February 24, 1998

Bruce Jordan
US Environmental Protection Agency
MD-13
Research Triangle Park, NC 27711

Dear Mr. Jordan:

On behalf of STAPPA/ALAPCO's Pollution Prevention and Sustainability Committee, we request that EPA consider several issues with respect to the relationship between pollution prevention and MACT standards. The Committee has found that significant barriers exist in MACT standards to the implementation of pollution prevention and industrial ecology principles. Indeed, in some cases, certain policies can result in unintended increases in emissions of hazardous air pollutants (HAPs). Below are specific examples of where obstacles to pollution prevention exist in MACT standards, as well as recommendations for developing revised policies.

## **Barriers**

*"Once In, Always In" Policy*

The "once in, always in" policy (announced by John Seitz in a 1995 memorandum) creates several barriers that greatly reduce the incentive and/or hamper a source's ability to implement pollution prevention measures. Since the effective date of the MACT standard locks in technology applied to that source category, the standard is a "snapshot" of what the better-than-average source is capable of achieving as of the date the emissions information was obtained by EPA. As a result, the MACT standard does not necessarily yield the best or the maximum reductions possible.

Technology evolves over time, particularly in cases where a source is considering a new manufacturing method or process. Often, long lead times are needed to apply to either their parent and/or central office in order to secure approval for capital expenditures for purchasing new technologies and/or conducting research into these technologies and processes. Once the MACT limit is set and a source is subject to the emissions limit, and the associated record keeping and reporting requirements, there is little incentive for a source to reduce emissions further by implementing pollution prevention, even if the reduction would result in emissions that are a fraction of the MACT limit. The burdensome administrative requirements for MACT sources continue regardless of the source's emissions.

For example, sources subject to the wood furniture MACT can comply with the emissions standard through use of higher solids solvent-based coatings. As long as the source meets the emissions limit, it is not limited to the amount of material that can be applied, such that actual emissions can increase over time. In addition, there is no incentive for a source to consider further reductions and/or to investigate new, less polluting technologies or processes since, under this policy, they are always subject to the MACT regardless of their emissions. In one particular situation, a source was able to switch from solvent-based to UV-cured coatings and, in the process, reduced its source HAP emissions from 50 tons per year to 200 pounds per year. Fortunately, this change occurred prior to the MACT compliance date and the source is not subject to the standard now. Since UV-cured coatings technology is being further refined, this option should be increasingly available to other sources. However, due to the "once in, always in" policy, there is no incentive for a source to commit capital to changing its processes -- even if emissions drop significantly below applicability thresholds -- since it will still be subject to the MACT.

*Inconsistent Treatment Among MACT Standards*

Pollution prevention is treated inconsistently among the various MACT standards. Indeed, certain MACTs do not include pollution prevention at all. While some MACTs include a pollution prevention option, their record-keeping and reporting conditions are so burdensome that sources are discouraged from considering them. For example, the proposed pharmaceutical MACT, which includes pollution prevention as an alternative means of demonstrating compliance, contains substantial record-keeping requirements that do not comport with pre-existing requirements pursuant to FDA requirements. Due to this disincentive, few sources will seek to take advantage of pollution prevention opportunities.

Another concept that would appear to promote pollution prevention is presented in the emissions averaging provision of the Hazardous Organic NESHAP MACT. In practice, sources find that the record keeping and reporting requirements are prohibitively onerous. This barrier is amplified further by EPA's plan to include reference in future MACTs to the emissions averaging provisions of the HON.

*Secondary Effects of Control Technology*

There are many secondary effects associated with the use of control technology that do not exist when pollution prevention techniques are used. Unfortunately, these effects are not being considered in the MACT development process. Control technologies can result in increases in emissions of oxides of nitrogen [where thermal treatment is chosen], increased waste disposal and wastewater impacts and increased energy usage, which itself has air emissions impacts. It has been demonstrated that these secondary effects can be avoided through pollution prevention activities. In other words, reductions achieved through pollution prevention are not offset by increases elsewhere or by cross-media pollutant transfers.

*Similar Sources Policy*

EPA's interpretation of "similar sources" in determining the MACT floor results in pollution prevention being treated as a separate process. The performance standard is therefore based upon a source's ability to control emissions, rather than being able to avoid emitting them through process and/or operational changes that integrate pollution prevention.

**Suggested Solutions**

We propose several solutions that will recognize the environmental benefits of pollution prevention, continue to offer sources flexibility in their operations and comply with the intent of the Clean Air Act. As a general rule, STAPPA and ALAPCO encourage EPA to provide real incentives for pollution prevention, rather than simply allowing pollution prevention approaches or use of pollution prevention as an alternative means to demonstrate compliance. Specifically, we offer the following recommendations:

- With respect to the "once in, always in" policy, sources who are able to reduce their emissions to very low levels without the application of control technology should be deemed in compliance with the MACT and not subject to the standard's other administrative requirements. An example would be to apply the John Seitz 1995 memorandum to sources being presumed to satisfy their Title V obligations if their actual emissions are a fraction of the applicable threshold. EPA could excuse a source from MACT if, through application of pollution prevention, a source's emissions were reduced to less than 25% of the particular threshold.

- MACT standards could be performance-based, requiring a source to meet an emissions standard of "X" pounds of HAP emissions per "Y" pounds or tons of product produced. In concept, this principle would operate in conjunction with a plantwide applicability limit (PAL) and include emissions and increased production that result from de-bottlenecking and facility expansions. The acrylic fiber Presumptive MACT considered this approach and STAPPA/ALAPCO encourage its broader application to other MACTs.

- EPA should consider developing a HAP-specific PAL that could be used to demonstrate compliance with the MACT standard for those states and local agencies that have developed an air toxics program. Such an approach would also strongly favor pollution prevention and would overcome the barriers associated with the emissions averaging provisions in the HON, as highlighted above. The HAP PAL should also include fugitive emissions from equipment leaks and valves/flanges to further promote real reductions in these pollutants.

- EPA should evaluate and consider what may be required by other federal agencies and seek to harmonize these requirements to the extent possible. For example, in

the pharmaceutical MACT, affected sources already maintain intricate records to demonstrate compliance with FDA requirements. Use of information already available and required elsewhere would help minimize any additional record keeping burden and improve the effectiveness of the source's operations. EPA should follow the example set by the Title V program when developing MACT standards. Title V permitting programs encourage permitting authorities to consider a holistic view of source operations, as compared to pre-Title V programs which were primarily emission point and/or equipment specific. This broader view and the five-year permit term create many opportunities for subject sources to implement more flexible paths to reduce emissions. Successful models like those of the Pollution Prevention in Permitting (P4) project reflect that the integration of pollution prevention, operational flexibility and pre-approval for changes and modifications create incentives for sources to operate more efficiently, replace older equipment and reduce emissions.

- EPA should be less concerned about backsliding from MACT control levels through potential to emit limits if it is indeed serious about residual risk under Section 112f and urban area source under Section 112k. Such sources could be regulated under Sections 112f and k as necessary to protect public health. If a source fully implements pollution prevention programs then it will limit its potential to emit. Reductions achieved through pollution prevention will also be permanent and quantifiable, therefore compliant with EPA's federal enforceability policy.

We believe that EPA's consideration of the approaches suggested above will strengthen environmental protection by removing barriers to new pollution prevention technologies and will offer sources several real possibilities to demonstrate compliance with the MACT. STAPPA and ALAPCO would like to receive a response by March 16, 1998 that communicates EPA's intent with respect to the issues raised and describes the mechanism through which the agency expects to further explore suggestions and to place viable approaches in place. If you have any questions, feel free to call Chris James at 860/424-3688 and Marcia Willhite at 402/441-8188.

Sincerely,

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