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Via Email

Attn: Renee Kramer
N.C. Department of Environmental Quality
217 West Jones Street
1646 Mail Service Center
Raleigh, NC 27699-1646
ej@ncdenr.gov

Re: Comments on Community Mapping System with Environmental Justice Tool

Dear Ms. Kramer,

The Southern Environmental Law Center (“SELC”) and, on behalf of their thousands of North Carolina-based members, Waterkeeper Alliance, Winyah Rivers Alliance, Cape Fear River Watch, Sound Rivers, Haw River Assembly, Yadkin Riverkeeper, Catawba Riverkeeper Foundation, Good Stewards of Rockingham, MountainTrue, Crystal Coast Waterkeeper, and White Oak-New Riverkeeper Alliance submit these comments on the North Carolina Department of Environmental Quality’s (“DEQ” or “agency”) Community Mapping System with Environmental Justice Tool (“EJ Mapping Tool”). Thank you for considering our comments.

We believe that this tool can help to ensure the fair treatment and meaningful involvement of all North Carolinians regardless of race, color, national origin, or income in DEQ’s development, implementation, and enforcement of environmental permits, rules, and guidance. To that end, we urge DEQ to implement the following improvements to the tool itself and to the plan for how it will be used.

1. Improvements to the EJ Mapping Tool

We applaud DEQ for creating a North Carolina-specific community mapping system with the EJ Mapping Tool. We understand that this version is just a start, and already it contains helpful information that can assist residents in being more cognizant of environmental and health concerns in their neighborhoods, and in the neighborhoods of their co-workers, family, and friends. To make the tool stronger and more effective, we recommend adding key data about environmental concerns, displaying demographic data more clearly, and altering aspects of the design of the tool to make it easier for uninitiated members of the public to use.

a. Add key data

We recognize that the EJ Mapping Tool cannot include all possible information that could inform residents of the state and help the state to make more environmentally just

decisions,¹ and this helps to explain why community outreach is necessary. Nevertheless, certain information is essential to the tool's effectiveness. First, DEQ should add information about pending applications. These data already exist in DEQ Environmental Application Tracker Web App, and would provide valuable context to residents and to the state of upcoming projects that may affect North Carolinians. Second, DEQ should include data showing poultry facility locations, to the extent that the state has this information. Third, DEQ should add the locations of Superfund sites. DEQ appears already to have this information, because the Division of Waste Management Site Locator Tool includes a layer named Federal Remediation Branch, which covers Superfund locations. Finally, existing environmental quality information would be helpful. This includes air quality monitors, and the most recent impaired waters lists. This information is necessary for users to be able to evaluate the current and recent environmental conditions that new facilities would affect or exacerbate.

b. Display demographic information more clearly

The EJ Mapping Tool should more clearly connect information about facilities to demographic information. First, there is currently no link to the demographics data from the environmental screening report; this should be added. Once it has been added, the data in the Demographics Dashboard should update in tandem with the map on the left of the screen so that a user can pan and compare neighboring census tracts. Second, in addition to the facilities list, the tool needs to show census geographies. When a user clicks on the map, the tool highlights a census tract, but the tract is not identified, only the county in which it lies is. It would be more useful if the tool told the user the tract name in addition to the county name.

c. Design the tool for ease of use by the public

Because this tool is intended to be used by members of the public, DEQ should make every effort to make it easy to use. Designing for simplicity and leading people to the information is very important for tools like this. When websites are too complex or confusing users often give up, but a few simple changes could go a long way to making this tool more accessible. The splash screen of the map is a necessary preamble about data limitations, but by trimming that message down and adding some information about where people can inquire further when data are unclear would help make clear to users that they are not limited to the data as presented in the tool. DEQ should also consider changing the word "all" to the word "most" or something comparable, in the sentence, "The Community Mapping System provides access to all of the available geographically referenced data that the DEQ maintains at this time."

Working to improve the visual hierarchy of the map will aid in the comprehension and differentiation of the many different thematic layers it displays. Changing the color of the county boundaries from pink to a color that does not match the bright colors of the thematic map layers will help eliminate one visual conflict. DEQ should replace the default basemap, Open Street Map ("OSM"), with Topographic by Esri. This will help to make the thematic data layers stand out and remove the county boundary conflict, because OSM's layers are generalized and vary considerable from the NCDOT county boundaries at higher zoom levels. Additionally,

¹ See Jorge Luis Borges, *On Exactitude in Science*, in *A UNIVERSAL HISTORY OF INFAMY* (1954).

having the Layers list already on when the map starts, and with the ability to turn on and off layers at will, would allow the user easily to customize the tool for their needs.

Lastly, DEQ should divide the map layers into three different sets of geographic relevance: state, regional, and local. This would allow users to prevent layers with a high number of features from obscuring map features, which can occur at the state and regional zoom levels. Currently, the tool begins on what appears to be zoom level 9 in ArcGIS Online, showing only the basemap and county boundaries, and then at the next zoom level in (10), all DEQ layers turn on at once, presenting the user with a map showing 29 different map symbols at once. It is too much, too fast. In the alternative, DEQ could potentially begin the map at zoom level 8, with state-level data turned on: county boundaries, tribal boundaries, air permits, major NPDES permits and Superfund sites. In this case, the regional level zoom would leave most of the map layers as is, and local level layers like above- and underground storage tanks, land-use restrictions, and dry cleaning sites would not appear until zoom level 13.

Although good design should minimize the need for instructions, it is still important that instructions are clear and readily available. DEQ should make sure that help-documents are accessible directly from the mapping tool itself (like in the Division of Waste Management Site Locator Tool), since anyone arriving at the mapping tool from a direct link will bypass the NCDEQ guidance information as it stands now. In addition, DEQ could hold an annual webinar on how to use the tool—as it evolves—and make a recording of the webinar easily available among the guidance materials.

2. Use the EJ Mapping Tool to Guide Decisions

The EJ Mapping Tool is the direct result of a settlement agreement between DEQ and Waterkeeper Alliance, NC Environmental Justice Network (“NCEJN”), and the Rural Empowerment Association for Community Help (“REACH”). The settlement requires DEQ to develop an environmental justice geographical information tool that will allow DEQ programs to conduct environmental justice analyses.² In order to fulfill this purpose, as well as the state’s commitment to environmental justice,³ the tool must not only inform the public, but it must guide DEQ’s actions. As explained below, DEQ is required to consider environmental justice—including cumulative impacts—in its decision-making under federal law and the settlement, which incorporates federal guidance to the same effect. Furthermore, multiple other jurisdictions already do so.

² Settlement Agreement between N.C. Dep’t of Env’t Quality and N.C. Env’t Justice Network, et al. 6 (2018), https://waterkeeper.org/wp-content/uploads/2018/05/Final-Settlement-Agreement_attachments-and-sig.pdf.

³ See *Secretary’s Environmental Justice and Equity Board*, N.C. DEP’T OF ENV’T QUALITY, <https://deq.nc.gov/outreach-education/environmental-justice/secretarys-environmental-justice-and-equity-board> (last visited July 10, 2019); N.C. DEP’T OF ENV’T QUALITY, ENVIRONMENTAL EQUITY INITIATIVE (2000), <https://ncejn.files.wordpress.com/2018/06/10-19-2000-ncdenr-environmental-equity-policy.pdf>.

a. State obligations to consider cumulative impacts support use of the tool in regulatory decision making

Under Title VI of the Civil Rights Act of 1964, DEQ must avoid discriminating on the basis of race, color, or national origin.⁴ DEQ's settlement with Waterkeeper, NCEJN, and REACH is intended to further this requirement. DEQ agreed to "review and, as appropriate, incorporate available data that are relevant to environmental, demographic, and health factors" in developing the EJ Mapping Tool.⁵ Thus, the settlement requires that the tool be designed to reveal cumulative impacts. The purpose of this requirement was to enable "DEQ programs to conduct environmental justice analyses," and the purpose of those analyses in turn was to avoid discrimination, as required by law, "during permitting processes and during regulatory oversight of facilities within its jurisdiction."⁶ Accordingly, DEQ agreed under the settlement to design the EJ Mapping Tool to reveal cumulative impacts and to use the tool to avoid discrimination.

Furthermore, in the settlement agreement DEQ agreed to consider specific sources of guidance on how the EJ tool will be applied, and the documents support using an EJ mapping tool in a way that influences agency decision-making. Those sources include the U.S. Environmental Protection Agency's ("EPA") Guidance on Considering Environmental Justice During the Development of Regulatory Actions;⁷ EPA's Technical Guidance for Assessing Environmental Justice in Regulatory Analysis;⁸ and the U.S. Department of Transportation, Federal Transit Administration's ("FTA") circular, Environmental Justice Policy Guidance for Federal Transit Administration Recipients.⁹

EPA's Guidance on Considering Environmental Justice During the Development of Regulatory Actions explains that the agency's "rule-writers" should review whether any of multiple EJ-related factors is relevant to the action—such as proximity and exposure to emission sources, unique exposure pathways, physical infrastructure, multiple stressors and cumulative impacts, capacity to participate in decision-making, and higher risk in response among vulnerable populations—and if so, they "should then consider whether the action involves potentially disproportionate impacts on minority populations, low-income populations, and/or indigenous peoples and thus raises a potential EJ concern."¹⁰ In other words, the guidance directs EPA to consider whether the action involves any EJ-related stressors and, if so, to

⁴ 42 U.S.C. § 2000d; 40 C.F.R. § 7.15.

⁵ Settlement Agreement between N.C. Dep't of Env't Quality and N.C. Env't Justice Network, et al. 6 (2018), https://waterkeeper.org/wp-content/uploads/2018/05/Final-Settlement-Agreement_attachments-and-sig.pdf.

⁶ *Id.*

⁷ U.S. ENVT'L PROT. AGENCY, GUIDANCE ON CONSIDERING ENVIRONMENTAL JUSTICE DURING THE DEVELOPMENT OF REGULATORY ACTIONS (2015), <https://www.epa.gov/sites/production/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf>.

⁸ U.S. ENVT'L PROT. AGENCY, TECHNICAL GUIDANCE FOR ASSESSING ENVIRONMENTAL JUSTICE IN REGULATORY ANALYSIS (2016), https://www.epa.gov/sites/production/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf.

⁹ U.S. DEP'T OF TRANSP., CIRCULAR FTA C 4703.1, ENVIRONMENTAL JUSTICE POLICY GUIDANCE FOR FEDERAL TRANSIT ADMINISTRATION RECIPIENTS (2012), https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_EJ_Circular_7.14-12_FINAL.pdf.

¹⁰ U.S. ENVT'L PROT. AGENCY, GUIDANCE ON CONSIDERING ENVIRONMENTAL JUSTICE DURING THE DEVELOPMENT OF REGULATORY ACTIONS 13-14 (2015), <https://www.epa.gov/sites/production/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf>.

conduct an EJ analysis. The agency’s official EJ screening tool is EJSCREEN,¹¹ the federal mapping tool developed by EPA, which the EJ Mapping Tool is designed to complement.¹²

Following EPA’s common-sense approach, DEQ should use the EJ Mapping Tool to guide its actions, paying particularly close attention to cumulative impacts. The tool is equipped identify potential EJ concerns including “proximity to emission sources” and “physical infrastructure.” Additionally, the demographic information provided in the EJ mapping tool can be used to identify “unique exposure pathways” that exist in some populations due to “unique environmental exposures because of practices linked to their cultural background or socioeconomic status.”¹³ Once the tool is operable for the purpose of assisting in decision-making, DEQ can further follow the lead outlined in the EPA guidance by keeping the tool relevant through updating the map inputs.¹⁴ This would allow DEQ to make regulatory decision using the highest quality and most recent data available.¹⁵ We expect that the Department will make special efforts to apply for funding for mapping updates, if necessary.

Finally, FTA’s circular entitled Environmental Justice Policy Guidance for Federal Transit Administration Recipients states that Geographic Information Systems (GIS) are the most effective way to portray a “composite residential demographic profile” and notes that the Census Bureau provides demographic data for public download.¹⁶ The circular explains that these tools can “evaluate the patterns of completed or planned [projects] relative to EJ populations.¹⁷ They provide spatial depictions of “the percent minority populations and low-income populations” that would be affected by DEQ’s proposed action, and the spatial depiction of disaggregated minority populations facilitates tailored outreach strategies to address the specific needs of the community.¹⁸ The EJ Mapping Tool could assist with each of these objectives.

The approach taken by these federal agencies shows that DEQ’s current plan to use the EJ Mapping Tool only to “increase local outreach and public participation”¹⁹ falls short of the mark; DEQ is capable of much more. Indeed, DEQ’s Division of Waste Management already is using a similar mapping tool²⁰ to ensure that it meets its obligation not to violate Title VI by allowing solid waste facilities to be sited in a way that imposes disproportionate cumulative

¹¹ *Id.* at 15-16, 16 n.28.

¹² Press Release, N.C. Dep’t of Env’tl Quality, DEQ accepting comments on Community Mapping System with Environmental Justice Tool (June 10, 2019), <https://deq.nc.gov/news/press-releases/2019/06/10/deq-accepting-comments-community-mapping-system-environmental-justice>.

¹³ *See id.* at 13.

¹⁴ *See id.*

¹⁵ *See id.*

¹⁶ U.S. DEP’T OF TRANSP., ENVIRONMENTAL JUSTICE POLICY GUIDANCE FOR FEDERAL TRANSIT ADMINISTRATION RECIPIENTS 14 (2012), https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_EJ_Circular_7.14-12_FINAL.pdf.

¹⁷ *See id.*

¹⁸ *See id.*

¹⁹ *DEQ North Carolina Community Mapping System*, N.C. DEP’T OF ENVT’L QUALITY, <https://deq.nc.gov/outreach-education/environmental-justice/deq-north-carolina-community-mapping-system> (last visited July 10, 2019).

²⁰ *Division of Waste Management Site Locator Tool*, N.C. DEP’T OF ENVT’L QUALITY, <https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=7dd59be2750b40bebebf49fc383f688> (last visited July 10, 2019).

impacts on minority or low-income communities.²¹ Furthermore, the tool could potentially help DEQ to comply with its obligation under multiple statutes to consider and mitigate the cumulative impacts of its decisions on environmental quality.²²

b. Existing practices in other jurisdictions support use of tool in regulatory decision-making

Agencies in other jurisdictions use mapping tools to assist in environmental decision making. EPA has developed an environmental justice mapping and screening tool (EJSCREEN) to help the agency better meet its responsibilities related to the protection of public health and the environment.²³ EJSCREEN is based on nationally consistent data and employs an approach that combines environmental and demographic indicators in maps and reports.²⁴ EJSCREEN provides a preliminary tool for the analysis of fair treatment, allowing users to identify communities that may qualify for extra consideration, engagement, and analysis as an agency develops enforcement, compliance, and permitting strategies. Local, state, and federal agencies can use EJSCREEN in a *relevant and meaningful* capacity to address environmental justice issues in their policymaking efforts and administrative decisions. As noted, the EJ Mapping Tool is designed to complement EJSCREEN.²⁵

Multiple states use mapping tools in making permitting decisions as well. For instance, the State of Illinois Environmental Protection Agency (“IEPA”) uses its EJ mapping tool to screen every permit application submitted to the agency.²⁶ If the EJ mapping tool identifies a pending permit application in an EJ community, IEPA flags the application for targeted outreach by the agency,²⁷ such as notifications, and public meetings and hearings.²⁸ Similarly, California’s Environmental Protection Agency uses its screening tool “to aid in administering environmental justice grants, promote compliance with environmental laws, prioritize site-cleanup activities and identify opportunities for sustainable development.”²⁹ In order to ensure the EJ mapping tool is used in a way that is both *meaningful and relevant* to communities in

²¹ N.C. Gen. Stat. § 130A-294(a)(4)(c)(9).

²² See N.C. Gen. Stat. § 143-215.1(b)(2) (requiring DEQ to “act on all permits so as to prevent violation of water quality standards due to the cumulative effects of permit decisions”); N.C. Gen. Stat. § 113A-120(a)(10) (deny a coastal development permit in any case that “the proposed development would contribute” to impermissible cumulative effects that are inconsistent with the guidelines set forth in N.C. Gen. Stat. § 113A-120(1)-(9)); N.C. Gen. Stat. § 143-215.22L(d) (requiring DEQ to consider the secondary and cumulative impacts of the proposed water transfer); 42 U.S.C. §§ 4321 *et seq.* (NEPA, when applicable); 40 C.F.R. §§ 1507 (NEPA cumulative impacts).

²³ *EJSCREEN: Environmental Justice Screening and Mapping Tool*, U.S. ENVTL. PROT. AGENCY, <https://www.epa.gov/ejscreen> (last updated Aug. 2, 2018).

²⁴ *Id.*

²⁵ Press Release, N.C. Dep’t of Env’t Quality, DEQ accepting comments on Community Mapping System with Environmental Justice Tool (June 10, 2019), <https://deq.nc.gov/news/press-releases/2019/06/10/deq-accepting-comments-community-mapping-system-environmental-justice>.

²⁶ ILL. ENVTL. PROT. AGENCY, ENVIRONMENTAL JUSTICE PUBLIC PARTICIPATION POLICY (2018), <https://www2.illinois.gov/epa/topics/environmental-justice/Documents/public-participation-policy.pdf>.

²⁷ *Id.* at 3.

²⁸ *Id.* at 4-6.

²⁹ CAL. OFFICE OF ENVTL. HEALTH HAZARD ASSESSMENT, CALENVIROSCREEN FAQs (Feb. 26, 2016), <https://oehha.ca.gov/calenviroscreen/calenviroscreen-faqs>.

North Carolina, DEQ should do the same with the EJ Mapping Tool and incorporate it into the agency's decision-making processes.

3. Conclusion

Thank you for your valuable ongoing work developing the EJ Mapping Tool, and for considering these comments. If you have any questions or wish to speak further, please contact us at ctaylor@selcnc.org and njimenez@selcnc.org.

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