are sites of legacy pollution in EJ communities across North Carolina. Many of these communities have advocated to DEQ for years to have these sites remediated.⁶⁰ DEQ has records and information about all of these sites. DEQ should therefore commit to publishing a

⁵⁶ ENV'T PROT. AGENCY, INTERIM ENVIRONMENTAL JUSTICE AND CIVIL RIGHTS IN PERMITTING FREQUENTLY ASKING QUESTIONS at 10, 14–15 (2022), https://www.epa.gov/system/files/documents/2022-08/EJ%20and%20CR%20in%20PERMITTING%20FAQs%20508%20compliant_0.pdf (“Even if the recipient identifies a substantial legitimate justification, a sufficient Title VI analysis evaluates whether there are any comparably effective alternative practices that would achieve the same legitimate objective but with a less discriminatory effect”).

⁵⁷ Exec. Order 292, *supra* note 1 § 11 (“The [Governor’s EJ Advisory] Council, in consultation with the C Office of Strategic Partnerships, shall engage with academia, prioritizing Historically Black Colleges and Universities and other Minority Serving Institutions, and other research institutions to conduct research on cumulative impacts in North Carolina and develop recommendations for creating a framework and methodology to assess cumulative impacts.”).

⁵⁸ Env’t Just. & Equity Advisory Bd., *supra* note 42.

⁵⁹ The term “legacy pollution site” refers generally to abandoned coal mines, orphaned oil or gas wells, and other places with a long history of on-site pollution. Brownfields, superfund sites, and other contaminated sites that have long been left without clean-up are also referred to as “legacy pollution sites.”

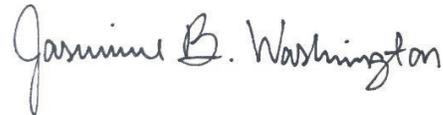
⁶⁰ E.g., Bill Atwater, *Alcoa’s Legacy Haunts West Badin: Community Continues Push for a Cleaner Future*, WUNC (Oct. 9, 2023), <https://www.wunc.org/environment/2023-10-09/alcoa-aluminum-west-badin-toxic-waste-pollution-protest>; Ernie Hood, *Forum Seeks Environmental Justice for North Carolina Neighborhood*, NAT’L INSTIT. ENV’T HEALTH & SCIS. <https://factor.niehs.nih.gov/2024/1/science-highlights/environmental-justice> (last visited Apr. 18, 2024); Ken Conners, *Coalition Leader Speaks Out Against Duke’s Coal Ash Recycling*, GOLDSBORO DAILY NEWS (Oct. 30, 2020), <https://www.goldsborodailynews.com/2020/10/30/coalition-leader-speaks-out-against-dukes-coal-ash-recycling/>.

comprehensive list of legacy pollution sites throughout the state by October 1, 2024, and working with federal government to provide funding to remediate these sites.

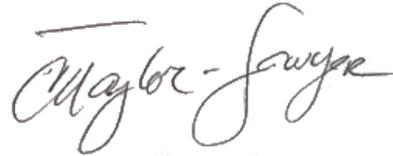
IV. Conclusion

As the cabinet agency with the most express connection and history with environmental justice,⁶¹ DEQ should use its final goals as an opportunity to be a leader amongst the cabinet agencies. As written, DEQ's draft EJ goals and outcomes are generally unclear and unmeasurable.

Sincerely,



Jasmine Washington
Associate Attorney
jwashington@selcnc.org



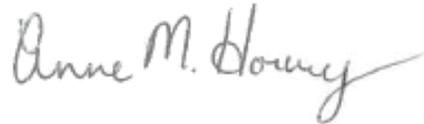
Chandra Taylor-Sawyer
Senior Attorney
ctaylor@selcnc.org

SOUTHERN ENVIRONMENTAL LAW CENTER
601 W. Rosemary Street, Suite 220
Chapel Hill, NC 27516
919-967-1450

⁶¹ N.C. DEP'T ENV'T & NAT. RES., ENVIRONMENTAL EQUITY POLICY 2 (Oct. 19, 2000), <https://edocs.deq.nc.gov/WaterResources/DocView.aspx?id=483051&dbid=0&repo=WaterResources&cr=1>; *Secretary's Environmental Justice and Equity Advisory Board (Archive)*, N.C. DEP'T ENV'T QUALITY, <https://www.deq.nc.gov/outreach-education/environmental-justice/secretarys-environmental-justice-and-equity-advisory-board-archive> (last visited Apr. 18, 2024) ("I challenge [the Environmental Justice and Equity] board, and all of you, to stand shoulder to shoulder with us and acknowledge that we all are responsible. You too must pledge to work for inclusion, demand equity and celebrate the diversity of the people of our great state. With that simple acknowledgment, together we will protect our natural resources, our economic interests, and our communities so that ALL North Carolinians will have clean air and clean water for today, tomorrow and future generations to come."); North Carolina Department of Environmental Quality Secretary's Environmental Justice and Equity Advisory Board Charter (2022), <https://www.deq.nc.gov/ej/nccms/nccms-glossary-terms-updated-january-2022/download?attachment>.



James Huey
Counsel for Environmental Justice
james@scsj.org



Anne Harvey
Chief Counsel for Environmental Justice
anne@scsj.org

SOUTHERN COALITION FOR SOCIAL JUSTICE
P.O. Box 51280
Durham, NC 27727
919-323-3380

cc (via e-mail):

Sharon Martin
sharon.martin@deq.nc.gov

Virginia Guidry
Virginia.Guidry@dhhs.nc.gov

Dr. Tamara Holmes Brothers
tamara.brothers@dncr.nc.gov

Sherri White-Williamson
Swhitewilliamson@ejcan.org

Dr. Marian Johnson-Thompson
marian.johnsonthompson@gmail.com

On Behalf of:

Bobby Jones
President
Down East Coal Ash Environmental and
Social Justice Coalition

Lisa Tyson
Secretary/Interim Vice Chair
NOTRA

Christopher Taylor
Equitable & Economic Engagement
Coordinator
Neighbors for Better Neighborhoods

Denise Robinson
Deputy Executive Director
Environmental Justice Community Action
Network

Deborah Maxwell
President
North Carolina NAACP

Riley Lewis
White Oak Waterkeeper
Coastal Carolina Riverwatch

George Jones
Executive Director
Partners for Environmental Justice

Omega and Brenda Wilson
Co-Founders/Directors
West End Revitalization Association

Dr. Crystal Cavalier
CEO
Seth Harris
Programs Director
7 Directions of Service

Danielle Koonce

Yesenia Cuello
Executive Director
NC FIELD, Inc.

Hannah Connor
Environmental Health Deputy Director
Center for Biological Diversity

Debra Buffkin
Executive Director
Jefferson Currie II
Lumber Riverkeeper
Winyah Rivers Alliance

Rania Masri
Co-Director
North Carolina Environmental Justice
Network

Robin K. Smith
Policy Director
North Carolina League of Conservation
Voters

William Kearney
Director/Board Chair
Warren County Environmental Action
Team, Inc

Scott Schang
Director
Wake Forest Environmental Law and
Policy Clinic

Grace Fitzgerald
Community Project Manager
McDowell Local Food Advisory Council

Lindsay Savelli
Program Manager
UNC Environmental Justice Action
Research Clinic

Vicki Lee Parker-High
Executive Director
North Carolina Sustainable Business
Council

Erin Carey
Acting Director
NC Sierra Club

Jeff Robins
Executive Director
CleanAIRE NC

Kendall Wimberley
Policy Advocate
Toxic Free NC

Khrystle Bullock-Sam
Working Group Member
NC Black and Green Network

Patience Burke
National Campaign Manager
Waterkeeper Alliance

Caroline Armijo
Director
The Lilies Project

Jaelyn Miller
Staff Attorney
Emancipate NC

Adam Colette
Programs Director
Dogwood Alliance

James Smith
President
Duplin County Branch of NAACP

Will Hendrick
Environmental Justice Director
North Carolina Conservation Network

Robert Moore
Vice President & Programs Manager
First Missionary Baptist Church of
Magnolia Ministries, Inc.



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

MICHAEL SCOTT
Director

November 6, 2023

GRAHAM, JAMES HENRY
P.O. BOX 221
BENSON, NC 27504

Re: Water Supply Well Sampling Results for
166 MANDOLIN LN- Well ID 640587005
Sampson County Landfill PFAS (SSF000001194)

Dear GRAHAM, JAMES HENRY,

With your permission, well water from your property, located at the address referenced above, was collected on 10/9/2023 by the NC Department of Environmental Quality (NCDEQ), Division of Waste Management. The sample was analyzed for a group of manufactured chemicals called per- and polyfluoroalkyl substances (PFAS) that have been used in industry and consumer products.

Attached are the Analytical Results for your well sample. The lab reported that no PFAS were detected in the water sample above the U. S. Environmental Protection Agency's (EPA) proposed maximum contaminant level (MCL) of 4 nanogram per liter (ng/L) for PFOA, 4 ng/L for PFOS, and/or the calculated Hazard Index of 1.0 for a mixture containing PFBS, PFHxS, PFNA and/or GenX in public water systems. Your results may show the presence of other PFAS which currently do not have proposed MCLs. See the attached Fact Sheet for more information on PFAS.

Feel free to contact me if you have additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "V. Antrilli, Jr.", with a long horizontal flourish extending to the right.

Vincent Antrilli, Jr
Bernard Allen Program Manager
NCDEQ Division of Waste Management
(919) 707-8353
Vincent.Antrilli@deq.nc.gov

Enclosures: Sample Analytical Results for 640587005
Understanding PFAS Fact Sheet



North Carolina Department of Environmental Quality | Division of Waste Management
217 West Jones Street | 1646 Mail Service Center | Raleigh, North Carolina 27699-1646
919.707.8200

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: October 24, 2023

Company : NC Dept Environmental Quality
Address : 1646 Mail Service Center

Raleigh, North Carolina 27699

Contact: Amy Delinsky
Project: Routine Analysis

Client Sample ID: 166_Mandolin	Project: NCDQ00117
Sample ID: 640587005	Client ID: NCDQ001
Matrix: Ground Water	
Collect Date: 09-OCT-23 14:38	
Receive Date: 10-OCT-23	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
EPA 537Mod PFCs by LC-MS/MS "As Received"												
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)	U	ND	0.561	1.70	ng/L	0.0170	1	JMB3	10/16/23	1714	2508689	1
2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol (N-EtFOSE)	U	ND	1.12	3.40	ng/L	0.0170	1					
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol (N-MeFOSE)	U	ND	1.12	3.40	ng/L	0.0170	1					
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)(FHpPA)	U	ND	1.12	3.40	ng/L	0.0170	1					
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)(FPePA)	U	ND	1.12	3.40	ng/L	0.0170	1					
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)(FPtPA)	U	ND	1.12	3.40	ng/L	0.0170	1					
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (F-53B Major)	U	ND	1.12	3.34	ng/L	0.0170	1					
Fluorotelomer sulfonic acid 4:2 (4:2 FTS)	U	ND	1.12	3.20	ng/L	0.0170	1					
Fluorotelomer sulfonic acid 6:2 (6:2 FTS)	U	ND	4.58	12.8	ng/L	0.0170	1					
Fluorotelomer sulfonic acid 8:2 (8:2 FTS)	U	ND	1.12	3.27	ng/L	0.0170	1					
N-ethylperfluoro-1-octanesulfonamide (N-EtFOSA)	U	ND	1.12	3.40	ng/L	0.0170	1					
N-ethylperfluoro-1-octanesulfonamidoacetic acid (N-EtFOSAA)	U	ND	1.12	3.40	ng/L	0.0170	1					
N-methylperfluoro-1-octanesulfonamide (N-MeFOSA)	U	ND	1.12	3.40	ng/L	0.0170	1					
N-methylperfluoro-1-octanesulfonamidoacetic acid (N-MeFOSAA)	U	ND	1.12	3.40	ng/L	0.0170	1					
Perfluorododecanesulfonic acid (PFDoS)	U	ND	0.561	3.40	ng/L	0.0170	1					
Perfluorobutanesulfonic acid (PFBS)		1.59	0.561	1.51	ng/L	0.0170	1					
Perfluorobutanoic acid (PFBA)	J	0.832	0.681	1.70	ng/L	0.0170	1					
Perfluorodecanesulfonic acid (PFDS)	U	ND	0.561	1.65	ng/L	0.0170	1					

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Contact: Amy Delinsky
Project: Routine Analysis

Client Sample ID: 166_Mandolin
Sample ID: 640587005

Project: NCDQ00117
Client ID: NCDQ001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
EPA 537Mod PFCs by LC-MS/MS "As Received"												
Perfluorodecanoic acid (PFDA)	U	ND	0.664	1.70	ng/L	0.0170	1					
Perfluorododecanoic acid (PFDOA)	U	ND	0.561	1.70	ng/L	0.0170	1					
Perfluoroheptanesulfonic acid (PFHpS)	U	ND	0.561	1.62	ng/L	0.0170	1					
Perfluoroheptanoic acid (PFHpA)	U	ND	0.561	1.70	ng/L	0.0170	1					
Perfluorohexadecanoic acid (PFHxDA)	U	ND	1.12	3.40	ng/L	0.0170	1					
Perfluorohexanesulfonic acid (PFHxS)	U	ND	0.561	1.55	ng/L	0.0170	1					
Perfluorohexanoic acid (PFHxA)	U	ND	0.681	1.70	ng/L	0.0170	1					
Perfluorononanesulfonic acid (PFNS)	U	ND	0.595	1.63	ng/L	0.0170	1					
Perfluorononanoic acid (PFNA)	U	ND	0.561	1.70	ng/L	0.0170	1					
Perfluorooctadecanoic acid (PFODA)	U	ND	1.12	3.40	ng/L	0.0170	1					
Perfluorooctanesulfonamide (PFOSA)	U	ND	0.561	1.70	ng/L	0.0170	1					
Perfluorooctanesulfonic acid (PFOS)	U	ND	0.681	1.70	ng/L	0.0170	1					
Perfluorooctanoic acid (PFOA)	U	ND	0.681	1.70	ng/L	0.0170	1					
Perfluoropentanesulfonic acid (PFPeS)	U	ND	0.561	1.60	ng/L	0.0170	1					
Perfluoropentanoic acid (PFPeA)	U	ND	0.561	1.70	ng/L	0.0170	1					
Perfluorotetradecanoic acid (PFTA)	U	ND	0.681	1.70	ng/L	0.0170	1					
Perfluorotridecanoic Acid (PFTriA)	U	ND	0.561	1.70	ng/L	0.0170	1					
Perfluoroundecanoic acid (PFUnA)	U	ND	0.561	1.70	ng/L	0.0170	1					
4,8-Dioxa-3H-perfluorononanoic acid (DONA,ADONA)	U	ND	0.561	1.70	ng/L	0.0170	1					
1,1,2,2-Tetrafluoro-2-(1,2,2,2-tetrafluoroethoxy)ethane sulfonic acid (NVHOS)	JX	0.312	0.170	0.425	ng/L	0.0170	1	DK2	10/18/23	2005	2508689	2
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (Gen-X)	U	ND	0.170	0.425	ng/L	0.0170	1					
4-(Heptafluoroisopropoxy)hexafluorobutanoic acid (PFECA-G)	UX	ND	0.170	0.425	ng/L	0.0170	1					
Nafion Byproduct 4 (PFESA BP4)	UX	ND	0.170	0.425	ng/L	0.0170	1					
Nafion Byproduct 5 (PFESA BP5)	UX	ND	0.170	0.425	ng/L	0.0170	1					
Nafion Byproduct 6 (PFESA BP6)	UX	ND	0.170	0.425	ng/L	0.0170	1					

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Contact: Raleigh, North Carolina 27699
Project: Amy Delinsky
Routine Analysis

Client Sample ID: 166_Mandolin	Project: NCDQ00117
Sample ID: 640587005	Client ID: NCDQ001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
EPA 537Mod PFCs by LC-MS/MS "As Received"												
Hydro-EVE	UX	ND	0.170	0.425	ng/L	0.0170	1					
Nafion Byproduct 1 (PFESA BP1)	UX	ND	0.170	0.425	ng/L	0.0170	1					
Nafion Byproduct 2 (PFESA BP2)	UX	ND	0.170	0.425	ng/L	0.0170	1					
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA or PFECA B)	U	ND	0.170	0.425	ng/L	0.0170	1					
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA or PES)	U	ND	0.170	0.425	ng/L	0.0170	1					
Perfluoro(3,5,7,9-tetraoxadecanoic acid (PFO4DA)	UX	ND	0.170	0.425	ng/L	0.0170	1					
Perfluoro(3,5,7-trioxaoctanoic acid (PFO3OA)	UX	ND	0.170	0.425	ng/L	0.0170	1					
Perfluoro(3,5-dioxahexanoic acid (PFO2HxA)	JX	0.350	0.170	0.425	ng/L	0.0170	1					
Perfluoro-2-methoxyacetic acid (PFMOAA)	X	1.14	0.170	0.425	ng/L	0.0170	1					
Perfluoro-3-methoxypropanoic acid (PFMOPrA)	U	ND	0.170	0.425	ng/L	0.0170	1					
Perfluoro(4-methoxybutanoic acid (PFMOBA)	U	ND	0.170	0.425	ng/L	0.0170	1					
Perfluoroethoxypropionic acid (EVE)	UX	ND	0.170	0.425	ng/L	0.0170	1					
Perfluoropropanoic acid (PFPrA)	JX	12.1	6.81	17.0	ng/L	0.0170	1					
R-EVE	UX	ND	1.12	3.40	ng/L	0.0170	1					
Perfluoro(3,5,7,9,11-pentaaxadodecanoic acid (PFO5DA or TAFN4)	UX	ND	0.170	0.425	ng/L	0.0170	1					
2,3,3,3-Tetrafluoro-2-(pentafluoroethoxy)propanoic acid (PEPA)	UX	ND	0.170	0.425	ng/L	0.0170	1					
Perfluoro-2-(perfluoromethoxy)propanoic acid (PMPA)	X	4.08	0.170	0.340	ng/L	0.0170	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 537.1 Modified	PFCs Extraction in Liquid	SR2	10/16/23	0823	2508686

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: October 24, 2023

Company : NC Dept Environmental Quality
Address : 1646 Mail Service Center

Raleigh, North Carolina 27699

Contact: Amy Delinsky
Project: Routine Analysis

Client Sample ID: 166_Mandolin
Sample ID: 640587005

Project: NCDQ00117
Client ID: NCDQ001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 537.1 Modified		
2	EPA 537.1 Modified		

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit



Understanding PFAS

What are PFAS, or per- and polyfluoroalkyl substances?

PFAS refers to a group of man-made chemicals. They are widely used in commercial and consumer products such as food packaging, water- and stain-repellent fabrics, nonstick products and firefighting foams. They are also commonly used in industrial processes and manufacturing. Because of their widespread use, these compounds are present in household and industrial waste, air emissions and wastewater discharges.

PFAS are often called “forever chemicals” because they don’t break down in the environment and can build up, or bioaccumulate, in humans and animals.



What do I need to know about PFAS?

Most Americans have been exposed to PFAS. Scientists have identified ingestion through drinking water as the primary pathway for PFAS exposure in humans. Most standard municipal drinking water treatment systems are not built to filter out PFAS and until recently, testing labs were not able to detect them at lower levels.

Some PFAS can accumulate in the human body. Scientific studies have shown that exposure to certain levels of PFAS have been linked to reproductive effects such as decreased fertility or increased high blood pressure in pregnant women; developmental effects or delays in children, including low birth weight, accelerated puberty, bone variations, or behavioral changes; increased risk of some cancers; reduced ability of the body’s immune system to fight infections, including reduced vaccine response; interference with the body’s natural hormones; and increased cholesterol levels and/or risk of obesity.



More information and resources are available online:

bit.ly/UnderstandingPFAS



For a Fact Sheet on filtration options and sampling from the NC Dept of Health and Human Services, scan the QR code or visit:

[bit.ly/
PFASFiltration](https://bit.ly/PFASFiltration)



What Steps Can I Take to Reduce PFAS Exposure?

The first step is finding out the PFAS levels in your drinking water.

- If you have public water, contact your utility to find out whether they have sampled for PFAS and what steps they are taking to address PFAS.
- If you have a private well, consider having your water sampled by a certified lab.

If you are concerned about the level of PFAS in your drinking water, whether you are on a well or public water, you may consider adding filtration to reduce the amount of PFAS you consume. The North Carolina Department of Health and Human Services has developed a list of options, from whole house or under sink systems to pitcher or fridge filters with information on their effectiveness.

Are there limits for PFAS in drinking water?

On March 14, 2023, U.S. EPA announced the proposed national regulation of six PFAS compounds for public water systems:

- EPA is proposing an enforceable Maximum Contaminant Level (MCL) for PFOA and PFOS, at 4 parts per trillion, a level that can be reliably measured by most labs.
- The proposed rule would also regulate GenX chemicals, PFNA, PFHxS, and/or PFBS through the use of a Hazard Index calculation to determine if the combined levels of these PFAS pose a potential risk to human health.

These limits apply to public drinking water systems, but private well users can use the proposed MCLs as a decision-making tool on whether to reduce exposure by adding filtration or seeking public water connections where available.

How is DEQ addressing PFAS?

DEQ has been working with public water systems to prepare for the proposed regulation and assess PFAS levels in drinking water systems across the state.

Additionally, DEQ has taken a number of actions to better identify PFAS sources and reduce emissions and discharges:

- Developing state groundwater and surface water quality standards for PFAS compounds;
- Requiring PFAS information from new facilities and industries;
- Developing permit conditions as appropriate throughout the state;
- Identifying and prioritizing locations where these substances may have been manufactured, used, discharged or disposed for additional assessment;
- Conducting groundwater testing and additional monitoring in areas with known PFAS contamination;
- Requiring all solid waste sanitary landfills to include PFAS analyses of all regular groundwater, surface water and leachate samples.