



Ryke Longest, Director Michelle Nowlin, Supervising Attorney

Environmental Law & Policy Clinic
Box 90360
Durham, NC 27708-0360

Telephone: (919) 613-7169
Toll Free: (888) 600-7274
Fax: (919) 613-7262

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Lisa Garcia, J.D.
Assistant Administrator for Environmental Justice
USEPA Headquarters, Ariel Rios Building
1200 Pennsylvania Avenue, N. W.
Mail Code: 1101A
Washington, DC 20460
garcia.lisa@epa.gov

Heather Case
Acting Director
Office of Environmental Justice

Re: Petition to conduct a Formal Environmental Justice Assessment of the proposed Titan America/Carolina's Cement Co. LLC's Cement Facility in New Hanover County, North Carolina

Dear Ms. Garcia and Ms. Case:

We write today on behalf of Pender Watch & Conservancy to petition the EPA to formally assess the environmental injustices affecting the citizens who live on the border of New Hanover and Pender Counties in North Carolina. We have reviewed EPA's Plan EJ 2014 and Toolkit for Assessing Potential Allegations of Environmental Injustice, both of which have guided our own assessment and decision to proceed with this petition. The situation confronting the community is urgent: the state Division of Air Quality has issued a draft air pollution permit for a cement kiln and quarry owned and operated by Titan America/Carolina's Cement Co. LLC's ("Titan") that is proposed for this area, and recent news reports suggest the agency plans to issue the permit by the end of the calendar year. Background information on the proposed facility is provided below.

CEMENT PLANT AND ENVIRONMENTAL CONCERNS

Titan America proposes to build the nation's fourth largest cement kiln on the banks of the NE Cape Fear River, in north New Hanover County, just south of the Pender County border. The property is characterized by tidally-influenced hardwood swamps and an abundance of wildlife. The River has been designated as "essential fish habitat" by the Wildlife Resources Commission and is heavily fished by local residents. Indeed, one of the community's biggest concerns is the

accumulation of heavy metals in aquatic species, specifically those species that are consumed locally. The river already is listed pursuant to Section 303(d) of the Clean Water Act as mercury impaired; the state's Division of Environmental Health has issued fish consumption advisories warning of the mercury levels found in fish taken from the river. A recent scientific study of the Cape Fear River found concentrations of arsenic, cadmium, mercury, selenium, polychlorinated biphenyls, and dieldrin (a pesticide) within fish tissue that exceeded the levels considered safe by the EPA and the North Carolina Health Director's Office. Mallin, et al., "Elevated Levels of Metals and Organic Pollutants in Fish and Clams in the Cape Fear River Watershed," *Archives of Environmental Contamination and Toxicology* (2011) 61:461-71.

The proposed cement plant would add to the mercury load in the river, and the ecological conditions – black water and swamp land – are among the most effective at methylation, i.e., converting elemental mercury into the more biologically available methyl mercury. Titan's own consultants have acknowledged this fact, and concluded that local residents – many of whom rely on fish caught from the river as a food source for their families – should simply eat less fish. *See Intertox, Inc., "Human Health Risk Assessment of Mercury Emissions from the Proposed Carolinas Cement Facility, Castle Hayne, North Carolina" (March 30, 2009).*

EPA has identified air pollution as the main environmental concern in cement manufacturing. Within this industry, there are myriad air pollution sources, from the quarry mining operations and mobile sources onsite, to energy-generation facilities, waste disposal operations, and the cement plant itself. At this particular site, there are also environmental concerns associated with groundwater contamination that could result from the on-site disposal of cement kiln dust, as well as from mobilization of an existing plume of chromium contamination as a result of aquifer dewatering to access the limestone in the quarry.

THE AFFECTED COMMUNITY

As noted above, the cement plant would be located in NE New Hanover County, just across the line from Pender County. According EPA's EJView online database and maps prepared by the Children's Environmental Health Initiative (CEHI) at Duke's School of the Environment, the communities directly south and north of the proposed site have markedly lower annual per capita incomes, greater percentages of persons living in poverty, and higher concentrations of minorities than the surrounding areas.

Other publicly-available data show that this community has disproportionately borne the negative effects associated with the region's economic and industrial development. Maps prepared for the Clinic by CEHI show that within a few miles of the site of the proposed cement kiln, there are more than ten facilities listed on EPA's Toxic Release Inventory, three Superfund sites, and at least one site of known groundwater contamination (this on an adjacent parcel of land). There are also a dozen or more day care facilities and nine public schools. Moreover, the parcel of land on which the facility would be located and on which fly ash and cement kiln dust would be disposed is in a flood hazard zone. Most of the residents in the area rely on private groundwater wells for their drinking water, which intensifies local concerns about groundwater depletion and contamination.

THE ENVIRONMENTAL JUSTICE ASSESSMENT

Because of these concerns, and the lack of a comprehensive environmental review of the proposed facility and its potential impacts, we respectfully ask EPA to intervene and conduct an assessment of the Environmental Justice concerns associated with this proposal. As necessary, we also ask EPA to work with the state Division of Air Quality and the company to identify measures that would minimize or eliminate the facility's impacts on the community.

In assessing the impact of Titan's proposed cement kiln and quarry, we recommend that EPA be sure to analyze the environmental effects of both the proposed cement kiln and the proposed quarry. Both developments have substantial and interwoven environmental impacts on the nearby and downstream communities. The cement kiln, for example, would emit hazardous air pollutants, including mercury. Cement kiln dust, which is a solid waste created during the cement production process, would be disposed on site and has the potential to contaminate water supplies – this is of particular concern because CKD is a “special waste” exempted from federal hazardous waste regulations. The quarrying activity would amplify the effects of the cement kiln pollution. For example, the quarry would drain wetlands, which currently provide valuable ecological services, and draw down an aquifer, which may affect drinking water supplies for citizens with private wells in the area. These interconnected effects on the area's valuable water supplies necessitate a holistic review of the effects of both the cement kiln and proposed quarry.

The various stages of the cement production process are also intrinsically linked and should not be evaluated in isolation. Titan has stated that its proposed quarry is integral to its project. In fact, Titan has stated that its cement kiln is not economically feasible without also building the proposed quarry. Because every step in the cement process – from mining raw material to disposal of manufacturing byproduct – potentially has significant environmental and public health effects, evaluating each step separately is not only in conflict with the comprehensive review anticipated by federal law, but also is a great disservice to the people of North Carolina, who rely on the government to ensure a safe environment for themselves and their children.

We have raised these concerns with the Division of Air Quality throughout the public comment process but have received no response, and it is for these reasons that we petition EPA to conduct a formal assessment of the environmental justice impacts associated with the proposed cement kiln and quarry. The unequal distribution of harms in both New Hanover and Pender Counties necessitate the oversight of the EPA.

Thank you for your assistance. Please call me at 919-613-8502 or email me at nowlin@law.duke.edu if you have questions concerning this request. I look forward to hearing from you.

Sincerely,

Michelle B. Nowlin

cc:

A. Stanly Meiburg, Deputy Director
U.S. Environmental Protection Agency

Lisa Garcia, J.D.
Assistant Administrator for Environmental Justice

Gwendolyn Keyes Fleming, Regional Administrator
United States Environmental Protection Agency, Region 4

Al Delia, Policy Director
Office of the Governor Bev Perdue

Marguerite E. McLamb
Sector Policies and Programs Division
Office of Air Quality Planning & Standards
U.S. Environmental Protection Agency

Heather Case, Acting Director
Office of Environmental Justice
U.S. Environmental Protection Agency

Cynthia Giles, Assistant Administrator
Office of Enforcement & Compliance Assurance
U.S. Environmental Protection Agency

Peter Grevatt, Director
Office of Children's Health Protection
U.S. Environmental Protection Agency

Veronica Butcher Shingleton, Policy Advisory
State of NC, Office of the Governor

Allie Sheffield, President
Pender Watch & Conservancy