

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF: Via email to KatyMFranz@eaton.com

Ms. Katy Franz
Counsel – Regulatory & Sustainability
Eaton Corporation

RE: Request for NESHAP/NSPS Test Cell Exemption Applicability Determination

Eaton Corporation, Auburn, Indiana

Dear Ms. Franz:

The U.S. Environmental Protection Agency has received and reviewed the letter, dated May 12, 2023, from Eaton Corporation, located in Auburn, Indiana requesting a determination for exemption from 40 CFR Part 60, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines for the stationary engines at the test cells TC-1, TC-2, TC-3, TC-4, TC-5, TC-6, and TC-7 utilized in testing clutches. The specific engines associated with the test cells identified above are listed in the table below:

Table 1: Engines at Test Cells

Test Cell #	Internal Test Cell #	Engine	HP	Mfg. Date	Date Installed in Test Cell
TC1	Cell 1	Cummins ISX 15L	600	2011	2014
TC2	Cell 3A	Caterpillar C15	550	2005?	2005
TC3	Cell 3B	Paccar MX13	455	2014	2015
TC4	Cell 4A	Cummins X12	475	2019	Not yet installed
TC5	Cell 4B	Cummins ISM 11L	335	2005	2013
TC6	Cell 11	Cummins ISX 15L	500	2001	2016
TC7	Cell 12	Cummins ISX 15L	500	2015	2018

Request

As described in the request letter, "mobile compression ignition engines from an Original Engine Manufacturer (OEM) that the OEM had used for engine testing purposes (R&D Engines) are installed in test cells at the Auburn Facility. The engines being tested are not installed in, or an integrated part of, the final product ... Eaton is seeking US EPA's concurrence that the R&D Engines utilized in test cells at the Auburn Facility are exempt from the requirements in 40 CFR Part 60, Subpart IIII (CI ICE NSPS) and 40 CFR Part 63, Subpart ZZZZ (RICE NESHAP)." Eaton Corporation explains in the letter that "both rules expressly exempt engines utilized in a test cell/stand".

Further, Eaton Corporation clarifies that "the Auburn Facility utilizes engines in its test cells to test clutches. More specifically, the purpose of clutch testing is to test the clutch effectiveness as to the specific OEM engines being tested. We believe clutches are properly considered engine components since the clutch is bolted to the engine flywheel, not the manual transmission. Everything that is bolted onto the engine, such as a turbo charger, is added to make a motor function (i.e., ancillary component of the engine). As with other engine components, if the transmission were removed from an installed engine, the clutch remains with the engine. In fact, transmissions are rarely used in the Auburn Facility test cells. Rather, most of the testing (99% of the time) uses a straight shaft setup that connects the engine components directly to the dynamometer."

In addition, Eaton Corporation posits that "Even if a clutch were to be considered a transmission component, it would still be considered a test cell/stand covered by [40 CFR Part 63] Subpart PPPPP. Under 40 CFR 63.9290, certain equipment is considered an affected source under Subpart PPPPP without having corresponding regulatory requirements under the rule.... In other words, for test cells testing transmissions and the other components/specified uses in 40 CFR 63.9290(d)(1)-(4) above, the test cells still fall under the definition of an affected source under Subpart PPPPP but does not have any requirements under that rule."

Background and Analysis

Eaton Corporation is requesting an applicability determination under 40 CFR Part 60, Subpart IIII and 40 CFR Part 63, Subpart ZZZZ for the stationary engines utilized in clutch testing cells TC-1, TC-2, TC-3, TC-4, TC-5, TC-6, and TC-7 as identified in Table 1 of this letter. As discussed below, EPA evaluated the test cell/stand exceptions as specified in 40 CFR Part 60 Subpart IIII and 40 CFR Part 63 Subpart ZZZZ and finds that the stationary engines are subject to the requirements of those regulations.

Although Eaton Corporation initially describes the engines as "mobile compression ignition engines... that the OEM had used for engine testing purposes," the request does not directly address the stationary source status of the engines as they are now being utilized at the Auburn Facility. The request does include a footnote stating, "it is our understanding that an R&D Engine at the Auburn Facility would only be considered a 'stationary engine' if it remains in a test cell for more than a year, even if the engine was originally designed for a mobile application." Subsequent discussions with Eaton Corporation indicate that the Auburn Facility occasionally swaps out engines, and the last engine installation was in 2018. Based on this

information, EPA concludes that engines used at test cells TC-1, TC-2, TC-3, TC-4, TC-5, TC-6, and TC-7, as specified in Table 1 are stationary engines.

Per 40 CFR Part 60 Subpart IIII, "§ 60.4200 Am I subject to this subpart? (b) The provisions of this subpart are not applicable **to stationary CI ICE being tested at a stationary CI ICE test cell/stand** (emphasis added)." Because the Auburn Facility is testing clutches and not stationary CI ICE in TC-1, TC-2, TC-3, TC-4, TC-5, TC-6, and TC-7, § 60.4200 (b) does not apply to the engines specified in Table 1 and associated with TC-1, TC-2, TC-3, TC-4, TC-5, TC-6, and TC-7. Therefore, Subpart IIII is applicable to the engines specified in Table 1 that are associated with TC-1, TC-2, TC-3, TC-4, TC-5, TC-6, and TC-7, provided they are manufactured, modified, or reconstructed after the applicability dates specified in § 60.4200 (a).

Per 40 CFR Part 63 - Subpart ZZZZ, "§ 63.6585 Am I subject to this subpart? You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand (emphasis added)." Further, § 63.6590(a) states that "An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand (emphasis added). § 63.6675 defines stationary RICE test cell/stand as an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE (emphasis added). Pursuant to the subpart PPPPP definition in § 63.9285(a), "an engine test cell/stand is any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines (emphasis added)." Because the Auburn Facility is testing clutches and not uninstalled stationary RICE in TC-1, TC-2, TC-3, TC-4, TC-5, TC-6, and TC-7, 40 CFR Part 63, Subpart ZZZZ is applicable to the engines specified in Table 1 that are associated with TC1, TC-2, TC-3, TC-4, TC-5, TC-6, and TC-7. EPA disagrees that because the clutch is attached to the engine for testing, that would mean when Eaton is testing a clutch, it is testing an engine. Rather, EPA considers the clutch a distinct part, which is further supported by the fact that Eaton is purchasing engines from the OEM and leaving them installed in the test cell while testing multiple different clutches.

Further, although Subpart ZZZZ uses the same definition of "Test Cell/Stand" as Subpart PPPPP, the "affected source" provisions and applicability for 40 CFR Part 63 Subpart PPPPP—National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands as cited by Eaton Corporation are not relevant to either 40 CFR Part 60 subpart IIII or 40 CFR Part 63 subpart ZZZZ applicability, which are addressed instead in "§ 60.4200 Am I subject to this subpart?, "§ 63.6585 Am I subject to this subpart?, and § 63.6590 What parts of my plant does this subpart cover?

Determination

EPA has reviewed your request and has concluded that stationary engines utilized in clutch testing cells TC1, TC-2, TC-3, TC-4, TC-5, TC-6, and TC-7 as identified in Table 1 are subject to 40 CFR Part 60, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR Part 63, NESHAP Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

This applicability determination relies upon the accuracy of the information submitted in the May 12, 2023 letter and subsequent discussions between EPA and Eaton Corporation. We have coordinated this determination with EPA's Office of Air Quality Planning and Standards (OAQPS). If you have any further questions, please contact Priyanka Painuly or Beth Valenziano, of my staff, at Painuly.Priyanka@epa.gov or Valenziano.Beth@epa.gov.

Sincerely,

Aburano, Digitally signed by Aburano, Douglas Date: 2023.09.07
14:58:36 -05'00'

Douglas Aburano Manager, Air Programs Branch