

Lillian Mauldin

June 13, 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)

Dear Ms. Ricco,

The City of Dallas (the City) is providing comments to the Texas Commission on Environmental Quality (TCEQ) regarding the 2023 amendment to the concrete batch plant standard permit. The City is the third largest city in Texas, serving a population of over 1.3 million residents (2022). As a municipal leader, the City recognizes the importance of ensuring environmental quality, fighting climate change, and advancing environmental justice. In May 2020, the City unanimously adopted the Comprehensive Environmental and Climate Action Plan (CECAP), which is a roadmap to help protect the health and environment of our residents and realize a more prosperous, sustainable, resilient, and just community. In August 2022, the City adopted the Racial Equity Plan (REP), which centers environmental justice by addressing the disproportionate impact of pollution and climate issues on historically disadvantaged communities. CECAP and REP goals include mitigating the air quality emissions and other impacts of intensive industrial uses, such as concrete batch plants within our community.

In an effort to advance our goals under the CECAP and REP, the City is implementing a two-phased approach to properly consider and reduce the environmental and health impacts of batch plants. The approach involves amending code provisions to better ensure the proper consideration of zoning districts, spacing, and standards associated with permanent and temporary concrete or

asphalt batching plant uses, including but not limited to, potentially incompatible industrial uses. In May 2022, City Council approved Phase I of the approach, which requires all new permanent and temporary batch plants to obtain a specific use permit and to participate in public hearings at the City Plan Commission and City Council. The City is currently evaluating options for Phase II to implement more refined land use conditions. Reducing human health and environmental impacts from batch plants has been a priority for City residents.

Batch plants significantly impact the air quality and health of our communities. Concrete batch plant operations emit fugitive emissions that include several air pollutants, including ozone precursors like 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.

The City also recognizes that, under the Clean Air Act (CAA), the Dallas-Fort Worth area is in severe nonattainment for the 2008 ozone national ambient air quality standard (NAAQS). Moreover, in January, the U.S. Environmental Protection Agency (EPA) proposed to strengthen the NAAQS for PM2.5. The permitting of batch plants should work to reduce ozone level and at least maintain PM2.5 levels in the area.

City staff held a series of public meetings in both English and Spanish from May 2022 to December 2022, and advanced Phase I of the code amendment provisions to require specific use permits for all concrete and asphalt batch plants due to the urgency expressed regarding a lack of a public process for the batch plants and growing concerns about the location of these batch plants in close proximity to residential, public and private schools, parks, churches, day cares, and other sensitive land uses.

In consideration of the environmental and health impacts from batch plants and consistent with the City's CECAP and REP, the City provides the following comments.

Dust Suppressing Fencing

At 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.

Site Definition

At Definitions Section (2)(I), "Site" should be defined as the total of all stationary sources located on one or more contiguous or adjacent properties. Alternatively, the permit should consider the cumulative impacts of nearby facilities that are authorized to emit air pollutants.

Single/Multiple Batch Plants

At 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.

Air Dispersion Modeling

At Administrative Requirement (3)(I), each owner or operator should be required to submit air dispersion modeling as part of their concrete batch plant standard permit registration. Fugitive emissions from batch plant operations, such as particulate matter and nitrogen dioxide (NO₂), vary widely depending upon the equipment used (e.g., front-end loaders), level of traffic and activity in and around the facility, prioritization of housekeeping and compliance obligations, and other factors. Dispersion modeling will better clarify fugitive emissions from each facility. Each owner or operator should be required to use the AERMOD air dispersion modeling system, which is EPA's preferred dispersion modeling system for these types of facilities.

In the alternative, the City recommends that TCEQ: use the AERMOD air dispersion modeling system to remodel air emissions from batch plants; and conduct separate modeling analyses to account for the different pollutant levels that exist in the different towns, cities, and regions of the State. Based on information obtained by the City, TCEQ chose to use the ISCT3 air dispersion modeling system; and did not sufficiently account for the unique air pollutant levels that exist in the various areas of our state, including the City of Dallas.

Distance from Communities

At Operational Requirements for Permanent and Temporary Concrete Plants (8)(A), 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. As referenced in action Air Quality Action 4 of the CECAP and Big Audacious Goals 2.3 and 2.15 of the REP, increasing the distance between batch plants and residents is a high priority to City residents. Based on available data and in consideration of EPA's process to possibly lower the PM2.5 standard, 1,650 feet is a sufficient and appropriate distance between batch plant emission sources and nearby locations listed above.

Housekeeping and Maintenance Requirements

At 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 the City's effort to improve local water quality, maintain particulate matter attainment status, reduce landfill material, protect the health of our residents, and meet other goals under the CECAP.

To prevent the tracking of sediment onto adjacent roadways and reduce 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 no 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.

Temporary Batch Plants

At the Temporary Concrete Plants Section (10), the permit should require public notice of the relocation of a temporary batch plant and an opportunity for residents to seek a public hearing if emissions sources are 1,650 feet from subdivisions, residential properties, public or private schools, place of worship, public parks, outdoor sports or recreational fields, crushing plants, and hot mix asphalt plants. As previously stated, batch plants are significant sources of fugitive emissions that threaten the health and environment of our communities. At minimum, local and state entities should be responsible for providing residents with proper notice and opportunity to comment prior to relocation.

Cumulative Impacts

Each owner or operator should be required to consider the cumulative impacts of nearby facilities that have been permitted by TCEQ or any other body delegated or authorized to issue Clean Air Act permits. As previously stated, batch plants are significant sources of fugitive emissions that may not remain within the fence-line; and batch plants may be located near other facilities authorized to emit air pollutants. An owner or operator of a batch plant should conduct air modeling that incorporates emissions from nearby facilities that are authorized to emit air pollutants.

Plot 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 plot 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.

Fence Line Monitoring and Publicly Available Data

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 that identify PM emissions leaving facility boundaries. Owners and operators should be required to make the monitoring data publicly available on the facility's website so that local residents may identify such emissions.

Compliance during Nighttime Operations

Each owner or operators should be required to sufficiently illuminate the facility during nighttime operations to better ensure compliance with permit terms, including terms related to the operation and maintenance of fabric or cartridge filters, transferring cement/flyash, controlling emissions from in-plant roads, and tracking sediment onto adjacent roadways.

Compliance Inspections

TCEQ should ensure compliance with the permit by conducting a compliance inspection of each permanent batch plant every other year and any batch plant (permanent or temporary) upon request by stakeholders. The City is willing to work with TCEQ and City stakeholders to ensure efficient community engagement, including an easy to use website that allows residents to submit a compliance review request.

We appreciate the importance TCEQ has placed on this opportunity for comment, as concrete batch plants remain a significant polluting industry in our community. Should you have any questions, please contact Carlos Evans, Director of the Office of Environmental Quality and Sustainability, at carlos.evans@dallas.gov or Carrie Rogers, Director of the Office of Government Affairs, at carrie.rogers@dallas.gov.

Sincerely,

Paula Blackmon

Chairwoman

Committee on Environment and Sustainability

Councilmember – District 9



June 13, 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)

Dear Ms. Ricco,

The City of Dallas (the City) is providing comments to the Texas Commission on Environmental Quality (TCEQ) regarding the 2023 amendment to the concrete batch plant standard permit. The City is the third largest city in Texas, serving a population of over 1.3 million residents (2022). As a municipal leader, the City recognizes the importance of ensuring environmental quality, fighting climate change, and advancing environmental justice. In May 2020, the City unanimously adopted the [Comprehensive Environmental and Climate Action Plan \(CECAP\)](#), which is a roadmap to help protect the health and environment of our residents and realize a more prosperous, sustainable, resilient, and just community. In August 2022, the City adopted the [Racial Equity Plan \(REP\)](#), which centers environmental justice by addressing the disproportionate impact of pollution and climate issues on historically disadvantaged communities. CECAP and REP goals include mitigating the air quality emissions and other impacts of intensive industrial uses, such as concrete batch plants within our community.

In an effort to advance our goals under the CECAP and REP, the City is implementing a two-phased approach to properly consider and reduce the environmental and health impacts of batch plants. The approach involves amending code provisions to better ensure the proper consideration of zoning districts, spacing, and standards associated with permanent and temporary concrete or asphalt batching plant uses, including but not limited to, potentially incompatible industrial uses. In May 2022, City Council approved Phase I of the approach, which requires all new permanent and temporary batch plants to obtain a specific use permit and to participate in public hearings at the City Plan Commission and City Council. The City is currently evaluating options for Phase II to implement more refined land use conditions. Reducing human health and environmental impacts from batch plants has been a priority for City residents.

Batch plants significantly impact the air quality and health of our communities. Concrete batch plant operations emit fugitive emissions that include several air pollutants, including

DATE
SUBJECT

June 9, 2023

City of Dallas Comments Non-Rule Project No. 2022-033-OTH-NR

ozone precursors like nitrogen oxides (NO_x) and volatile organic compounds (VOCs) and other criteria pollutants like PM₁₀ and PM_{2.5} (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.

The City also recognizes that, under the Clean Air Act (CAA), the Dallas-Fort Worth area is in severe nonattainment for the 2008 ozone national ambient air quality standard (NAAQS). Moreover, in January, the U.S. Environmental Protection Agency (EPA) proposed to strengthen the NAAQS for PM_{2.5}. The permitting of batch plants should work to reduce ozone level and at least maintain PM_{2.5} levels in the area.

City staff held a series of public meetings in both English and Spanish from May 2022 to December 2022, and advanced Phase I of the code amendment provisions to require specific use permits for all concrete and asphalt batch plants due to the urgency expressed regarding a lack of a public process for the batch plants and growing concerns about the location of these batch plants in close proximity to residential, public and private schools, parks, churches, day cares, and other sensitive land uses.

In consideration of the environmental and health impacts from batch plants and consistent with the City's CECAP and REP, the City provides the following comments.

Dust Suppressing Fencing

At 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.

Site Definition

At Definitions Section (2)(I), "Site" should be defined as the total of all stationary sources located on one or more contiguous or adjacent properties. Alternatively, the permit should consider the cumulative impacts of nearby facilities that are authorized to emit air pollutants.

June 9, 2023

City of Dallas Comments Non-Rule Project No. 2022-033-OTH-NR

Single/Multiple Batch Plants

At 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.

Air Dispersion Modeling

At Administrative Requirement (3)(I), each owner or operator should be required to submit air dispersion modeling as part of their concrete batch plant standard permit registration. Fugitive emissions from batch plant operations, such as particulate matter and nitrogen dioxide (NO₂), vary widely depending upon the equipment used (e.g., front-end loaders), level of traffic and activity in and around the facility, prioritization of housekeeping and compliance obligations, and other factors. Dispersion modeling will better clarify fugitive emissions from each facility. Each owner or operator should be required to use the AERMOD air dispersion modeling system, which is EPA's preferred dispersion modeling system for these types of facilities.

In the alternative, the City recommends that TCEQ: use the AERMOD air dispersion modeling system to remodel air emissions from batch plants; and conduct separate modeling analyses to account for the different pollutant levels that exist in the different towns, cities, and regions of the State. Based on information obtained by the City, TCEQ chose to use the ISCT3 air dispersion modeling system; and did not sufficiently account for the unique air pollutant levels that exist in the various areas of our state, including the City of Dallas.

Distance from Communities

At Operational Requirements for Permanent and Temporary Concrete Plants (8)(A), 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. As referenced in action Air Quality Action 4 of the CECAP and Big Audacious Goals 2.3 and 2.15 of the REP, increasing the distance between batch plants and residents is a high priority to City residents. Based on available data and in consideration of EPA's process to possibly lower the PM_{2.5} standard, 1,650 feet is a sufficient and appropriate distance between batch plant emission sources and nearby locations listed above.

Housekeeping and Maintenance Requirements

At General Requirements (5) and Operational Requirements (8), the permit should reduce the types of housekeeping and maintenance activities to better reduce fugitive emissions.

DATE
SUBJECT

June 9, 2023

City of Dallas Comments Non-Rule Project No. 2022-033-OTH-NR

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 the City's effort to improve local water quality, maintain particulate matter attainment status, reduce landfill material, protect the health of our residents, and meet other goals under the CECAP.

To prevent the tracking of sediment onto adjacent roadways and reduce 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 no definitions or emission or cleanup 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.

Temporary Batch Plants

At the Temporary Concrete Plants Section (10), the permit should require public notice of the relocation of a temporary batch plant and an opportunity for residents to seek a public hearing if emissions sources are 1,650 feet from subdivisions, residential properties, public or private schools, place of worship, public parks, outdoor sports or recreational fields, crushing plants, and hot mix asphalt plants. As previously stated, batch plants are significant sources of fugitive emissions that threaten the health and environment of our communities. At minimum, local and state entities should be responsible for providing residents with proper notice and opportunity to comment prior to relocation.

Cumulative Impacts

Each owner or operator should be required to consider the cumulative impacts of nearby facilities that have been permitted by TCEQ or any other body delegated or authorized to issue Clean Air Act permits. As previously stated, batch plants are significant sources of fugitive emissions that may not remain within the fence-line; and batch plants may be located near other facilities authorized to emit air pollutants. An owner or operator of a

DATE
SUBJECT

June 9, 2023

City of Dallas Comments Non-Rule Project No. 2022-033-OTH-NR

batch plant should conduct air modeling that incorporates emissions from nearby facilities that are authorized to emit air pollutants.

Plot 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 plot 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.

Fence Line Monitoring and Publicly Available Data

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 that identify PM emissions leaving facility boundaries. Owners and operators should be required to make the monitoring data publicly available on the facility's website so that local residents may identify such emissions.

Compliance during Nighttime Operations

Each owner or operators should be required to sufficiently illuminate the facility during nighttime operations to better ensure compliance with permit terms, including terms related to the operation and maintenance of fabric or cartridge filters, transferring cement/flyash, controlling emissions from in-plant roads, and tracking sediment onto adjacent roadways.

Compliance Inspections

TCEQ should ensure compliance with the permit by conducting a compliance inspection of each permanent batch plant every other year and any batch plant (permanent or temporary) upon request by stakeholders. The City is willing to work with TCEQ and City stakeholders to ensure efficient community engagement, including an easy to use website that allows residents to submit a compliance review request.

We appreciate the importance TCEQ has placed on this opportunity for comment, as concrete batch plants remain a significant polluting industry in our community. Should you have any questions, please contact Carlos Evans, Director of the Office of Environmental Quality and Sustainability, at carlos.evans@dallas.gov or Carrie Rogers, Director of the Office of Government Affairs, at carrie.rogers@dallas.gov.

Sincerely,

DATE

June 9, 2023

SUBJECT

City of Dallas Comments Non-Rule Project No. 2022-033-OTH-NR



Paula Blackmon
Chairwoman
Committee on Environment and Sustainability
Councilmember – District 9

Cc: Honorable Mayor and City Councilmembers
T.C. Broadnax, City Manager
Tammy Palomino, City Attorney
Cal Estee, Assistant City Attorney
Carrie Rogers, Director, Office of Government Affairs

DRAFT