

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 10460

SEP 28 1982

OFFICE OF  
AIR, NOISE AND RADIATION

MEMORANDUM

SUBJECT: Policy on Excess Emissions During Startup, Shutdown,  
Maintenance, and Malfunctions

FROM: Kathleen M. Bennett

TO: Assistant Administrator for Air, Noise and Radiation  
Regional Administrators, Regions I-X

This memorandum is in response to a request for a clarification of EPA's policy relating to excess emissions during Startup, shutdown, maintenance, and malfunctions.

Excess emission provisions for startup, shutdown, maintenance, and malfunctions were often included as part of the original SIPS approved in 1971 and 1972. Because the Agency was inundated with proposed SIPS and had limited experience in processing them, not enough attention was given to the adequacy, enforceability, and consistency of these provisions. Consequently, many SIPS were approved with broad and loosely-defined provisions to control excess emissions.

In 1978, EPA adopted an excess emissions policy after many, less effective attempts to rectify problems that existed with these provisions. This policy disallowed automatic exemptions by defining all periods of excess emissions as violations of the applicable standard. States can, of course, consider any demonstration by no source that excess emissions were due to an unavoidable occurrence in determining whether any enforcement action is required.

The rationale for establishing these emissions as violations, as opposed to granting automatic exemptions, is that SIPS are ambient-based standards and any emissions above the allowable may cause or contribute to violations of the national ambient air quality standards. Without clear definition and limitations, these automatic exemption provisions could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment. Additionally, by establishing an enforcement discretion approach and by requiring the source to demonstrate the existence of an unavoidable malfunction on the source, good maintenance procedures are indirectly encouraged.

Attached is a document stating EPA's present policy on excess emissions. This document basically reiterates the earlier policy, with some refinement of the policy regarding excess emissions during periods of scheduled maintenance.

A question has also been raised as to what extent operating permits can be used to address excess emissions in cases where the SIP is silent on this issue or where the SIP is deficient. Where the SIP is silent on excess emissions, the operating permit may contain excess emission provisions which should be consistent with the attached policy. Where the SIP is deficient, the SIP should be made to conform to the present policy. Approval of the operating permit as part of the SIP would accomplish that result.

If you have any questions concerning this policy, please contact Ed Reich at (382-2807).

Attachment

1. To the maximum extent practicable the air Pollution control equipment, process equipment, or processes were maintained and operated in a manner consistent with good practice for minimizing emissions;

2. Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;

3. The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;

4. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality; and

5. The excess emissions are not part of a recurring pattern indicative of inadequate design operation, or maintenance.

### III. EXCESS EMISSIONS DURING START-UP SHUTDOWN AND MAINTENANCE

Any activity or event which can be foreseen and avoided, or planned, falls outside of the definition of sudden and unavoidable breakdown of equipment. For example, a sudden breakdown which could have been avoided by better operation and maintenance practices is not a malfunction. In such cases, the control agency must enforce for violations of the emission limitation. Other such common events are start-up and shutdown of equipment, and scheduled maintenance.

Start-up and shutdown of process equipment are part of the normal operation of a source and should be accounted for in the design and implementation or the operating procedure for the process and control equipment. Accordingly, it is reasonable to expect that careful planning will eliminate violations of emission limitations during such periods.

If excess emissions occur during routine start-up and shutdown of such equipment, they will be considered as having resulted from a malfunction only if the source can demonstrate that such emissions were actually caused by a sudden and unforeseeable breakdown in the equipment.

Similarly, scheduled maintenance is a predictable event which can be scheduled at the discretion of the operator, and which can therefore be made to coincide with maintenance on production equipment, or other source shutdowns. Consequently, excess emissions during periods scheduled maintenance should be treated as a violation unless a source can demonstrate that such emissions could not have been avoided through better scheduling for maintenance or through better operation and maintenance practices.