



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

Mr. Douglas A. Campbell
Supervisor
Operating Permits Section
Air Quality Bureau
7900 Hickman Road, Suite 1
Windsor Heights, Iowa 50324

RE: Request of EPA to Determine the Appropriate Method of Calculating
Reconstruction as it Applies to 40 CFR Part 63, Subpart P P P P P
Plant Number: 31-01-009

Dear Mr. Campbell:

In your letter dated November 4, 2009, Iowa Department of Natural Resources - Air Quality Bureau is seeking EPA to provide clarification on how to calculate whether replacement costs reach 50 percent of the fixed capital cost that would be required to construct a "comparable new source," for the purpose of determining if reconstruction may have been triggered when adding new test cells under 40 CFR Part 63, Subpart P P P P P. More specifically, whether the term "comparable new source" refers to the existing equipment only without any planned replacement components. EPA Region 7 has reviewed your letter in consultation with the EPA Office of Air Quality Programs & Standards and the Office of Enforcement Compliance and Assurance. Based on the definition of affected source as defined in the final rule in 40 CFR Part 63, Subpart P P P P P, and other materials reviewed a "comparable new source" refers to the existing source, therefore the percent cost of reconstruction should be calculated by dividing the cost of new components (i.e., new test cell equipment) by the cost of existing test cells and existing equipment to determine if reconstruction costs have been met under General Provisions, 40 CFR Part 63.2.

This determination is specifically unique to, and should only be used when, calculating reconstruction under 40 CFR Part 63, Subpart P P P P P.

40 CFR Part 63, Subpart P P P P P defines an affected source as the collection of all equipment and activities associated with engine test cells/stands used for testing uninstalled stationary or uninstalled mobile (motive) engines located at a major source of HAP emissions. Also, according to section 63.9290 (a)(3) an affected source is reconstructed if it meets the definition of reconstruction in section 63.2 of subpart A of this part and reconstruction is commenced after May 14, 2002. Therefore, the addition of test cells to a facility does not automatically trigger new source MACT requirements, unless the definition of reconstruction as listed in the amended General Provision is met.

Reconstruction under section 63.2 means, in part, the replacement of components of an affected or previously non-affected source to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost required to construct a comparable new source. While the regulations do not define "comparable new source," it is clear within context of the paragraph (see 63.2, reconstruction definition) that the term stands for "a newly reconstructed existing facility." In addition, with regard to 40 CFR Part 63 Subpart P P P P P EPA's response to comments provides additional clarification, as follows:

If a single test cell is added or reconstructed at an existing major source facility with several (e.g., more than two) test cells, it is unlikely that new source MACT would be triggered. The amended General Provisions defines reconstruction in terms of a 'comparable new source.' If the **existing facility** (bold added) has multiple test cells/stands as part of its affected source, it is unlikely that a single test cell would cost more than 50 percent of the fixed capital cost that would be required to construct a comparable new source..." See response to comment 2.2.2, "National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Standards Background Information for Final Standards - *Summary of Public Comments and Responses*", dated February 2003.

Accordingly, in John Deere's case for the facility in Dubuque (a major source) the planned changes to the collection of equipment and activities would include the additions of test cells/dynamometers 1, 2, and 3 along with a replacement of the dynamometer on test cell 8. Those additions cannot be included as part of the existing facility for reconstruction determination purposes.

Moreover, EPA's Applicability Determination Index (ADI) has a comparable example of calculating reconstruction under Part 60 Subpart XX. Control number 0000081 in the ADI, *Gasoline Bulk Terminal Reconstruction & Comparable Facility*, where the definition of the affected source in Subpart XX is the total of all loading racks, a "comparable" facility for purposes of reconstruction may only include the current existing components of the loading racks.

Calculating reconstruction as in the situation provided in your letter for the John Deere facility would be done as follows:

Adding Test Cells/Dynamometer 1, 2, and 3 = \$870,000
Replacing Dynamometer 8 = \$60,000
Existing Test Cells/Dynamometer = \$2,197,829

$$\frac{(\text{Cost of New Equipment})}{(\text{Cost of Comparable New})} = \frac{(\$870,000 + \$60,000)}{(\$2,197,829)} = 42\%$$

Since the cost of new equipment is not more than 50% of the cost to construct a comparable new facility, the definition of reconstruction would not be met.

It is important to note, as mentioned in your letter, that the reconstruction costs cannot be broken into phases. That is if John Deere decides to add or replace any test cells or dynamometers, the cost of new equipment will have to be aggregated with the \$930,000 used towards reconstruction previously performed.

Also as clarified in the regulations, passive measurements, control limitations, and/or electronics are not included in any part of the reconstruction evaluation. 40 CFR 63.9290(a)(3). If any of those type of components were priced and added to part of the cost of new equipment or cost of a comparable new source, they need to be removed.

If you have any additional questions, please contact Eric Sturm at 913.551.7377 or sturm.eric@epa.gov.

Sincerely,



Mark A. Smith
Branch Chief
Air Permitting and Compliance
US EPA Region 7

cc: Melanie King, EPA OAQPS
Sally Harmon-Semple, EPA OECA