SC DEPARTMENT *of*
ENVIRONMENTAL
SERVICES

Bureau of Air Quality
Response to Comments on Air Quality

General Operating Permit for Concrete Plants
Statewide, South Carolina

The following is the South Carolina Department of Environmental Services, Bureau of Air Quality's (SCDES or Department) response to the comments made during the formal comment period held September 23, 2025, through October 23, 2025, and the reopened period held January 23, 2026, through March 3, 2026, regarding the draft General Construction Permit for Concrete Plants as well as the draft General Operating Permit for Concrete Plants.

The written Department Decision, permit, statement of basis, this response document, and a letter of notification are located for viewing at the SCDES Columbia office located at 2600 Bull Street, Columbia SC 29201, and on our webpage at https://des.sc.gov/programs/bureau-air-quality/air-quality-department-decisions.

Hard copies of all the above-listed documents and written comments received can be requested by contacting our Freedom of Information Office at (803) 898-3882.

Air Pollution Impacts - Comments were received expressing concerns about air quality impacts and associated health, property, and quality of life impacts. Comments raised specific concern about effects of particulate matter, diesel emissions, and toxic pollutants for the public, including concerns about silicosis, lung cancer, COPD, and kidney disease, among other health concerns.

Response: The issued permits reflect updates to the Department's preexisting general construction and operating permits for concrete plants, which are not specific to any one particular facility but rather are designed to cover facilities with similar operations that have applied for and obtained coverage under the general permits. To be eligible for coverage under these permits, sources must be minor emissions sources or must accept federally enforceable restrictions limiting their potential to emit particulate matter to below the threshold for becoming a "major" source. Sources accepting federally enforceable limits on their potential to emit must record daily production levels and report production information annually.

The issued permits consist of relevant emission limits, operational requirements, and recordkeeping and reporting requirements for owners and operators of concrete plants covered by the general permits. These limits and requirements are based on air quality regulations established at the federal and state level which are designed to protect people's health and overall welfare. These regulations are based on scientific research and studies about how pollution affects human health. They set limits on how much pollution can be released and require facilities to use controls and follow certain operating practices.

Under the Clean Air Act, the U.S. Environmental Protection Agency (EPA) designates areas as in "nonattainment" when monitored pollutant concentrations exceed federal health-based ambient air quality standards. For concrete plants, the primary pollutant emitted is particulate matter (dust). Ambient air quality standards exist for fine particles ($PM_{2.5}$) and larger particles (PM_{10}), which are known to affect breathing and health. Currently, South Carolina does not have any nonattainment areas.

To meet the requirements of the general permits, concrete plants must use equipment and practices to control dust, such as dust collectors and water sprays. They are also required to keep records of their operations and maintenance and perform regular inspections to ensure they stay within permitted limits. When implemented in accordance with the general permits, permitted operations by covered concrete plants are expected to effectively minimize particulate and other regulated emissions.

Free Silica and Silicosis - Comments were received expressing concern about silica dust, a type of particulate matter, and links to silicosis and other health impacts.

Response: Silica is a naturally occurring mineral found in common materials like sand, soil, and rock. Because of this, small amounts of silica are already present in the ambient air from everyday activities like windblown dust or driving on dirt roads.

Serious health problems, such as lung cancer and silicosis, have been associated with long term exposure to high concentrations of respirable silica, primarily in occupational settings where workers may be exposed to much higher concentrations over time.

To protect public health, the U.S. Environmental Protection Agency (EPA) has set ambient air quality standards for particulate matter (dust) in the air. In 1996, the EPA evaluated available scientific information related to silica exposure, including both occupational and non-occupational exposure studies and data, and concluded that healthy individuals exposed to ambient concentrations of silica were adequately protected by the federal ambient air quality standards for PM_{10}. Since that evaluation, EPA has further strengthened the particulate standards to provide increased protection of public health and the environment. Because EPA has determined that these existing standards sufficiently regulate silica exposure, it has not created a separate ambient standard specifically for silica and has not listed silica as a hazardous air pollutant. Therefore, the Department's air quality regulations

and permits similarly focus on controlling particulate matter emissions, including emissions that may contain silica.

In addition, workplace exposure to silica is regulated by the Occupational Safety and Health Administration (OSHA), which sets strict limits to protect workers.

For concrete plants, the permit requires multiple dust control measures to reduce emissions. These include using dust filters, water sprays, and enclosed systems during operations like loading and batching. The facility must also control dust from roads and other open areas using water, paving, or similar methods.

When these controls are properly used, they are effective at reducing dust levels both on-site and in surrounding areas, helping protect workers and the public.

Noise Levels – Comments were received concerning noise levels of the facility and related operations.

Response: If noise from the facility becomes unusually loud or different from normal operations, it should be reported to the Department's regional office. This could be a sign that equipment is not working properly.

Noise is not regulated under Department air quality permits or air quality regulations. However, concerns about excessive noise can be addressed to local city or county officials, who may handle noise-related issues.

Impacts on Other Non-Air Quality Resources – Comments were received during the public comment period expressing concern about potential impacts on wildlife, property value, land, and water quality, as well as general quality of life.

Response: Air permit decisions are based solely on the applicable state and federal air quality regulations and standards in effect at the time of permitting. Based on the Department's review, the conditions and terms of the issued general permits are consistent with relevant air quality regulations and requirements.

Concerns related to water resources, wildlife, land impacts, property values, and general quality of life are outside the scope of the Department's air quality regulatory authority and, therefore, not addressed through the air quality permitting process. The Department understands that such concerns are very important to the community. While these considerations matter, the Department's role in this process is limited to evaluating air quality under applicable state and federal regulations. The Department does address other environmental concerns through separate regulatory programs. For example, concrete plants are required to comply with stormwater regulations under an NPDES permit, which includes measures to prevent pollutants from leaving the site during rainfall.

In addition, while not specifically addressed by the terms of these general air quality permits, it is noted that secondary ambient air quality standards for particulate matter are designed not only to protect public health but also to safeguard the environment, including plants, animals, and ecosystems.

Decisions related to facility location, zoning, and land use are typically made by local city or county governments, often before a permit application is submitted to the Department.

Truck traffic – Comments were received during the public comment period concerning the influx of truck traffic and road impacts. Comments also expressed concern with trucks' diesel emissions.

Response: The Department does not have the authority to regulate truck traffic on public roads. That responsibility belongs to the South Carolina Department of Transportation.

The Department also does not regulate emissions directly from vehicles (like diesel exhaust from trucks). Such emissions are regulated by the U.S. Environmental Protection Agency (EPA).

However, the Department does regulate fugitive dust emissions from roadways and trucks within the facility. The general permits require the site to control dust on its roadways and develop and implement a dust control plan.

The facility must also adhere to other permit requirements to limit visible emissions and reduce dust from operations, especially for activities that are not enclosed.

Monitoring – A comment was received requesting the Department require continuous or routine monitoring of particulate matter and silica, with results made public.

Response: The Department relies on its stationary network of ambient air monitors to continuously monitor air quality throughout the state and determine compliance with the NAAQS and state ambient air quality standards as outlined by federal regulations. South Carolina's ambient air monitoring network monitoring stations are strategically located in a diverse set of geographical locations to represent ambient pollution levels. Per 40 Code of Federal Regulations (CFR) Part 58, Appendix D, ambient air monitors are required to be placed in areas with the highest population, or where the highest pollutant concentrations are expected to occur. If the ambient network monitors demonstrate that air pollutant concentrations are below the national standards, it is reasonable to expect that the air pollutant concentrations in the surrounding areas are also lower than the national standards. The monitoring network is reviewed annually to ensure that the requirements and the needs of the air program are met. The Department has operated an air quality monitoring network in South Carolina since 1959. The monitoring network currently includes eighteen (18) $PM_{2.5}$ monitors and samplers and two (2) PM_{10} monitors and samplers at ten

(10) sites across the state. 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. All monitors in South Carolina show attainment with all current air quality standards, including for PM_{10} or $PM_{2.5}$.

Other Permit Concerns - Comments were received expressing concerns that the general permit may not fully consider the unique circumstances of specific facilities and the communities surrounding them (and referenced communities that lack zoning protections, as well as lack of consideration of proximity to schools, churches, ballparks, or neighborhoods). Comments requested additional terms be written into permits when plants are located beside residential neighborhoods. Comments also expressed concerns about the removal of specific conditions related to fuel burning equipment and crushing and screening operations.

Response: Even though the general permits will be used statewide, each facility seeking coverage under these permits must apply separately, and each application for permit coverage is reviewed separately based on the applicant's proposed equipment and applicable regulations. Concerns about any specific grant or denial of permit coverage to a specific facility are outside the scope of this general permit issuance.

Previous permit language applicable regarding fuel combustion sources has been removed from the updated general permits because most concrete plants do not have fuel combustion sources that require a permit. However, any fuel combustion operations requiring a permit will still be addressed during the permitting process. If a facility has additional equipment, like generators, fuel-burning units, or crushing operations, those operations are evaluated separately and will be addressed by extra, site-specific permit conditions when required.

The Department also considers how close facilities seeking coverage under these general permits are to nearby homes and communities. Specifically, air dispersion modeling may be required on a case-by-case basis, upon consideration of factors such as proximity to residences and population density, to show how emissions will spread and to ensure air quality standards are met in surrounding areas. Any alleged violations identified through inspections, reporting reviews, or complaint investigations are referred to the Department's Enforcement Section for appropriate action and resolution, which may include civil penalties as well as any necessary corrective action to bring the facility into compliance.

Temporary crushing and screening operations are no longer addressed by these general permits, as these activities now require coverage under a separate permit designed specifically for those types of operations. This change helps to promote clarity and to ensure the correct rules are applied to each set of operations.

General Support – Commenters during the public hearing expressed general support for the permits.

Response: The Department sincerely appreciates the time and input provided by all commenters regarding the draft general construction and operating permits for concrete plants. Public feedback is an important part of the process and is carefully considered.

While we value the perspectives shared by community members, businesses, employees, and customers, the Department's authority requires that permitting decisions be based on a technical review consistent with applicable state and federal air quality regulations. Permit decisions are not based on general community or other approval or disapproval of an industry or facility.