MEMORANDUM

SUBJECT: Tire-Derived Fuel (TDF) Classified as Municipal Solid Waste (MSW)

for a Prevention of Significant Deterioration (PSD) Exemption

FROM: John Calcagni, Director

Air Quality Management Division (MD-15)

TO: David Kee, Director

Air and Radiation Division, Region V (AR-18J)

This is in response to your memorandum dated May 22, 1992 requesting a redetermination of whether TDF qualifies as an alternative fuel generated from MSW and therefore is exempted from PSD review. As discussed in your memorandum, 40 CFR 52.21(b)(2)(iii)(d) excludes from the definition of physical or operational change, and thus from the modification provisions for PSD, the "use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from MSW." On June 7, 1988, we made a determination that the combustion of a fuel consisting solely of TDF did not qualify for this exclusion (see memorandum from John Calcagni to David Kee, dated June 7, 1988). In light of the recent new source performance standards (NSPS) decision involving municipal waste combustors (MWC), you have inquired as to whether this determination will be changed. As discussed below, we do not plan to change our position at this time.

My prior determination rested on two grounds: (1) "TDF does not, by itself, constitute MSW in accordance with the definition contained in paragraph (b) of 40 CFR 60.51;" and (2) TDF is not "generated from" MSW within the meaning of the PSD exclusion. These determinations in part rested upon our conclusion that the exclusion was intended to address "fuel consisting of either the total collected mixture of municipal type waste (i.e., MSW) or the bulk of such mixture excluding the noncombustible waste fraction [i.e., refuse-derived fuel (RDF)]." In short, the Environmental Protection Agency's (EPA's) concern is for the alternative use of MSW which has already been collected, and not any particular individual component which might be utilized as a fuel by itself.

The interpretation was based on the definition of "solid waste" as it appeared in the NSPS for incinerators [40 CFR 60.51(b)]. In that regulation, solid waste is defined as refuse, more than 50 percent of which is municipal type waste, consisting of a mixture of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustibles, and noncombustible material such as glass and rock. Thus, the exemption from PSD review was intended for the mixture and not just one component of solid waste. The TDF did not qualify for the exemption because it was a single component of solid waste.

Your redetermination request is based on the discussion of TDF contained in the preamble and final rule for the MWC NSPS (40 CFR 60.50a) found in the February 11, 1991 Federal Register (56 FR 5488-5527).

In the MWC NSPS, the definition of "MSW" was revised by eliminating the 50 percent or greater mixture requirement. The MSW is defined as either a mixture or a single item stream of household, commercial, and/or institutional discards. This would include materials such as paper, wood, yard wastes, plastics, leather, rubber, glass, metals, and other combustible and noncombustible materials. The MSW also includes RDF which is shredded and classified by size (or pelletized) before combustion. Household, commercial/retail, and institutional waste does not include sewage, wood pallets, construction and demolition wastes, industrial process or manufacturing wastes, motor vehicles (including motor vehicle parts or vehicle "fluff"), and segregated medical waste. The MSW does include motor vehicle maintenance parts, limited to vehicle batteries, used motor oil, and tires. In addition, the preamble specifically states that tires are considered to be MSW.

While the recent NSPS changes the definition of MSW for MWC, we do not believe that the revision automatically must be or should be extended to new source review (NSR) programs. First, despite the many similarities between the applicability provisions of the two programs, EPA has long recognized that interpretations of the NSPS requirements cannot be automatically extended to their NSR counterparts. For instance, in the preamble to the 1980 regulations, EPA noted that the NSPS exclusions do not govern the similar NSR exclusions;

The NSPS program does not involve assessments of the impact of a source on air quality. In EPA's view, any switch to another fuel or raw material that would distort a prior assessment of a source's air quality impact should undergo scrutiny.

This concern is especially acute here since this exclusion would conceivably allow huge amounts of increased emissions to escape PSD review. Indeed, it is the absence of any regulatory analysis of the air quality impact of the new NSPS provisions that counsels against making this change.

In the February 11, 1991 preamble, the EPA specifically stated that it did not want to take any premature action with regard to the combustion of tires and decided not to regulate facilities that burn TDF under the MWC NSPS. The Agency was silent as to the applicability of other NSPS regulations and as to other regulatory programs. Just as EPA was hesitant to regulate such sources under the MWC NSPS, we cannot at this time assume the Agency intended to exempt such sources from regulations that have applied to them under the NSR program.

In addition to the impact from increased use of TDF, we are also concerned about opening this exclusion to any fuel derived from one or more materials found in the MSW stream. As discussed, the exclusion was designed to promote fuels derived from the entire waste stream and not any one constituent. The EPA assessed the risks to air quality from the exclusion based on this limitation. To now say that any one component qualifies (i.e., waste oil, batteries, plastics) dramatically changes the equation. The EPA may still retain the power to exclude such single-component fuels, but this power should be exercised only after a careful and public analysis of the impacts on air quality of such a change. The NSPS rule did not attempt this analysis, and EPA should stand with the status quo until one is done.

Region V's suggestion of imposing the environmentally- beneficial criteria to TDF, while laudable as a policy option, does not appear to be legally feasible.

Our examination of the regulatory history surrounding the RDF exclusion leads us to conclude that it is a full exclusion. If a fuel qualifies as RDF and is used for steam generation, it meets the regulatory criteria and is excluded from review. While we may impose additional criteria through rulemaking, we cannot read these into a regulation, no matter how sound the policy justification.

While we will not change our regulations at this time, we are aware of the potential environmental benefits that TDF offers. For this reason, we intend to address this issue in the NSR update package that is currently under development.

In the interim, I recommend that you work with both State and local agencies and sources to examine all permitting options that may exist. As a reminder, there are two scenarios in which a facility can qualify for a PSD exemption when switching to TDF: (1) a major steam-generating unit that switches to TDF that does not increase emissions greater than the significant emission rate, and (2) the source is capable of accommodating the alternative fuel as provided in 40 CFR 52.21(b)(2)(iii)(e).

If you have any further questions, please do not hesitate to contact Larry Elmore at telephone (919) 541-5433 or telefax (919) 541-5509.

cc: Air Division Director, Regions I-IV and VI-X

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