Kathryn Bazan

See attached comments.

June 14, 2023

Gwen Ricco
MC 205, Office of Legal Services
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: Non-Rule Project No. 2022-033-OTH-NR (Amendment to the Concrete Batch Plant Standard Permit)

Ms. Ricco,

For many years, community members in Dallas have been vocal about the negative impact that concrete batch plants have on the air quality within their neighborhoods and health of their communities. As a result of the community's expressed concerns regarding a lack of a public input processes for batch plants and the state's permitting of batch plants near residential, public and private schools, parks, churches, day cares, and other sensitive land uses, the city adopted a zoning code amendment to require specific use permits for all concrete and asphalt batch plants. Based on the lived experiences of our communities and public input during the code amendment process, I have the following recommendations and comments on the TCEQ's draft amendment.

Distance from Communities

All emissions sources of a facility should be located at least 1,650 feet away from subdivisions, residential properties, public or private schools, places of worship, public parks, outdoor sports or recreational fields, crushing plants, and hot mix asphalt plants.

Concrete batch plant operations emit fugitive emissions that include several air pollutants, including ozone precursors such as nitrogen oxides (NOx) and volatile organic compounds (VOCs) and other criteria pollutants like PM10 and PM2.5 (fine particle pollution). Concrete batch plants include multiple sources of fugitive emissions, including: the unloading of aggregate or sand from truck, rail or barge onto storage piles; the movement of aggregate and sand to maintain the shape of storage piles; the process of filling the bucket of the front-end loader for transfer to the hoppers; wind erosion of the sand and aggregate storage piles; and the movement of delivery trucks, cement trucks and front-end loaders over the haul roads and yard surfaces. Roadways internal to the plant site are also big contributors to the overall level of dust associated with a plant. Pollutants such as PM, VOCs, and ozone may cause significant health effects, including fatigue, nausea, and dizziness; reduced lung function; worsening of medical conditions like asthma and heart disease; and increased mortality from lung cancer and heart disease.

Public Notice and Participation

Newspaper notices are no longer an effective resource if used as the sole method for communicating public notices for permits, as not all residents can afford a subscription. Online notices are more effective, but not everyone has reliable internet access. Therefore, the TCEQ should utilize other potentially more effective forms of notification, e.g., notifications through the postal mail service. Every home receives mail and there is no direct cost to the homeowner to receive mail. TCEQ should require that facilities send out a mass mailer informing communities of any proposed CBP operation. The mailer could be done through the USPS presorted standard mail option. Presort mail would allow the mailer to be delivered to every home located within the zip code in which the CBP is to be located. These options would ensure that every person that could potentially be affected by the operation of the CBP would be notified of the proposed facility and of their opportunity to participate in the public commenting process. If a public meeting or hearing is held, a subsequent mass mailer should also be done notifying them how they can participate in English and Spanish.

Air Dispersion Modeling

The updated protectiveness review was conducted using the ISCST3 model (Version 02035, but ISCST3 is no longer the EPA's preferred air dispersion model. The AERMOD modeling system was formally adopted as the preferred dispersion modeling in November 2005, replacing ISC3. AERMOD incorporates more current state-of-the-art modeling techniques that replace the antiquated model algorithms contained in ISC3. Specifically, AERMOD contains new or improved algorithms and is a more appropriate modeling system for modeling potential impacts from emissions authorized by the concrete batch plant standard permit and it is recommended that the protectiveness review of the permit is reevaluated using AERMOD.

Protectiveness Review & PM2.5 Standard

While the TCEQ performed an updated protectiveness review as part of the standard permit amendment proposal, it should commit to performing additional modeling and a new protectiveness review if the EPA's January 6, 2023 proposal to revise the primary (health based) annual PM2.5 standard from its current level of 12.0 µg/m3 to within the range of 9.0 to 10.0 µg/m3 is finalized prior to adoption of the standard permit. This revision to the NAAQS could result in Dallas County in Texas being potentially considered as non-attainment for PM2.5. TCEQ should also review and proportionately adjust setback distances based on any revision to the NAAQS.

Compliance Inspections

TCEQ should ensure compliance with the permit by requiring that all CBPs be inspected through unannounced inspections by TCEQ or the local air control agency at regular intervals (at least every 24 months) to ensure compliance with the standard permit. The inspection should evaluate the condition of barrier fencing, shrouding, roads, equipment operation, and compliance with any other best management practices employed at the facility. Inspectors should review the complaint history (if relevant) with the operator and discuss what actions have been taken to ensure they are operating in a manner to reduce complaints from the community.

Dust Suppressing Fencing

TCEQ allows the installation of dust suppression fencing or other barrier to be installed as a border around roads and other traffic and work areas. The installation of such barriers as specified under condition 8(I) allows a site to avoid the buffer distance requirements in condition 8(H). In Definitions Section (2)(D), the permit should only allow "Dust suppressing fencing" and not "other barriers." Dust suppressing fencing should be defined as solid fence materials as allowed by the jurisdiction or municipality that is at least 12 feet high that is used to prevent fugitive dust from stationary equipment stockpiles, in-plant roads, and traffic areas from leaving the plant property. In addition, the standard permit should require regular inspection of the barrier fencing, regular cleaning at a specified interval, and replacement of any barrier material on a specified schedule to ensure proper effectiveness of the barrier fencing at suppressing dust.

Fence Line Monitoring and Publicly Available Data

In addition to engineering controls for dust suppression, TCEQ should require all CBPs to install fenceline PM2.5/10 sensors or monitors. Given the threat of fugitive emissions going beyond the fence line and the threat of batch plant operations to human health and the environment, owners and operators should be required to install fence line monitors and be required to make the monitoring data publicly available.

Cumulative Impacts

To determine cumulative impacts in the protectiveness review, modeled impacts from the concrete batch plant emission sources were combined with a background ambient concentration. Based on review, it does not appear that any additional off-site emission sources were included in the cumulative analysis. Further, it does not appear that the requirements of the amended standard permit include any proximity limitations regarding multiple concrete batch plants located nearby each other. The protectiveness review should be updated to

evaluate and account for possible overlap of impacts of multiple concrete batch plants authorized under the standard permit located in close proximity to each other to fully demonstrate that cumulative impacts from the amended CBP SP will not lead to violations of the NAAQS and/or state health effects levels, or cause nuisance level impacts on local residents and businesses.

While TCEQ made the recommendation to increase the minimum setback distance for CBP in some counties, as shown in Table 1, most counties remain at the 100 ft setback distance. As mentioned above, it does not appear that TCEQ explicitly considered cumulative impacts in the determination of these setback distances. TCEQ should consider cumulative impacts and also consider the proposed change to the PM2.5 NAAQS when determining the setback distance for each county. TCEQ should consider extending the setback distance for neighboring counties to discourage the migration of CBP from a county with a 200 or 300 ft setback distance to a neighboring county with a 100 ft setback distance. Relying on a minimum 100 ft setback distance alone does not appear to be adequate to address quality of life impacts a CBP may have on adjacent residents and businesses. TCEQ should exercise its discretion to deny CBP permits if that assurance cannot be demonstrated by the applicant or if TCEQ has significant concerns about an area being overburdened or disproportionately impacted with air emission sources. TCEQ should also exercise the same denial authority at renewal if a source has a demonstrated record of causing air quality concerns and/or nuisance concerns for local citizens. Once again, we strongly recommend that TCEQ explore requiring fenceline sensors and/or monitoring for PM2.5 and PM10 emissions for existing facilities already located adjacent to residential neighborhoods, businesses, schools, daycares, or places of worship and that data be maintained and available to TCEQ and EPA for inspection.

Voiding Air Permits

TCEQ should include a requirement that concrete batch plants notify TCEQ within 30 days of ceasing operations so that the permit can be voided. This issue was highlighted in the Sunset Advisory Commission Report and stated “Trying to establish which concrete batch plants are still active when performing inspections wastes staff time and effort. Without updated data on which regulated entities are currently in operation, TCEQ field staff cannot establish accurate inspection schedules, and members of the public do not have access to reliable information about regulated activity in their area.”

Site Plan

To better ensure the identification of emission sources and the protection of human health and the environment, each owner or operator should be required to submit a site plan that clearly identifies: all property lines, emission sources, buildings, tanks, and process vessels and other process equipment in the area in which the facility will be located; and distances to the closest

subdivisions, residential properties, public or private schools, place of worship, public parks, outdoor sports or recreational fields, crushing plants, and hot mix asphalt plants.

Single/Multiple Batch Plants

In Administrative Requirement (3)(J), owners and operators should be prohibited from operating multiple batch plants on the same site. Fugitive emission from a single batch plant may vary widely depending upon a variety of factors, discussed below. Fugitive emissions from multiple batch plants substantially increase fugitive emission variability, particularly without any requirement to conduct air dispersion modeling. Allowing the operation of multiple batch plants at one facility reduces the ability of the owner or operator to prevent human health and environmental impacts to the community.

Housekeeping and Maintenance Requirements

In General Requirements (5) and Operational Requirements (8), the permit should reduce the types of housekeeping and maintenance activities to better reduce fugitive emissions. For example, General Requirements at (5)(E) should make clear that an owner or operator of a permanent batch plant is only allowed to control emissions from in-plant roads and traffic areas by paving them with a cohesive hard surface that is maintained intact and cleaned. Allowing the use of watering, dust suppressant chemicals, and materials such as roofing shingles threatens efforts to improve local water quality, maintain particulate matter attainment status, reduce landfill material and protect the health of residents.

To prevent the tracking of sediment onto adjacent roadways and reduces the generation of dust, operational requirements at (8)(G) should require an owner or operator to, at minimum, both use a vacuum truck (or equivalent) to clean the plant road entrances and use a tire-wash system to remove sediment from the wheels and undercarriage of trucks that haul aggregate, cement, and concrete. The tracking of sediment and dust onto nearby roadways is a primary concern for nearby residents and requires a more comprehensive solution than what is currently required by the draft permit.

Moreover, the permit's housekeeping and maintenance requirements should include specific standards. For example, General Requirements (5)(F) and (G) require the owner and operator to "minimize dust emissions" and "immediately clean up spilled material" but provide no definitions or emission or clean up standards. Operational Requirements at (8)(G) require "the use of a vacuum truck to clean the plant road entrances," or "the use of a tire-wash system" but provide not definitions or emission or clean up standards. As a result, owners and operators may have varying understandings of how to comply with these requirements, implement activities and techniques that vary in effectiveness, and ultimately negatively impact the health and environment of our residents while intending to comply with permit obligations.

Thank you for the opportunity to improve the Concrete Batch Plant Standard Permit to better protect the health of our communities across Texas and the environment.

Sincerely,

Kathryn Bazan

Kathryn Bazan