ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION
WASHINGTON, D.C. 20460

September 2, 2025

Mr. Philip McNeely
Director
Maricopa County Air Quality Department
301 W. Jefferson Street, Suite 410
Phoenix, Arizona 85003

Dear Mr. McNeely,

Thank you for your letter dated August 1, 2025, requesting EPA's input on your assessment that the applicable laws of the Maricopa County Air Quality Department ("MCAQD") do not prohibit an initial phase of construction proposed by the TSMC Arizona Corporation ("TSMC") before obtaining a permit to construct a stationary source of air pollution. According to a July 15, 2025, letter addressed to you from TSMC, this company proposes to construct the core and shell of a building that will eventually house emission units without contemporaneously beginning construction on any semiconductor manufacturing equipment that could be classified as an emissions unit. TSMC also states that this phase of construction will not include air pollution capture or control equipment or foundations for any emission units.

Similar to EPA's regulations implementing the Clean Air Act (CAA) Nonattainment New Source Review (NSR) program at 40 C.F.R. § 51.165, MCAQD's regulations prohibit "beginning actual construction" of a major stationary source of air pollution prior to obtaining a permit from MCAQD. MCAQD's regulations define "begin actual construction" at Maricopa County Rule 100 § 200.25 as follows: "the initiation of physical on-site construction activities on an emissions unit, which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. . .".

In the July 15, 2025, letter from TSMC enclosed with your August 1, 2025, letter, TSMC states that it:

> builds [its] semiconductor manufacturing facilities in three stages: (1) core and shell building, which is simply the foundation, steel superstructure, and external walls and does not include any emissions units; (2) mechanical, electrical and process piping, which involves installing the systems that will support the operations of the fab, including the cleanroom and equipment in the cleanroom; and (3) tool hookup, which involves

installation of connection piping and electrical that will ultimately house the semiconductor manufacturing equipment.[1]

According to TSMC "[t]he core and shell itself is neither an emissions unit nor is it a capture device, as all of the emissions ultimately produced by the fab are captured through control devices and duct systems meticulously designed to maintain a cleanroom environment. As tool hookup completes, semiconductor manufacturing equipment can only then begin installation."[2] In your August 1, 2025, letter you state that "MCAQD is inclined to agree with TSMC that if a structure contains no emissions unit(s) it is not a 'source' subject to Clean Air Act permitting authorities because it does not emit or have the potential to emit pollutants."[3] TSMC's July 15, 2025, letter rests on a reading of the EPA regulations that EPA communicated in a March 15, 2020, draft guidance memorandum titled: "Interpretation of 'Begin Actual Construction' Under the New Source Review Preconstruction Permitting Regulations (March 2020 Draft Guidance)."[4] You observed that "the March 2020 Draft Guidance supports this conclusion with its focus on whether an emissions unit is being built."[5] You further observed that a March 28, 1986, EPA memorandum from Edward Reich (Reich memo)[6] "broadly implies that building 'any accommodating installation' begins actual construction. . .".

With regard to the March 2020 Draft Guidance, the EPA does not presently intend to issue a final version of the March 2020 Draft Guidance. The EPA's view at this time is that it can provide greater clarity on the construction activities that are permissible under the CAA prior to obtaining an NSR permit (or without such a permit) by revising the EPA's NSR regulations, including the definition of "begin actual construction," which EPA plans to propose and finalize in 2026. However, until that process is completed, the Agency may advise on these matters on a case-by-case basis.

Consistent with the views expressed in the March 2020 Draft Guidance, the EPA continues to recognize that the definition of the term "begin actual construction" in EPA's regulation prohibits "the initiation of physical on-site construction on an emissions unit"[7] and that this does not prohibit initiation of physical on-site construction of those parts of a facility that do not qualify as an emission unit. The EPA also continues to view the 1986 Reich memo to have adopted an overly broad reading of the term

[1] Letter from Robert Sandoval, TSMC Arizona Corporation Corporate Environmental Health and Safety Manager, to Phillip McNeely, Director of Maricopa County Air Quality Department, titled: "Clean Air Act: Request for Regulatory Interpretation Guidance on 'Begin Actual Construction'," July 15, 2025 (Page 4).
[2] *Id*.
[3] Letter from Phillip McNeely, Director of Maricopa County Air Quality Department, to Aaron Szabo, Assistant Administrator Office of Air and Radiation, titled: "Request for clarification of current EPA policy on 'begin actual construction'," August 1, 2025 Letter (Page 2).
[4] Draft Memorandum from Anne L. Idsal, Principal Deputy Administrator, Office of Air and Radiation, to the EPA Regional Air Division Directors, titled: "Interpretation of 'Begin Actual Construction' Under the New Source Review Preconstruction Permitting Regulations," March 15, 2020.
[5] August 1, 2025 Letter (Page 2).
[6] Memorandum from Edward E. Reich, Director of Stationary Source and Compliance Division, Office of Air Quality Planning and Standards, to Robert R. DeSpain, Chief Air Programs Branch, EPA Region VIII, titled: "Construction Activities Prior to Issuance of a PSD Permit with Respect to "Begin Actual Construction," March 28, 1986.
[7] 40 C.F.R. § 52.21(b)(11).

"emissions unit" to suggest that it includes installations necessary to accommodate an emissions unit. EPA intends to provide more clarity through rulemaking on how MCAQD and other permitting authorities may distinguish between emissions units and the other parts of a facility that are not an emissions unit or a part of an emissions unit.

After reviewing the provided information on TSMC's proposed project and the applicable MCAQD regulations, EPA believes that it is within MCAQD's discretion to interpret its existing regulations to allow TSMC to undertake, prior to obtaining an NSR permit, the activities listed under stage 1, the core and shell of a building, provided that the construction of this core and shell of a building does not involve the physical construction on an emission unit or the laying of underground piping or construction of supports and foundations that are part of any emissions unit. According to your August 1, 2025, letter, "TSMC states that the shells are not specifically configured for emissions units (e.g., there is no piping, ventilation ductwork or specific foundation work for any emissions units." TSMC may be allowed to undertake physical on-site construction activity, even if it is of a permanent nature, without having first obtained an NSR preconstruction permit, provided that the activity does not involve construction "on an emissions unit." In addition, the activities listed in the MCAQD definition may not be undertaken prior to obtaining an NSR permit if those activities involve construction "on an emissions unit." The EPA agrees with MCAQD's conclusion that requiring TSMC to obtain a permit before it starts building a structure that does not include an emission unit, or any component of an emission unit (including piping or a foundation specifically configured for an emissions unit) seems an overly broad reading of EPA's regulations and is supported by the reading of this regulation reflected in EPA's March 2020 Draft Guidance discussed in your August 1, 2025, letter, and in TSMC's July 15, 2025, letter.

The EPA view expressed here is based on the project-specific facts presented by TSMC and MCAQD. This communication of EPA's view is not a final agency action, and it does not itself create or alter any binding requirements on MCAQD, TSMC, or the public. Any construction activities undertaken by TSMC prior to issuance of an NSR air permit by MCAQD would be solely at TSMC's risk, as MCAQD would retain the discretion to deny any subsequent application to construct a stationary source of air pollution (including emissions units) if the applicable criteria are not met. If TSMC submits an application to construct under the MCAQD NSR air permitting program, MCAQD may not use TSMC's time and resources expended on construction prior to obtaining a permit (what EPA has called "equity in the ground") to justify MCAQD's decision on any applicable Best Available Control Technology (BACT) or Lowest Available Emissions Rate (LAER) determinations and/or to grant the air permit. Furthermore, if changes to TSMC's proposed emissions units design are necessary to meet this or any other requirements of the permitting process (such as demonstrating that emissions from the stationary source will not cause or contribute to violations of air quality standards), MCAQD may require TSMC to meet the requirements of such conditions in the final air permit, even if it means modifying or rebuilding structures that TSMC has begun building prior to obtaining a permit.

The EPA appreciates MCAQD's ongoing efforts to protect air quality in Maricopa County through preconstruction air permitting. Should you have any further questions or need additional clarification, please feel free to contact our office.

Sincerely,

Aaron Szabo
Assistant Administrator

cc: Office of Air Quality Planning and Standards Director
EPA Region 9 Administrator