

Memorandum



CITY OF DALLAS

DATE November 12, 2021

TO Honorable Chair and Members of the Environment & Sustainability Committee

SUBJECT **Batch Plant Permits, Policies and Strategies**

As requested by Committee Chairwoman Paula Blackmon, staff is developing strategies to effectively address batch plants in ways that protect our community, enhance local air quality, improve public health, and support ongoing related construction through greater transparency related to batch plant operations within the City. This memorandum provides an outline of potential short- and longer-term strategies that are currently under staff development and evaluation for Committee consideration in early 2022. Additionally, the attachment to this memorandum provides a summary of current batch plant permits, related policies and oversight activities and regulatory enforcement efforts within the City of Dallas.

Staff are presently working to evaluate logistics, public information, equity impacts, and legal ability to implement several short- and longer- term strategies to attain better public information concerning batch plant permit processes and plant locations. Each option will be evaluated to determine the ability to reduce potential for environmental justice and equity concerns, reduce impacts to EPA-defined sensitive receptors such as residential neighborhoods, schools, daycare centers, parks, and places of worship, that overall meets objectives of enhancing local air quality, improving public health, and supporting ongoing related construction through greater transparency related to batch plant operations within the City.

Short-Term Strategies

Short-term strategies could be implemented within a couple of weeks to a couple of months, with minimal impact to batch plant operators, contractors that rely on them, and could help inform the impacted neighborhoods to allow requests for related hearings. Ideas being evaluated include:

- **Site Mapping:** City-maintained GIS mapping of existing and proposed batch plant locations with attached operating status (and/or linkage to TCEQ site).
- **Immediate Internal Notification of Receipt of TCEQ Batch Plant Notifications:** The City's Air Quality compliance team receives regular notifications of pending permit applications. These are typically sent to the Executive Team and can be expanded to include the affected City Council member/ Environmental Commissioners in that notification.
- **Improve Public Awareness of TCEQ Public Notice:** Many affected residents do not see the TCEQ-published notice and the signs may not attract attention. The City can improve this process via newsletters, social media, and websites, as well as by explaining how to take advantage of the public input opportunities.
- **Posting Complaint Reporting Information at Batch Plants:** While most standard permits require posting for public information, the City's Air Quality team responds to complaints about batch plants within 24-hours. Posting perimeter signage could be an effective tool to help with environmental problems in neighborhoods. The City could post bilingual signs within the City right-of-way at every batch plant with information about where to call with a complaint. The signs could also post information about what to include

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in the complaint to help the inspectors. Speedy resolution to complaints would greatly benefit residents.

- **Coordinated City Inspections:** Batch plants are subject to regular air quality and stormwater inspections. Currently, inspectors may not always share information unless there's a specific concern. If they could provide coordinated inspections and/or share reports of inspections so that the inspectors are aware of the observations of others. This could lead to more efficient inspections.
- **Environmental Policy:** City contracts currently include certification by the contractor that they agree to follow the City's Environmental Policy. Project staff can make sure that this is discussed in the pre-bid and pre-construction briefings, and appropriately is included into the project specifications. Staff may review this policy to see if an update for clarification may be required.

Long-Term Strategies

Staff are also evaluating ideas that may be more effective overall but may take additional time to implement. Actions that will require public input, and or that depend on actions by others, and that may take longer than 3 to 6 months to implement could include, but not be limited to:

- **Forward Dallas:** Appropriate locations for this type of land use may be explored as part of the update to the Forward Dallas Comprehensive Land Use Plan Update.
- **Zoning Changes:** The ZOAC/CPC processes may be used to better define where this type of land use could be allowed. These processes may also include a review of City of Dallas notification limits for related hearings.
- **Sustainable Procurement Updates:** As part of its workplan this year, which was briefed to this Committee in October, the working group is updating the City's Environmentally Preferred Products list, which may present opportunities to address some of the concerns outlined here. In addition, the working group will collaborate with end-user departments on standards that may be appropriate to include in new contracts for concrete and asphalt purchases as well as explore more sustainable alternatives to those materials.
- **Environmental Equity Checklist:** A checklist is recommended as a front-end function that allows all related departments to integrate equity & environmental quality in everyday functions and prevent any gaps that can contribute to disparate impacts on neighboring communities of industrial operations. This effort should include a review by appropriate staff to develop the Environmental Equity checklist, and then determine the mechanics for implementation, including a review of applicable framework set forth in the Government Alliance for Racial Equity – Equity Indicators Matrix.
- **Legislative Change:** During the 2020-21 Legislative session there were several bills introduced to address batch plants including but not limited to setbacks, adjacent land use, site housekeeping, and air quality controls. The City of Dallas wrote in support of all of them. Unfortunately, none of these bills made it out of Committee. It may make sense to work with our legislative affairs staff, affected neighborhoods, staff from other cities, and others to get these bills back on the radar, and to ensure support.

Because the issues related to batch plants involve several City Departments, staff will be working together to provide a more detailed briefing with recommended strategies to address these facilities to both the Environment Commission and the ENVIS City Council Committee in the first quarter of 2022. Should you have questions or need additional information, please contact me or Sheila Delgado at 214-670-1642.

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Assistant City Manager
[Attachment]

c: Mayor and City Council
T.C. Broadnax, City Manager
Chris Caso, City Attorney
Mark Swann, City Auditor
Biliera Johnson, City Secretary
Preston Robinson, Administrative Judge
Kimberly Bizzor Tolbert, Chief of Staff to the City Manager

Majed A. Al-Ghafry, Assistant City Manager
Jon Fortune, Assistant City Manager
Dr. Eric A. Johnson, Chief of Economic Development and Neighborhood Services
M. Elizabeth Reich, Chief Financial Officer
M. Elizabeth (Liz) Cedillo-Pereira, Chief of Equity, and Inclusion
Directors and Assistant Directors

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Attachment

Batch Plants in the City of Dallas

Approximately 75 percent of the placed U.S. concrete comes from batch plants; these facilities are common throughout Texas, including the City of Dallas. The Texas Commission on Environmental Quality (TCEQ) records show several hundreds of batch plants in the DFW metroplex; City of Dallas records indicate that there are currently 38 active permitted batch plants within the City limits, typically concentrated near the Elm Fork / Walnut Hill industrial area, and along the I20, I30, and I45 Highway corridors. Additionally, batch plant permits limit production to 300 cubic yards of concrete production per hour and to 6,000 cubic yards per day, however, several batch plant sites in Dallas include multiple permitted operations within one parcel (e.g. – much higher production rates per site).

Because concrete must be used within one to two hours from the time it is mixed, batch plant operators, and their construction contractors prefer these facilities to be in or near the project sites where the product will be used and prefer locations with lower lease costs. This can result in potential environmental justice concerns.

Air Quality Considerations

In North Texas, ten counties including Dallas consistently do not meet the 2008 Federal Air quality criteria for ground level ozone. In addition, nine counties consistently do not meet the updated 2015 Federal standard for ozone. In 2020, despite changes in transportation volume due to the COVID19 shutdown, the North Texas Region again failed to meet these standards resulting in the recommendation from Environmental Protection Agency (EPA) to escalate the local air quality designation from “Non-Attainment” to “Severe Non-attainment” for ozone. This action may require updates to the State Implementation Plan and has prompted the North Central Council of Governments (NCTCOG) to adopt a voluntary resolution for member cities to reduce Single-Occupancy Vehicular travel by 20 percent. In addition, the EPA has commenced with rule-making relative to tighten up regulations related to particulate pollution, which would likely impact many batch plant operations. Dallas is ranked 16th on the American Lung Associations’ list of most ozone-polluted cities, and several Dallas ISD schools have high incidents of asthma-related absentee-ism in excess of 28 percent (Texas A&M University – Transportation Institute, Center for Applied Research, in Transportation Emissions, and Environmental Health, and The Nature Conservancy. 2019. “Breathe Easy Dallas: Measuring the Impact of Select Interventions on Air Quality and Daily Asthma Exacerbations, at High Risk Schools; Year One, Report of Activities”).

Batch plants are known sources of critical air pollutants including fine particulates (PM₁₀ and PM_{2.5}), nitrogen oxides (NO_x), Sulfur dioxide, (Sox), and Volatile Organic Compounds (VOC). Other related air pollutants of concern include silicates and formaldehyde. The emissions generally originate from the transfer of the cement, sand, and aggregates as part of the concrete production process. However, additional fugitive emissions can also occur through the transfer of sand and aggregates, truck loading, mixer loading, vehicle traffic, and wind erosion from storage piles. In addition, many batch plants use stationary internal combustion engines to run compressors and other equipment. These engines are limited to 1,000 horsepower but can also be important sources of emissions, depending on the type of engine and fuels used. Although not regulated by the TCEQ, emissions from trucks and concrete plant vehicles are also sources of emissions. Diesel trucks are often observed near plants, idling while waiting in line to load.

Existing TCEQ Permit Processes

The TCEQ has a two- tier permitting system for batch plants. Before construction begins, the operator must apply for and receive an approved construction permit. After construction, some larger facilities that are considered major sources of air pollution must apply for an operating permit under Title V of the Clean Air Act.

There are three basic types of batch plant construction permits, and the resulting public information, site design, and reporting requirements vary with each. These are:

- Permit by Rule (PBR): these typically are less complex sites with lower volumes and simply require administrative forms and may require the operator to meet some very basic operating conditions and record keeping. There are specific PBR requirements for different sources that qualify.
- Standard Permit: Under Texas Health and Safety Code § 382.05195, the TCEQ may promulgate permits for categories of facilities and use the same types of air emission controls to all plants within the defined category. This type of permit is limited to the types of facilities that will not make a significant contribution of air contaminants to the atmosphere. Concrete Batch Plants are usually permitted under the Standard Permit for Concrete Batch or using the Standard Permit for Concrete Batch Plants with Enhanced Controls. **Most batch plants in Dallas come in under this type of permit.**
- New Source Review (NSR) Permit: The last type of construction permit is a unique permit for each facility. They are issued on a case-by-case basis, for sites with high emissions, high anticipated volume produced, and or near EPA-defined sensitive receptors such as neighborhoods, day-care centers, places of worship, or schools. Each permit is unique and must document compliance with all applicable air quality regulations. In some cases, when the site is near sensitive receptors such as residential communities, places of worship or schools, air dispersion modeling of plant emissions is required. For some cases, the applicant must demonstrate that the plant will meet the EPA standard for controlling emissions called Best Available Control Technology. NSR permits require detailed review for environmental impacts.

Most plants require a standard permit. There are few legislative requirements for these standard permits, only that the permits be enforceable, be adequately monitored for compliance by the Commission, and that the permits require the permitted facilities to use Best Available Control Technologies (BACT).

The standard permit for concrete batch plants cover three types of facilities: (1) permanent concrete batch plants, (2) temporary concrete batch plants, and (3) specialty concrete batch plants. The standard permit is available for any concrete batch plant producing less than 300 cubic yards per hour. The permit has separate requirements for permanent and temporary and specialty plants.

The standard permits have some complex requirements that include public notice and opportunity for public input, site-layout requirements, documentation, and record-keeping production limits,

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permitted operation timelines (a temporary plant can only operate for 180 days at a specific location). Compliance requires quarterly visual fugitive dust observations and limited testing.

Existing City Policies and Related Oversight

- Environmental Policy – The City has had an [Environmental Policy](#) in place since 2005, that requires all City staff and contractors to sign that they concur with and will follow this policy. Consistent with this policy, staff perform the related regulatory compliance services to ensure compliance for local batch plants and other facilities.
- Air Quality Compliance: The OEQS Air Quality compliance division works under grants from the TCEQ to ensure local air quality permit compliance. In addition to record keeping and quarterly testing, inspectors periodically inspect batch plants. Inspectors typically visit each plant in the City at least once annually, depending on compliance status. The inspection frequency is higher in Dallas than in Texas cities that depend on the TCEQ for inspections. In addition to inspections, the City of Dallas responds to complaints on batch plants within 24 hours. Once a complaint is received, an inspector will visit the facility to investigate the complaint.
- Stormwater MS4 Permit Compliance: The City maintains a TCEQ Municipal Separate Storm Sewer System Permit (MS4) that delegates to the City responsibility and authority for water quality regulatory compliance. Under this permit, City staff are responsible for ensuring compliance with the Construction General Permit (construction sites of one or more acre in size, or part of a common development plan one or more acre in size) and with the Multi-Sector General Permit (certain kinds of industrial and manufacturing facilities). Both permits include batch plants and other similar facilities. Batch plant operators are required to monitor the water quality impacts of their operations and maintain pollution prevention measures and other industry-specific site management practices. City staff inspect batch plants on a frequency determined by the specific permit claimed by the operator, the compliance status of the facility, and the specifics of the operation. Staff typically inspect batch plants at a minimum of annually under the Multi-Sector General (Industrial) Permit, and every 13 to 28 days, depending on site size under the Construction General Permit.
- Pre-treatment Compliance (DWU): Industrial facilities that dispose of process waters into the City's wastewater collection system are required to have a pre-treatment program that includes sampling, and onsite housekeeping requirements. DWU inspectors perform regular inspections of facilities under the pre-treatment program.
- Code Compliance: Dallas Code Compliance staff respond to all complaints associated with private property and also conduct batch plant facility inspections relative to any complaints received concerning compliance with City of Dallas Codes and Ordinances (including noise ordinance).
- Sustainable Procurement Policy: In May 2021, the Dallas City Council approved a sustainable procurement policy. This umbrella policy sets up an interdepartmental City staff working group to improve social, economic, and environmental outcomes in contracting.

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- City's Addendum to the NCTCOG Construction Standards: Like many of the cities in the NCTCOG region, the City relies on the regional construction specifications as developed by a group of City representatives in the 16-county DFW metroplex. City staff from Public Works, Development Services, Parks, Dallas Water Utilities, and the Office of the Bond Program work together to develop a Dallas-specific addendum that applies to public construction in Dallas. This Addendum may offer opportunities related to the use of batch plants in Dallas in the future.
- Planning & Urban Design: In addition to environmental permitting, concrete batch plants within the City of Dallas are subject to zoning requirements. The Zoning Ordinance sets forth the requirements on where uses can operate. In some areas, batch plants require a Specific Use Permit (SUP), which is processed through City Plan Commission and City Council. In other areas, the building official in Development Services can issue a Certificate of Occupancy if the permit meets the criteria set forth in the Zoning-Ordinance.
- Development Services: In addition to environmental permitting, concrete batch plants are subject to local zoning requirements, which are enforced through Development Services. The Department reviews permits and can issue a Certificate of Occupancy (CO) if the permit meets the criteria set forth in the Zoning Ordinance. The CO allows operation of the project. Improvements to site development layout, setbacks and both air and stormwater buffers can be reviewed through this review process.

Per the Zoning Code, temporary concrete batch plants require a temporary Certificate of Occupancy by special authorization of the building official. The building official may issue a temporary certificate of occupancy in any zoning district for a temporary batching plant to mix, compound, and batch concrete, asphalt, or both, for a public or private project, which is valid for six months.