

South Carolina Department of Health and Environmental Control
Bureau of Air Quality
Response to Comments
Public Notice #21-023-SOP-C-H
Effingham Pellets, LLC (1040-0165-CA)

The following is the SC Department of Health and Environmental Control's (SC DHEC) Bureau of Air Quality (Department) response to the comments made and issues raised during the formal comment period held May 17, 2021 through July 1, 2021 regarding the draft Effingham Pellets, LLC state construction permit. The written comments received regarding the draft permit are available for viewing at the SC DHEC Columbia office located at 2600 Bull Street, Columbia, SC 29201, or hardcopies can be requested by contacting our Freedom of Information Office at (803) 595-3817.

A public hearing was held by the Department on June 17, 2021, to receive oral and written comments on the proposed project. Due to health concerns associated with the COVID-19 pandemic the public hearing was held virtually using Microsoft Teams and a telephone call-in number to allow for public participation while protecting public health under current guidance to prevent the spread of COVID-19. Approximately 38 members of the public participated in the virtual hearing, of those, 19 people provided oral comments. During the comment period a total of 2,406 written and oral comments were received.

During the comment period, comments were received from the general public and representatives of several organizations including the Dogwood Alliance, the Midlands Sierra Club, the Whitney M. Slater Foundation, the U.S. Industrial Pellet Association, the New Alpha Community Development Corporation, the Pee Dee Indian Tribe, and the Pee Dee Minority Health Office.

The Department has reviewed each comment and revised the draft permit where appropriate based on the Department's regulatory authority. The following is a summary of the changes to the draft permit and other actions taken by the Department in response to the public comments received during the public comment period:

- The fugitive dust condition (C.8) has been updated to reflect the submission and approval of the Best Management Practices (BMP) Plan in response to comments received during the public notice period, rather than within 120 days of permit issuance.
- An air dispersion modeling analysis was completed by the Department to further evaluate compliance and to address community concerns.

The Department has reviewed and provided a written summary of the comments followed by the Department's response:

GENERAL SUPPORT OR OPPOSITION: The Department received general comments in support or opposition to the issuance of the Effingham Pellets air construction permit.

Department Response: The Department appreciates all comments made regarding the Effingham Pellets draft air construction permit. However, the Department does not have the authority to make permitting decisions based on community, business, employee, and customer approval or disapproval of the company/facility. The Department's decision is based on the technical review of the application and regulatory requirements in place at the time the application was submitted and whether the facility has demonstrated that it can meet all applicable air regulatory requirements if operated according to the information provided in the application. The Department has considered all comments received pertaining to the draft construction permit and the facility's ability or inability to meet applicable air regulatory requirements, as detailed in the comments and responses below.

NOISE: The Department has received comments in opposition to the proposed construction project expressing concerns that the project will lead to increased noise from the facility's operations and from increased truck traffic.

Department Response: The Department does not have any noise standards in its air quality regulations and therefore lacks authority to base a permit decision on noise levels. Issues such as noise are typically addressed at the local level by municipalities or counties. However, excessive noise levels not usual for a site should be reported to the SC DHEC regional office. Abnormal noise could be an indication that equipment is not operating properly.

ODOR: The Department received comments in opposition to the proposed construction project citing concerns of increased odors from the facility's operations.

Department Response: The presence of odor does not necessarily indicate the presence of dangerous air pollution. Many air pollutants can be detected by smell at much lower concentrations than the maximum allowable concentrations established to protect public health. There are no state or federal odor regulations administered by the Department that would apply to Effingham Pellets. The Department's regional offices do investigate citizen complaints, including odor complaints, when they occur. Abnormal odors could be an indication of a malfunction or equipment issue and thus should be reported to the Department.

The Department did reach out to Effingham Pellets to ask the facility to provide a response to community concerns about potential increased odor. Effingham Pellets stated that they do not expect any noticeable odors from the facility. Effingham Pellets indicated that the pellets themselves typically have a very mild scent, similar to being in a forest, and would likely be undetectable beyond property lines. The facility indicated that stronger scents often attributed to wood product facilities are associated with wood combustion and high-temperature drying, neither of which will be present at the proposed mill.

ENVIRONMENTAL JUSTICE: The Department received comments in opposition to the proposed construction project requesting that a full Environmental Justice report be completed. Commenters claim that the project would disproportionately impact low-income communities and communities of color, noting that the population of Florence County is approximately 42% Black or African American and has a relatively high poverty rate, especially its youth, with around 25% of residents under 18 living below the poverty line.

Commentors also assert that the community that would be impacted by the new project has already been disproportionately affected by COVID-19. The Dogwood Alliance submitted a comment to specify that Florence County experienced more cases of COVID-19 per capita and a lower vaccination rate in comparison to the national average. The commenter asserts that the emissions of particulate matter (PM), hazardous air pollutants (HAPs), and volatile organic compounds (VOCs) would contribute to an even higher risk of respiratory illnesses.

Department Response: As stated on our website, DHEC is committed to “the fair treatment and meaningful involvement of people of all races, cultures and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and polices in working towards increasing prosperity of all South Carolinians.” To that end, DHEC utilized EPA’s EJSCREEN to review the environmental and demographic indicators near the proposed project located on 4509 Ingram Bypass in Effingham, SC. Upon review of the EJSCREEN data, the area ranked in the 83rd percentile for low-income population within a one-mile radius and the 80th percentile for wastewater discharge within a two-mile radius. Although EPA has stated that the 80th percentile has been “helpful to establish a suggested Agency starting point for the purpose of identifying geographic areas that may warrant further consideration, analysis, or outreach,” the EPA webpage (<https://www.epa.gov/ejscreen/purposes-and-uses-ejscreen>) details how EPA intended for EJSCREEN to be used.

Screening tools should be used for a “screening-level” look. Screening is a useful first step in understanding or highlighting locations that may be candidates for further review. However, it is essential to remember that screening-level results:

- Do no, by themselves, determine the existence or absence of environmental justice concerns in a given location
- They do not provide a risk assessment
- Have other significant limitations.

DHEC is committed to environmental justice and engaging with communities, environmental justice stakeholders, and permit applicants to address environmental justice concerns and ensure that citizens in overburdened communities can have meaningful involvement in our decision-making process. Based on the comments received, the residents of Effingham, SC have identified themselves as an EJ community. In an effort to provide opportunities for meaningful engagement to the community near Effingham Pellets, the Department held a public hearing and took other steps to communicate information about the project and address the community's questions and concerns throughout the permitting process (See section "Community Involvement and Community Benefit Questions").

South Carolina air quality regulations do not require an EJ analysis or assessment of a facility's cumulative effects. Facilities are required to ensure that National Ambient Air Quality Standards (NAAQS) are not violated and that applicable regulatory requirements are met. South Carolina is currently, and has a long history of, meeting the NAAQS statewide. These standards have been established by the US EPA and set to be protective of public health, including those sensitive and vulnerable populations, and the environment. The Department also requires applicants to demonstrate the proposed project will not cause or contribute to a violation of the NAAQS. In this case, the application showed that controlled emissions of the relevant NAAQS pollutants would be below threshold levels requiring an air quality modeling analysis, demonstrating that no violation of the NAAQS would occur. Although the proposed emissions from the facility were shown to be below their respective exemption thresholds for modeling purposes, an air dispersion modeling analysis was nonetheless completed by the Department to further evaluate compliance and to address community concerns. This modeling analysis further indicated that no interference with attainment or maintenance of the NAAQS would occur (See section "Air Pollution and Community Health"). Additionally, the applicant was able to demonstrate the ability to comply with other applicable regulatory requirements governing pollutant emissions of concern to the commenter, including PM, HAPs, and VOCs. Although the facility is considered a minor source under applicable air quality regulations, the permit also contains added precautions such as a production limit, Best Management Practices Plan provisions, and requirements for periodic source testing and rolling emissions calculations to ensure ongoing compliance. The air permit decision is based on all applicable air quality regulations and review of all technical and other information submitted showing compliance with requirements for issuance of the permit.

It is a priority of the Department to empower communities to work closely with regulated facilities and local officials to identify potential community hazards and steps that could be taken to reduce risks. The Department was recently awarded a U.S. EPA grant for environmental justice initiatives that will benefit low-income and minority communities. The Department will use this new funding to further enhance our ability to work collaboratively with environmental justice communities to understand, promote, and integrate approaches that provide meaningful and measurable improvements to public health and the environment. The Department looks forward to working closely with our environmental justice partners across South Carolina as we pilot new training programs and other initiatives to expand statewide.

COMMUNITY INVOLVEMENT AND COMMUNITY BENEFIT QUESTIONS: The Department received a comment in opposition of the proposed construction project due the lack of opportunity for community involvement in the process. The commentor asserts that the County Council did not allow public comment periods for issues not on the agenda while denying community members the opportunity to add the air permit issue to the council meeting agenda. The Department also received many comments opposed to the proposed project, claiming bias in favor of large businesses at the expense of the community. Commenters also assert that the new facility would only create 10 new jobs that may or may not be available to members of the surrounding community.

Department Response: The Department has no authority or say in county council processes or any other local decision-making. The Effingham Pellets, LLC permit is a minor source air quality permit that was not required by regulation to undergo a public notice or public hearing. However, in this case, the Department provided public notice of the draft permit based on concerns previously expressed about these types of plants and a perceived need for community involvement in the permit process. The Department also held a public hearing and had several meetings with the community leaders during the application review to provide updates on the project. The Department also developed a webpage specific to Effingham Pellets so the community would have one place to obtain up-to-date information on the project, including a copy of the public hearing presentation and recording of the public hearing. The Department strives to ensure that engagement with nearby communities is meaningful. Meaningful community engagement encourages transparency, dialogue, and open communication between all Department stakeholders, including community members and regulated facilities.

The air regulations do not require or allow consideration of how a community may or may not benefit from a proposed project. Therefore, a permit cannot be denied based on such factors. In addition, the Department does not make permitting decisions based on a business's size or finances. Facilities of many different types and sizes are required to obtain

Department air quality permits prior to construction or operation. Permit decisions are based on the specific permit application received and the applicant's ability to satisfy regulatory requirements for issuance of a permit.

AIR POLLUTION AND COMMUNITY HEALTH: The Department received several comments in opposition to the proposed construction project citing concerns about air pollution and the effects it will have on the health of people in the community. Commenters raised concerns about the increase of several air pollutants, such as PM, VOCs, and HAPs. The Department also received several comments citing various health issues associated with these pollutants, predominantly concerning particulates and their impact on the respiratory system. Commenters highlighted high rates of respiratory diseases such as asthma and lung cancer and health impacts on children, claiming that these and similar illnesses can be caused or exacerbated by PM and other air pollutants.

Department Response: Federal and state air quality regulations are established to be protective of public health, using scientific data and human health risk assessments. These regulations include standards for ambient air quality and emission limits, controls and/or operational requirements for industrial facilities. The Clean Air Act (CAA) requires the EPA to establish NAAQS for six common ("criteria") pollutants considered harmful to public health. There are two types of NAAQS: primary standards and secondary standards. Primary standards are set to protect public health, in particular, the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards are set to protect public welfare, such as protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

The EPA is also required to designate areas of the country as nonattainment when monitoring information shows pollutant concentrations exceed, or violate, a set standard. There are no nonattainment areas in South Carolina for pollutants emitted by this project.

National ambient standards have been set for the following pollutants emitted from the proposed project: particulate matter (PM) consisting of particulate matter less than 10 microns in diameter (PM₁₀) and particulate matter less than 2.5 microns in diameter (PM_{2.5}), and carbon monoxide (CO). In accordance with S.C. Regulation 61-62.1, "no permit to construct or modify a source will be issued if emissions interfere with attainment or maintenance of any state or federal standard." Effingham Pellets' proposed operations were evaluated to determine if the emissions from the proposed project would interfere with attainment of the NAAQS. The emissions rates for the three criteria pollutants were determined to be well under the thresholds specified in the Modeling Guidelines for Air Quality Permits under which air quality dispersion modeling would be required. These minimal emissions indicate that the facility will be in compliance with the NAAQS at and

beyond the property boundary; however, in response to the many comments concerning the impact of the emissions in the surrounding area, the Department has completed computer modeling to further evaluate compliance. The Bureau of Air Quality performed this analysis using an EPA-approved air dispersion computer model to simulate how the facility's maximum emissions would be dispersed into the atmosphere surrounding the proposed site. The results of the analysis indicate that the maximum concentration of emissions attributed to Effingham Pellets and representative background data for the Effingham Pellets location show that the total ambient air quality in the area will be well below the NAAQS for each of the emitted criteria pollutants with concentrations of 28% (24-hr PM₁₀), 80% (24-hr PM_{2.5}), and 75% (Annual PM_{2.5}), indicating that the proposed project will not cause or contribute to a violation of the NAAQS for any applicable pollutant if the facility is operated in compliance with the permit.

EPA and Department regulations distinguish between "major sources" and "minor sources" based on whether a project's emissions will exceed specified major source emission thresholds. This facility is considered a true minor source for all relevant pollutants, including the PM and VOC emissions referenced by the commenters. The facility is also a true minor source of HAPs, with less than 10 tons per year for any single HAP and less than 25 tons per year for total combined HAPs. In addition, Effingham Pellets is subject to the state air toxics rule (R.61-62.5, Standard No. 8). This rule requires facilities that emit a regulated state air toxic to meet the applicable ambient standard established for that toxic pollutant at the property boundary or beyond. Effingham Pellets has demonstrated that it would meet all established standards, using the EPA-approved air dispersion computer model SCREEN3 model. This is a very conservative model used to screen sources that may need to use refined more complicated modeling to demonstrate compliance.

The air quality analysis for all criteria and air toxic pollutants was based on the facility operating at its full permitted capacity for 24 hours per day. In addition, stack testing will be performed to verify appropriate emission factors were used to calculate emission rates for all pollutants emitted from the process. The facility is also required to maintain rolling monthly calculations of all relevant pollutants, including PM, HAPs, and VOCs, and must ensure production levels remain within the permitted limit.

The permit also includes requirements for the control of fugitive dust, as discussed further in the "Dust and Truck Traffic" section of this response document. A Best Management Practices Plan is required to decrease dust leaving the facility and reduce overall particulate matter emissions.

DUST AND TRUCK TRAFFIC: The Department received several comments opposed to the proposed construction project citing concerns about dust outside of the property

boundaries. Commentors expressed concern about dust generated by increased truck traffic. One commenter also expressed concern about wood pellets coming off of trucks. Another commentor asserted there should be a bond or a financial savings account created by the company for the purpose of adding protections such as additional filters and necessary improvements in case of failures of the fugitive dust plan. Commenters also asserted that Effingham Pellets should submit a Best Management Practices Plan for approval by the Department before the permit is issued.

Department Response: The Department understands that Effingham Pellets, like other wood pellets plants, has the potential to generate large amounts of fugitive dust, based on the nature of operation alone. As with all facilities in the state with the potential to generate fugitive dust, Effingham Pellets is required to implement measures to minimize fugitive dust to the extent possible. More specifically, the facility must meet the requirements under South Carolina Regulation 61-62.5, Standard No. 4, Section X and S.C. Regulation 61-62.6, Section III, governing non-enclosed operations and control of fugitive particulate matter, respectively. These requirements also appear in the permit. The Department has also included dust control provisions requiring Effingham Pellets to control and minimize fugitive dust emissions from the plant and required Effingham Pellets to submit a Best Management Practices (BMP) Plan for dust control. Although the draft permit on public notice required submission of the BMP Plan for Department review and approval within 120 days of final permit issuance, the Department's final permit instead required the submission of the BMP Plan prior to permit issuance, given concerns expressed in the comments and to not delay its submittal. Effingham Pellets submitted the BMP Plan to the Department electronically on July, 20, 2021, and it was reviewed and approved by the Department on July 22, 2021. The BMP Plan is available to the public upon request through DHEC's Freedom of Information process.

Department regulations do not include any applicable bond or other similar requirement. However, if it is determined that the BMP Plan measures, pursuant to this permit, are insufficient to ensure the facility's impact to any nearby communities is minimized, the facility is required to revise the plan so that it is sufficient to minimize impacts. The Department's regional office will also investigate citizen's complaints, including dust complaints, when received from the public. The facility would also be subject to enforcement action as appropriate to the extent dust is not minimized as required by the permit. All permit terms, including requirements to develop and implement the BMP Plan, are enforceable.

The Department regulates the fugitive dust from roads within the facility; however, the Department does not have the authority to regulate truck traffic on the public roads. Tailpipe emissions from mobile sources are regulated by the EPA under the authority of the CAA. The permit requires the facility's roadways to be paved and/or treated to minimize dust. The

permit also requires the BMP Plan to address dust control methods for roadways and truck operations at the facility. The BMP Plan should decrease dust leaving the facility. The BMP Plan also addresses spilled materials, citing SC Code of Laws which require loads and covers to be firmly attached to prevent the escape of materials loaded onto vehicles. Signage for these laws will be posted at all truck entrances and exits. In addition to implementing the BMP Plan, Effingham Pellets asserts that truck traffic between itself and Charles Ingram will not contribute to an increase in total truck traffic through the community. Given that Charles Ingram was already selling and transporting shavings to other facilities further from the lumber mill, each truck load used by the proposed facility is a truck kept off of residential roads. Effingham Pellets indicates that this will offset the transportation of finished pellets and any additional truck traffic that may result from shavings sourced from other facilities.

See the “Air Pollution and Community Health” section of this response document for further discussion in response to concerns related to health and particulate matter emissions.

CLIMATE, DEFORESTATION, AND FLOODING: The Department received comments opposed to the proposed construction project, requesting that impacts on climate, South Carolina’s forests, and biodiversity be addressed. Commenters assert that the use of wood residues as alternative fuel are heavily contributing to increased carbon emissions, claiming that the annual throughput of the facility could result in nearly 3 acres of forests cut down every day and produce carbon dioxide emissions equivalent to as much as an additional 18,171 cars on the road. Commenters also state that pellets are often sourced from forests in global biodiversity hotspots, and destruction of natural forests and the expansion of industrial tree plantations pose a serious threat to South Carolina’s climate change resiliency. Commenters voiced concern that the removal of trees in the Pee Dee area is leading to increased flooding.

Department Response: As stated above, the Department’s permitting decisions are based on the Department’s technical review of an application and the regulatory requirements in place at the time of the Department’s review. After rigorous review based on all information submitted, including required emissions data for the project, Effingham Pellets’ application for its proposed construction project was determined to demonstrate that all applicable air quality requirements could be met. Applicable air regulations do not provide for consideration of deforestation, flooding impacts, biodiversity impacts, downstream uses of pellet fuel, or other similar concerns; therefore, these matters are outside the scope of the Department’s permit review. The types of facilities that choose to locate and operate in the state pursuant to applicable local zoning requirements are also a matter outside of the Department’s control.

The proposed operations at Effingham Pellets do not include the harvesting or processing of whole trees. The proposed facility will only be capable of utilizing an existing byproduct (wood shavings) from existing wood products facilities. Although the Department lacks the authority to specifically address forest impacts in the permit, the permit does contain a limit on Effingham Pellets' annual wood pellet production for purposes of compliance with applicable limits.