

# SOUTHERN ENVIRONMENTAL LAW CENTER

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***VIA U.S.P.S. and ELECTRONIC MAIL***

Ms. Elizabeth Cannon  
N.C. Division of Waste Management  
Hazardous Waste Section  
MSC 1646  
Raleigh, NC 27699-1646  
*elizabeth.cannon@ncdenr.gov*

**Re: Alcoa, Inc.'s January 2013 Corrective Measures Study by Enviroengineering, Inc.**

Dear Ms. Cannon:

We appreciate the opportunity to submit comments on behalf of the North Carolina Environmental Justice Network (“NCEJN”) regarding Alcoa, Inc.’s January 2013 Corrective Measures Study on the Alcoa Facility in Badin, North Carolina. Please accept these comments for consideration in your preparation of a draft decision on Alcoa’s proposal.<sup>1</sup>

NCEJN is a coalition of community organizations and its supporters who work with low-income communities and people of color, including the West Badin community, to promote health and environmental equity, clean industry, safe work places and fair access to all human and natural resources through organizing, advocacy, research and education based on principles of economic and political equity. The NCEJN works to empower impacted communities through organized forums, conferences and support of member advocates on environmental issues that negatively impact their health and quality of life.

The Southern Environmental Law Center (“SELC”) is a non-profit legal advocacy group dedicated to protecting the environment of the South. SELC works with more than 100 partner groups in six southeastern states. SELC has been actively involved in a variety of efforts to protect and improve water quality in the Yadkin River Basin and strives to incorporate principles of environmental justice in its program work.

We urge the Division of Waste Management (“DWM”) to hold Alcoa fully accountable for waste from its closed aluminum facility in and around the West Badin community. First, the

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<sup>1</sup> As of August 15th, 2013, NCDWM’s notice regarding acceptance of comments on the Study does not indicate a closing date for public comments. However, in recognition of a confirmed August 15<sup>th</sup> deadline, we ask for your consideration of these comments as you prepare your draft decision. *Available at* <http://portal.ncdenr.org/web/wm/alcoa-badin>.

state should require more aggressive remediation of identified sites. Then, the state should direct Alcoa to keep the community informed and engaged in the remediation process by creating a more interactive website that provides information on contaminated sites and allows input by citizens. Then, we urge the DWM to require Alcoa to create a remediation fund for future cleanup of later identified contaminated sites and an enhancements fund for community development.

### **History of Badin Lake Contamination by Alcoa**

The Badin Lake area, located in Stanly County, North Carolina, is home to almost 2,000 residents.<sup>2</sup> The lake is a popular recreational area for activities such as fishing, boating and swimming.<sup>3</sup> The 1996, 1997 and 2007 chemical analyses of sediments collected from Badin Lake indicated elevated levels of toxic chemicals such as cyanide, polychlorinated biphenyls (PCBs), and polynuclear aromatic hydrocarbons (PAHs).<sup>4</sup> Contamination of Badin Lake has been connected to the former aluminum facility owned and operated by Alcoa along the banks of the lake.<sup>5</sup>

The facility generated and disposed of numerous contaminants such as PCBs through Alcoa's outfall pipes leading directly to the lake.<sup>6</sup> In 2012 the state approved a capping project to cover PCB contaminated sediment in 3.7 acres of the 5,350 acre lake.<sup>7</sup>

Badin Lake will continue to be impacted by on-site contamination if an adequate clean-up plan for on-site contamination is not implemented. Alcoa's January 2013 Corrective Measures Study fails to illustrate how Alcoa will execute a timely and effective clean-up of waste sites in and around Badin.

### **Inadequacy of Current Corrective Measures Study**

In its Corrective Measures Study (the "Study"), ALCOA identified three locations where it acknowledges groundwater contamination and a need for action: groundwater at the Alcoa/Badin Landfill; groundwater at the Old Brick Landfill; and groundwater at the Main Plant.<sup>8</sup> Groundwater samples of the Alcoa/Badin Landfill showed the existence of cyanide in

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<sup>2</sup> Badin.org, Welcome to Badin, NC, [http://www.badin.org/about\\_badin.html](http://www.badin.org/about_badin.html), (last visited June 13, 2013).

<sup>3</sup> North Carolina Public Health, Badin Lake Fish Study Fact Sheet (2009), <http://epi.publichealth.nc.gov/oe/hace/docs/BadinLakeFactSheet.pdf>.

<sup>4</sup> *Id.*

<sup>5</sup> BHE Environmental, Inc., *BADIN LAKE SEDIMENT REMEDIAL ACTION PLAN: ALCOA BADIN OPERATIONS, BADIN, NORTH CAROLINA 28009 1-23* (2012), [http://portal.ncdenr.org/c/document\\_library/get\\_file?uuid=83b1cc00-0e9f-4640-baa0-21f9c04c9be4&groupId=38361](http://portal.ncdenr.org/c/document_library/get_file?uuid=83b1cc00-0e9f-4640-baa0-21f9c04c9be4&groupId=38361), (last visited June 13, 2013).

<sup>6</sup> *Id.* at 3.

<sup>7</sup> ALCOA, Badin Lake Sediment Remediation Project Fact Sheet (2012), [http://www.alcoa.com/yadkin/en/pdf/20120509\\_Badin\\_Remediation\\_Project\\_Fact\\_Sheet.pdf](http://www.alcoa.com/yadkin/en/pdf/20120509_Badin_Remediation_Project_Fact_Sheet.pdf), (last visited August 15, 2013).

<sup>8</sup> *Supra* note 22.

numbers that exceeded the screening value in a single well down gradient of the landfill.<sup>9</sup> At the Old Brick site, groundwater sampling results also demonstrated the existence of cyanide that exceeded the screening values.<sup>10</sup> One of the sampling events for the Old Brick Landfill reported cyanide above the NC 2L Standard (Classification and Water Quality Standards Applicable to the Groundwater of North Carolina) in one well.<sup>11</sup> The Main Plant sampling possibly showed the greatest impact to groundwater among the three sites. At the Main Plant, groundwater samples identified cyanide, fluoride, and trichloroethene at concentrations above the 2L Standards.<sup>12</sup>

In the same study Alcoa identified options for remediation to correct the groundwater contamination issues at each site. The remediation options that Alcoa proposes to adopt are vague and too generic to form the bases for adequate remediation of the sites.

The Study concluded that Alcoa's best option for remediation at the Alcoa/Badin Landfill and at the Old Brick Landfill is to monitor through institutional controls.<sup>13</sup> Monitoring of the Alcoa/Badin Landfill and the Old Brick Landfill will consist of "annual monitoring events for five years to confirm stability and effectiveness of the interim measures taken."<sup>14</sup> In its assessment, Alcoa failed to explain exactly how it will monitor the sites. For example, there is no reference to reporting the effectiveness of the Institutional Controls or how it will communicate results of its monitoring events to the community. Also, Alcoa stated that it "would not incorporate implementing activities that would present exposure risks to the community, workers, or the environment;" another vague and broad statement.<sup>15</sup> Here, Alcoa failed to provide details about the type of activities it will implement. Finally, Alcoa stated that "the exposure of authorized visitors would be reduced to acceptable levels through controls *such as* PPE requirements, dig permits, or other restrictions that would be outlined in an environmental use agreement."<sup>16</sup> Again, Alcoa's proposal is vague and fails to define an "acceptable level" of exposure; and, though there are suggested options to reduce exposure of authorized visitors Alcoa failed to explicitly state what it will in fact do to follow through on this objective.

For the Main Plant site, the Study concluded that Alcoa should conduct a risk-based assessment.<sup>17</sup> The risk-based assessment will "examine current CAOs (Corrective Action Objectives) which are solely defined on existing regulatory policy."<sup>18</sup> Once again, Alcoa

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<sup>9</sup> *Id.* at 4-5.

<sup>10</sup> *Id.* at 5.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> *Id.* at 25.

<sup>14</sup> *Id.* at 10.

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> *Id.* at 25.

<sup>18</sup> *Id.* at 22.

vaguely defines exactly what risk-based assessment it will use and what action it will take to assess the risk from exposure to constituents of interest (COIs). Under this plan, Alcoa stated, “[t]he implementation of a site-specific risk-based assessment can result in the protect[ion] [of] human health and the environment,” yet Alcoa failed to expand on how a risk-based assessment will indeed meet this objective.<sup>19</sup> Alcoa failed to describe: the process of implementing this assessment, the results it will be looking for during the assessment process, the time period of the risk assessment and next steps following a proper risk assessment. For the Main Plant site, Alcoa listed five options for remediation; of the five options, outside of no action, the risk-based assessment bears the lowest cost to Alcoa.<sup>20</sup>

These recommendations are inadequate. Alcoa’s remediation plan lacks a process with objectives, steps and deliverables that illustrate the action Alcoa will take to effectively remediate the contaminated sites. Additionally, the community affected by the contamination has not been extensively involved in the remediation decision process. Additional efforts should be made by Alcoa and the State to collect information from residents and to actively involve residents in the remediation decision process.

The DWM should require that Alcoa create an interactive website that provides information on 1) identified contaminated sites and the remediation plans for those sites and 2) sites<sup>21</sup> that were previously identified and determined to not require remediation and the basis for that determination. This tool should show where the contaminated sites are located, provide background information on the sites and information on the remediation process. Further, there should be a tool that allows users to specify additional sites that may be currently unknown to the state or Alcoa that may also require remediation. The website could better address public concerns and provide a more substantive medium for public participation. An interactive website will be effective in keeping the community informed of remediation plans and engaged in the clean-up process. Inviting citizens to a meeting in the West Badin community, or even working with residents to do in person surveys could provide reliable data to include in the interactive tool.

As stated, Alcoa has identified three locations where it acknowledges groundwater contamination and a need for action.<sup>22</sup> However, the full extent of damages caused by Alcoa’s operations is uncertain. The DWM can ensure that Alcoa remains accountable for any later identified contaminated sites by requiring Alcoa to create a remediation fund for future clean-up. The DWM can ensure that the community is also made more whole by requiring Alcoa to set up a special fund for community enhancements. Alcoa continues to operate dams on the Yadkin River making a substantial profit by selling electricity generated from it on the wholesale market.

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<sup>19</sup> *Id.* at 23.

<sup>20</sup> *Id.* at 15-24.

<sup>21</sup> These sites should include, but would not be limited to, the 46 SWMUs and 2 areas of concern previously evaluated by the state and or the USEPA. *Id.* at 4.

<sup>22</sup> *Supra* note 22.

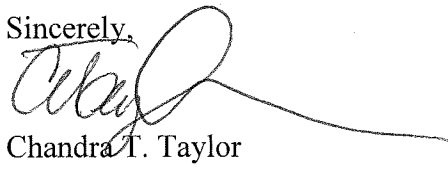
It is reasonable to request that funding generated by the water resources of this state be set aside to clean up environmental contamination from the old smelting facility. Further, without this requirement, existing and as yet undiscovered contamination may otherwise become a financial and public health burden to the people of North Carolina.

Alcoa has failed to be a good steward of the natural resources of the state, and the State of North Carolina has responded in a recently filed lawsuit. On August 2, 2013 the State of North Carolina filed suit requesting a declaration that it owns the riverbed on which Alcoa operates dams to create hydropower. The State acknowledges that Alcoa is operating for its own economic interest at the expense of North Carolina and its residents. The complaint also recognizes that Alcoa has a “[l]egacy of [e]nvironmental [p]ollution” of the “soil, the groundwater and the waters of the Yadkin River, all of which threaten the health, safety and welfare of area and downstream residents, as well as the health and welfare of the Yadkin River and the River’s aquatic life.”<sup>23</sup> In addition to this state action, the Department of Water Quality denied Alcoa a 401 Water Quality Certification for its Yadkin Hydroelectric Project.<sup>24</sup> It is evident that state is taking greater precautions with Alcoa.

For these reasons the DWM should also take precautions with consideration of Alcoa’s proposed remediation of on-site contamination and take steps to hold Alcoa accountable to the West Badin community for its environmental pollution. The DWM should require more aggressive remediation of sites identified in the Study, request that Alcoa provide an interactive forum for public engagement in the remediation process and create remediation and enhancement funds to ensure that the financial burden of Alcoa’s environmental contamination and pollution does not fall on the people of North Carolina.

Thank you for the opportunity to comment on this important matter.

Sincerely,



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Senior Attorney  
Southern Environmental Law Center

cc:  
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<sup>23</sup> Complaint at 6, N.C. v. Alcoa, Inc. (No. 13CV0110477).

<sup>24</sup> News Release, Dep’t. of Env’t. and Natural Resources, State Denies Alcoa Water Quality Certification Due to Ownership Dispute (Aug. 2, 2013), available at <http://www.ncdenr.gov/web/guest/news-releases>.