

**Gaspar | Dogwood Alliance | Environmental Integrity Project | Our Children's Earth  
Partnership for Policy Integrity**

April 26, 2018

The Honorable Kay Ivey  
Office of the Governor  
State Capitol  
600 Dexter Avenue  
Montgomery, AL 36130

Dear Governor Ivey:

We, the undersigned community and environmental groups who work to protect the health and wellbeing of Alabama's citizens and environment, call on Alabama officials to address the dangerous and unlawful air pollution emitted by wood pellet plants in Alabama, including taking the specific steps set forth in this letter to address existing deficiencies and to take proactive measures in the future to address new facilities.

Today, Environmental Integrity Project (EIP) released a report, "Dirty Deception: How the Wood Biomass Industry Skirts the Clean Air Act," which reveals how the wood pellet manufacturing industry in the southern US, including three mills in Alabama, emits vast amounts of frequently unlawful air pollution and systematically evades Clean Air Act requirements to reduce air pollution. These factories convert millions of tons of trees into wood pellets to be shipped to Europe, where they are burned for electricity under the false premise that doing so is carbon neutral. It turns out this emerging industry emits substantially more air pollution here in the US than anybody expected.

Although Alabama has required at least one facility, the Westervelt Pellet mill, to address unlawful air pollution, Alabama must do the same for the Zilkha Biomass plant near Selma. Specifically, Alabama must take the following steps to address the existing emissions issues as well as to prevent future violations of the Clean Air Act:

**First, Alabama Must Require the Zilkha Biomass Plant to Apply for a New Air Permit Which Addresses Serious Pollution Issues.**

On November 30, 2017, the Alabama Department of Environmental Management voided the air permits for the Zilkha Biomass wood pellet plant in Selma for failing to submit required reports, failing to develop a maintenance plan, and failing to address substantial excess carbon monoxide (CO) emissions. Recently, the facility owners paid their overdue fees and requested that ADEM reinstate the facility's permit. Given the serious nature of the facility's noncompliance as well as permit deficiencies identified below, we urge ADEM not to simply reinstate this permit. Rather, ADEM must require the facility owners to apply for and obtain a new permit that assures the facility's full compliance with state and federal clean air requirements. Any such permit proceeding must include a fair and meaningful opportunity for public participation.

The Zilkha mill is regulated as a “minor” air pollution source based on permit restrictions that serve to limit facility-wide emissions of pollutants like volatile organic compounds (VOCs) and CO to below the “major source threshold” of 250 tons per year. When Zilkha first conducted emissions testing in 2017, the tests revealed that the facility emits 456 tons of CO per year when operating at the plant’s design capacity—nearly twice the major source threshold. This means the facility has triggered the Clean Air Act’s New Source Review requirements for major sources, including the obligation to install the best available control technology. This would likely be a regenerative thermal or catalytic oxidizer, which Alabama DEM must require before the facility restarts operations. If the facility wishes to avoid the installation of new controls and continue to be regulated as a minor source, Alabama must incorporate a production limit into the facility’s permit that ensures that its emissions will not exceed the major source threshold—currently the permit does not contain such a limit. Decades-long EPA policy as well as a federal district court ruling affirm that such production or operating limits are a necessary component of an enforceable synthetic minor limit. Without this limit, the facility will remain a major source subject to the best available control technology requirement.

The facility is also almost certainly a major source of VOCs. The permit improperly exempts units known as hammermills and pellet coolers from emissions testing requirements, so the true rate is not known. However, emissions testing from every comparable wood pellet mill shows these units emit hundreds of tons more VOCs than Alabama DEM believes.<sup>1</sup> Emission factors from tests at a pellet mill in Georgia show Zilkha’s hammermills and pellet coolers emit between 450 and 570 tons per year, emission factors from tests at a mill in Florida show these units emit 487 tons per year, and emission factors from tests at a mill in South Carolina show these units emitting 316 tons per year.<sup>2</sup> Given that the wood dryer and the proprietary “black pellet” system also emit substantial amounts of VOCs, it is simply not plausible that Zilkha’s facility-wide VOC emissions are below the 250 ton per year major source threshold. Therefore, Alabama DEM must require the facility to comply with the best available control technology for each unit, which would likely be a regenerative thermal or catalytic oxidizer such as the kind in use on these units at similar mills. Alternatively, as discussed above, Alabama DEM must institute an enforceable production limit which will ensure the facility’s VOC emissions do not exceed 250 tons per year. Finally, Alabama DEM must require emissions testing for these units for VOC emissions.

### **Next, Alabama Must Address the Industry’s Terrible History of Fires and Explosions.**

Since 2014, more than half of the large pellet mills in the South have had news-worthy fires or explosions, including a fire at Zilkha and an explosion at another Alabama plant, Westervelt Pellets, both in 2016. These fires can produce massive amounts of harmful air pollution; for

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<sup>1</sup> Zilkha is permitted to process 100% softwood, which emits more VOCs than hardwood, therefore “comparable facilities” in this sense are facilities processing 100% softwood.

<sup>2</sup> Memorandum from Manny Patel, Georgia EPD, to Eric Cornwell, Georgia EPD, entitled “Emission Factors for Wood Pellet Manufacturing,” dated January 29, 2013, containing stack testing results from Georgia Biomass.; Florida DEP Technical Evaluation & Preliminary Determination for Green Circle Bio Energy, November 7, 2014, pg 5; Air Emission Test Report for Colombo Energy, Prepared by John Richards, Ph.D., P.E., Air Control Techniques. December 4, 2017, at 17.

instance, a recent silo fire at a Texas pellet facility burned for more than 50 days, sickening dozens of nearby residents and leading to multiple lawsuits. Many of these fires and explosions are caused by combustible wood dust, an extreme hazard at wood pellet mills.

The Clean Air Act gives Alabama a powerful tool to address wood dust explosions and fires. The Act contains a General Duty Clause which requires facilities producing or handling extremely hazardous substances to design, maintain, and operate their facilities in a safe manner. As the long list of fires and explosions at wood pellet facilities show, wood dust clearly qualifies as an extremely hazardous substance. Unfortunately, permits issued to pellet plants in Alabama do not even reference the General Duty Clause. Alabama DEM must revise these permits to specify that the General Duty Clause applies to the facility's handling of explosive dust and require the facility to perform specific steps that are sufficient to ensure that workers and others who live, work, recreate in the facility's vicinity are protected from the dangers posed by combustible dust. At a minimum, the permit should:

- A. Identify the Clean Air Act's General Duty Clause as an applicable requirement with respect to the facility's handling of combustible dust.
- B. Specifically require the facility to prepare a hazard analysis identifying the hazards associated with explosive dust and the facility's processes, potential fire and explosion scenarios, and the consequences of a fire or explosion.
- C. Establish specific design and operation standards that the facility must meet to prevent a dust-related fire or explosion.
- D. Establish recordkeeping and reporting requirements sufficient to demonstrate that the facility is meeting its General Duty Clause obligations.

### **Finally, Alabama Must Issue Better Permits for Future Wood Pellet Mills.**

Given the heavy burden this industry places on the citizens and environment of Alabama, the undersigned groups oppose the issuance of permits for new wood pellet mills. However, if the state does issue permits for new facilities or for modifications at existing facilities, officials must ensure new permits require facilities to comply with all requirements under the Clean Air Act. The undersigned groups call for the following specific actions in future permitting:

- 1. Require "major" sources of air pollution to install the best available control technology.** As EIP's report reveals, many pellet mills with major source permits evade using the best available control technology, or any control technology at all, while facilities with minor source permits, often the same size or larger, do utilize controls. Alabama must not reward companies for refusing to install controls that would reduce facility emissions to minor levels. Rather, Alabama must require new or modified major sources to reduce emissions using controls that are at least as effective as those utilized by the best-controlled minor sources. This includes using VOC controls that achieve at least 95% reductions on emissions on each of the major sources of pollution at the facility. If facilities in Georgia and Alabama can do this, so can Alabama facilities.
- 2. Ensure Communities are Notified of and Able to Participate in Permitting Decisions.** Many of the air permits EIP surveyed from across the South were issued without any public

notice or the ability to comment, including permits for the initial construction of facilities, in contravention of the Clean Air Act. This means communities were not informed of the decision to allow sources of air pollution to locate in their backyard. States should ensure that the public has a meaningful opportunity to participate in any permit proceeding for a new or modified wood pellet mill.

- 3. Institute pellet production limits at facilities that claim to be too “minor” for the best available pollution controls.** If pollution controls will not keep emissions below legal limits when a facility is operated at full capacity, the facility’s permit must restrict maximum production to a level that ensures the facility will not exceed the major source threshold.

The Clean Air Act only works to protect health and the environment when state agencies are fully implementing all of the Act’s requirements. The undersigned groups call on Alabama to address the errors and omissions identified in this letter and in EIP’s report, and to further make proactive moves to better understand and control emissions from this emerging industry in the future.

Please contact Patrick Anderson at [panderson@powellenvironmentallaw.com](mailto:panderson@powellenvironmentallaw.com) or (470) 440-1124 to respond to our request or to obtain additional information. We thank you for your leadership on the environment and your concern for the health and well-being of Alabama’s citizens.

Sincerely,

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