

US EPA ARCHIVE DOCUMENT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
AIR AND RADIATION DIVISION  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590  
April 6, 1993

REPLY TO THE ATTENTION OF:  
(AT-18J)

Dennis Drake, Acting Chief  
Air Quality Division  
Michigan Department of Natural Resources  
P.O. Box 30028  
Lansing, Michigan 48909

Dear Mr. Drake:

This letter concerns a proposal by General Motors (GM) to burn natural gas in existing industrial boilers at an estimated 16 sites in the State of Michigan, and 12 other sites in Region 5. The units at issue currently burn coal or fuel oil. During a February 23, 1993, telephone conference between GM, the United States Environmental Protection Agency (USEPA), and the Michigan Department of Natural Resources to discuss these alternate fuel projects, GM was asked to provide a demonstration that a change in fuels would not affect future auto production rates at these facilities.

The data provided by GM in a March 9, 1993, letter indicate that the utilization rate of the boilers would not be influenced by a switch to this more economical fuel because (1) the total steam cost at a given plant is insignificant when compared to the total operating cost at that plant, and (2) the steam production is primarily determined by climate conditions, not auto production rates.

The New Source Review (NSR) regulatory provisions require that a proposed physical change result in an increase in actual emissions in order for the change to be considered a modification and therefore subject to NSR. See, e.g., 40 Code of Federal Regulations 52.21(2)(i). In this case, the proposed switch to natural gas at various GM facilities will result in substantial reductions in the emissions factors of particulate matter, sulfur dioxide, and, in most cases,

oxides of nitrogen, as well as air toxics . The use of natural gas will also result in a substantial cost savings for the source. In general, where a source makes a change that reduces the costs of production, such changes usually affect the utilization of the facility. In this case, GM has clearly demonstrated that the utilization rate of the boilers will not be affected by the proposed fuel switch to natural gas. Consequently since the emissions factors for all relevant pollutants will decrease and neither the rate of production nor hours of operations of the facilities will increase as a result of the change, USEPA has determined that the proposed projects will not result in an increase in emissions. Therefore, based on the specific circumstances and data presented, it is USEPA's view that GM's proposed natural gas conversion projects should not be considered a major modification under the Federal New Source Review regulations.

If you have any questions with regard to this letter, please contact me.

Sincerely yours,

David Kee, Director  
Air and Radiation Division