



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590



REPLY TO THE ATTENTION OF:

A-18J

G. Vinson Hellwig  
Chief  
Michigan Department of Natural Resources and Environment  
Air Quality Division  
Constitution Hall, 4<sup>th</sup> Floor  
525 West Allegan Street  
Lansing, Michigan 48909

Dear Mr. Hellwig:

Thank you for your letter of December 10, 2008, in which you request guidance from U.S. Environmental Protection Agency on permitting and calculating potential emissions from engine and chassis dynamometer test cells to assist you with determining the applicability of Clean Air Act (CAA or the Act) permitting requirements to Hyundai America Technical Center, Inc. (Hyundai). Your letter identifies and briefly discusses three specific issues on which you are seeking guidance from EPA, as follows:

Your letter asks first if emissions from chassis dynamometers are subject to federal permitting, given that fully assembled vehicles are tested within these units. We understand your reference to "federal permitting requirements" to mean a requirement for a stationary source to obtain a construction or operating permit under a CAA-mandated program such as minor or major New Source Review (NSR), Title V, etc. The permits issued under these programs are legally enforceable by the permitting authority, EPA and citizens under the Act. In Hyundai's case, the chassis dynamometers are fully enclosed units into which motor vehicles are placed for emissions testing under various use conditions. The tailpipe emissions exhaust to a capture unit, and then pass through a gas chromatograph (to measure pollutant levels) and to a catalytic converter, an air pollution control device, and finally are exhausted into the air from the stack. You indicate there is no national guidance addressing the applicability of permitting requirements to chassis dynamometer (i.e., vehicle test cells) emissions.

As you know, EPA's air permitting programs such as NSR and Title V generally cover only emissions from stationary sources. Section 302(z) of the Act defines stationary source as "any source of an air pollutant except those emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in section [216 of the Act]." EPA interprets this definition as excluding emissions from internal combustion motor vehicle

engines only when those engines are being used for transportation purposes. As noted above, in the case of the Hyundai facility, the vehicles being tested on the chassis dynamometer are being used for testing purposes and have not yet been introduced into commerce. Thus, the emissions from the engines are not created while the vehicle is used for transportation purposes. Therefore, based on the information provided by Hyundai and Michigan Department of Natural Resources and Environment (MDNRE), EPA concludes that vehicle test cell emissions should be attributed to the stationary source, and MDNRE should count them for purposes of determining applicability of permitting requirements.

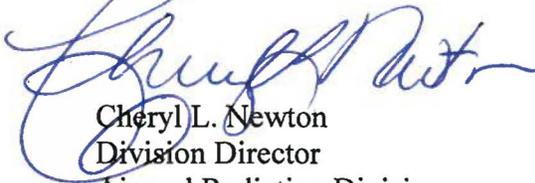
You also inquire about the proper method for calculating potential emissions of criteria pollutants and hazardous air pollutants from unpermitted dynamometers (as opposed to permitted dynamometers) under CAA permitting programs. Both the NSR and National Emissions Standards for Hazardous Air Pollutants (NESHAP) programs contain definitions of "potential to emit" (PTE). Michigan's State Implementation Plan-approved Prevention of Significant Deterioration program, including the approved definition of PTE, governs the applicability of the NSR program. The applicability of the NESHAP program is based on the "potential to emit" definitions under 40 C.F.R. §§ 63.2 and 63.9375. Both programs essentially define PTE as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design, taking into account certain enforceable limits on PTE. You should work with Hyundai to determine the maximum number of vehicles that can be tested at the chassis dynamometer and the maximum PTE for the highest emitting vehicle that Hyundai expects to test to calculate the uncontrolled PTE for the chassis dynamometer.

Finally, you inquire about the proper methodology for calculating PTE for engine and chassis dynamometers for the purpose of Title V applicability. EPA's January 25, 1995, memorandum, entitled "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Act," addressed several issues, including the concept of "maximum capacity of a stationary source to emit under its physical and operational design," which is an aspect of the definition of a source's PTE under section 112 and Title V of the Act. EPA advises MDNRE to use the January 25, 1995, memorandum, as amended by extensions, and other guidance documents (such as those at <http://epa.gov/ttn/atw/pte/ptepg.html>) to calculate the PTE from engine and chassis dynamometers for Title V purposes. Like other facilities, those with emissions from vehicle test cells may avoid triggering major source permitting requirements by properly limiting their PTE. However, 40 C.F.R. § 70.3 and the Michigan Title V program address other criteria that may cause a minor or area source to be subject to Title V, such as an applicable section 111 or 112 standard. We encourage sources to work with their permitting authorities to find workable solutions to their PTE issues. Importantly, the concept of "enforceability" under Title V incorporates two separate fundamental elements that must be present before a limitation will be taken into account when determining a source's PTE. First, the limitation must be enforceable by a governmental entity, and not merely voluntary. See, e.g., National Mining Association v. EPA, 59 F.3d 1351, 1362 (D.C. Cir. 1995). Second, limitations must be enforceable as a

practical matter or “effective.” Id. Over the years, EPA has issued numerous statements regarding elements of a limitation that is enforceable as a practical matter. The majority of these statements are in documents available on the Region 7 NSR and Title V documents database at <http://www.epa.gov/region7/programs/artd/air/policy/search.htm>, as well as in Title V Orders located at <http://www.epa.gov/region7/programs/artd/air/title5/title5pg.htm>. You should review the applicable regulations and any available guidance documents for each program to determine what types of PTE limits you may consider.

We apologize for the delay in our response to your request. Due to the complexity of this issue and your concern regarding national consistency, multiple Headquarters' offices and each of the Regional permitting contacts were consulted before finalizing this determination; we also plan to share this letter with other EPA regional offices in support of our consistency goals. We would be pleased to work with you in making any further determinations for the Hyundai facility, and we will strive to respond more expeditiously. Please contact Charmagne Ackerman, of my staff, at (312) 886-0448 if you have any additional questions or would like to discuss specific issues regarding this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Cheryl L. Newton". The signature is fluid and cursive, with the first name being the most prominent.

Cheryl L. Newton  
Division Director  
Air and Radiation Division