U.S. ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 60, 61, 63, and 65

[AD-FRL]

RIN 2060-AG28

Consolidated Federal Air Rule (CAR): Synthetic Organic Chemical Manufacturing Industry

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule and notice of public hearing.

SUMMARY: This action proposes a consolidated Federal air rule for the Synthetic Organic Chemical Manufacturing Industry (SOCMI). This proposed rule consolidates major portions of the following new source performance standards (NSPS) and national emission standards for hazardous air pollutants (NESHAP) applicable to storage vessels, process vents, transfer operations, and equipment leaks within the SOCMI: 40 CFR part 60, subparts A, Ka, Kb, VV, DDD, III, NNN, and RRR; 40 CFR part 61, subparts A, V, Y, and BB; and 40 CFR part 63, subparts A, F, G, and H. The proposed rule is intended to pull together applicable Federal SOCMI rules into one integrated set of rules in order to simplify, clarify, and improve implementation of the existing rules with which source owners or operators must

comply. The consolidated rule is an optional compliance alternative for SOCMI sources; sources may simply continue to comply with existing applicable rules or choose to comply with the proposed consolidated rule. The effect of this consolidation will be to improve understandability, reduce burden, clarify requirements, and improve implementation and compliance.

DATES: Comments. Comments must be received on or before [insert date 75 days after publication date in the FEDERAL REGISTER].

Public Hearing. A public hearing will be held, if requested, to provide interested persons an opportunity for oral presentation of data, views, or arguments concerning the proposed SOCMI CAR. If anyone contacts EPA requesting to speak at a public hearing by [insert date 30 days after publication date in the FEDERAL REGISTER], a public hearing will be held on [insert date 45 days after publication date in the FEDERAL REGISTER], beginning at 9:30 a.m. Persons interested in attending the hearing should notify Yvonne Chandler, (919) 541-5627, to verify that a hearing will occur. If a hearing is held, the docket will remain open for 30 days after the hearing for the submission of rebuttal or

supplementary information as provided by section 307(d)(5) of the Clean Air Act (Act).

Request to Speak at a Hearing. Persons wishing to present oral testimony must contact Yvonne Chandler, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, N.C., 27711, telephone number (919) 541-5627 by [insert date 30 days after publication date in the FEDERAL REGISTER].

ADDRESSES: Comments. Comments should be submitted (in duplicate, if possible) to: Air and Radiation Docket and Information Center (MC-6102), Attention, Docket No. A-96-01, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC, 20460. The EPA requests that a separate copy also be sent to the contact person listed below in the "FOR FURTHER INFORMATION CONTACT" section.

Comments on the proposal may also be submitted electronically by sending electronic mail (e-mail) to: a-and-r-docket@epamail.epa.gov. Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on disks in WordPerfect 5.1 file format or ASCII file format. All comments and data in electronic form must be identified by the docket number (A-96-01). No Confidential Business Information (CBI)

should be submitted through electronic mail. Electronic comments on this proposed rule may be filed online at many Federal Depository Libraries.

Docket. A docket, No. A-96-01, containing information considered by EPA in development of the proposed standards for the CAR, is available for public inspection between 8:00 a.m. and 4:00 p.m., Monday through Friday except for Federal holidays at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (MC-6102), 401 M Street SW, Washington, DC 20460 [phone: (202) 260-7548]. The docket is located at the above address in Room M-1500, Waterside Mall (ground floor). A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Mr. Rick Colyer, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, N.C., 27711, telephone number (919) 541-5262, fax number (919) 541-0942, or e-mail: colyer.rick@epamail.epa.gov.

Technology Transfer Network. The Technology Transfer Network (TTN) is a network of EPA's electronic bulletin boards. The TTN provides information and technology exchange in various areas of air pollution control. The service is free except for the cost of a

phone call. Dial (919) 541-5472 for modems up to 14,400 bits per second (bps). The TTN is also accessible through the Internet at "http://ttnwww.rtpnc.epa.gov." If more information on the TTN is needed, call the HELP line at (919) 541-5384.

SUPPLEMENTARY INFORMATION: The following outline is provided to aid in reading the preamble to the proposed SOCMI CAR.

G. Enhancing the Intergovernmental Partnership Under Executive Order 12875

H. Clean Air Act

I. National Technology Transfer and Advancement Act

J. Executive Order 13045

K. Executive Order 13084: Consultation and Coordination with Indian Tribal Governments

I. Regulated Entities and Background Information

A. Regulated Entities

The regulated category and entities potentially affected by this action include:

Category	Examples of regulated entities
Industry	Synthetic organic chemical manufacturing industry units. For example, producers of benzene, toluene, or any other chemical listed in table 1 of 40 CFR part 63, subpart F, and any other chemical manufacturing process unit identified in an applicable subpart that references the use of this part. Producers of polypropylene, polyethylene, polystyrene, or poly(ethylene terephthalate). Producers of vinyl chloride and polyvinyl chloride. Volatile organic compound storage vessels. Benzene storage vessels. Benzene transfer operations. Equipment (valves, pumps, connectors, etc.) in benzene service.

This table is not intended to be exhaustive, but rather, to provide a guide for entities likely to qualify to implement this action. This table lists the types of entities that EPA is now aware could potentially qualify to implement this action. To determine whether your facility will qualify to implement this action, you should carefully examine the applicability criteria in 40 CFR part 60 subparts Ka, Kb, VV, DDD, III, NNN, and RRR; 40 CFR part 61, subparts V, Y, and BB; and 40 CFR part 63, subparts F, G, and H. If you have questions

regarding the applicability of this action to a particular entity, consult the person listed in the preceding "FOR FURTHER INFORMATION CONTACT" section.

B. Background Information

Over the past 25 years, EPA has issued a series of Federal air regulations, many of which affect the same plant site. As a result, many facilities are now subject to multiple Federal rules applying to different emission points. Each rule has its own emission control requirements as well as monitoring, recordkeeping, and reporting requirements. Although these rules were developed for different purposes, under different statutory authorities, and apply to different pollutants, they may impose many duplicative or near duplicative requirements on a plant site, thus complicating implementation of and compliance with these rules.

On March 16, 1995 President Clinton and Vice President Gore announced several initiatives aimed at reinventing environmental regulation. One of those initiatives was to consolidate Federal air rules, so that all Federal air rules for any single industry would be incorporated into a single rule. This rule would consist of ". . . one set of emission limitations, monitoring, and recordkeeping and reporting requirements."

The EPA selected the Federal air rules applying to the SOCMI for a pilot project to study the feasibility and practical implications of consolidating and streamlining existing rules, and to establish a workable process for consolidation that can then be applied to other consolidation efforts in the future. The SOCMI was selected as the pilot because of the large number of similar Federal air regulations that can apply at a single location. The SOCMI is subject to NSPS and NESHAP under the Act, as well as to Resource Conservation and Recovery Act (RCRA) air standards. The rules for a given type of emission point require application of controls with similar control efficiencies and include similar design, equipment, or operating standards. However, the standards differ in their applicability and in some of their control, monitoring, recordkeeping, and reporting requirements. Additionally, both the SOCMI and State air pollution control agencies have expressed great interest in consolidation of applicable Federal air requirements to the extent possible for easier incorporation into title V operating permits.

For these reasons, EPA believes that consolidation of the requirements of the various rules into one rule would greatly benefit both the industry and government

enforcement agencies. It is believed that such consolidation would improve compliance and enforceability and reduce resource needs.

II. Considerations in Rule Development

A. Goals and Objectives

The following goals and objectives were established for developing this proposed consolidation:

(1) Reduce regulatory burden by consolidating and simplifying requirements and eliminating duplicative requirements.

(2) Facilitate implementation and compliance by making the requirements easier to understand and incorporating streamlined compliance approaches from the most recent rules.

(3) Consolidate the present system of Federal air rules that apply to SOCMI facilities into a single rule without compromising environmental protection and enforceability by maintaining the same applicability and the same or greater emission control levels as the underlying rules.

It is not EPA's intent to alter the applicability of the underlying rules. Thus, only sources already subject to an underlying rule would be affected by the CAR. Likewise, no source subject to an underlying rule would

become exempt under the CAR. In addition, regardless of which eligible sources choose to comply with the CAR, implementation of the CAR will not result in greater emissions. Rather, greater emission reductions would be likely since all sources choosing to comply with the CAR would be raised to the same level of control. It is anticipated that, due to the burden reduction afforded by the CAR, sources will choose to comply with the CAR despite potential increases in stringency over some provisions in the underlying rules.

As a basis for the consolidation effort, EPA recognized that strategies and approaches to regulating specific types of emission points, such as storage tanks or equipment leaks, have evolved and improved over the 25 years of SOCMI rule development. For the most part, the referencing subparts have not been substantially revised since promulgation, other than administrative changes. In developing the CAR, EPA has focused on provisions that reflect the most current and effective approaches to emission control as well as the clearest and most concise language. Burden reduction was also a major theme in the consolidation process, and each provision was examined closely for potential burden reduction. Particular scrutiny was given to provisions

dealing with monitoring, recordkeeping, and reporting. Moreover, reducing the number of applicable rules, in and of itself, is a source of additional burden reduction. The EPA believes that creation of a consolidated air rule around these goals and objectives will lead to improved compliance and implementation for the SOCMI industry.

B. Participation

The EPA's strategy for consolidation included significant participation by affected parties outside the Agency. The EPA approached the Chemical Manufacturers Association (CMA), which represents the SOCMI, to discuss the concept of a consolidated SOCMI rule and to contribute ideas for establishing such a rule. The CMA readily supported the concept of consolidation and volunteered resources to assist in the project. Air pollution agencies in States where the majority of SOCMI facilities are located and national environmental groups were also invited. Some States and environmental groups declined direct involvement due to resource constraints and also due to the fact that the applicability of the underlying rules would not change, and the overall stringency of the underlying rules would not be diminished.

In addition, an extended group of other interested parties consisting of representatives from industries with similar emissions and emission points as the SOCMI, environmental groups, and State agencies was kept informed through correspondence and meetings. This extended group was briefed and asked to provide input periodically during development of the proposed CAR. Industries and organizations represented in this group would not necessarily be affected by the CAR but are interested in the outcome to determine whether a similar consolidation effort would be beneficial for their interests. This group includes the following interested parties:

- State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials (STAPPA/ALAPCO) and other State air pollution agencies
- Synthetic Organic Chemical Manufacturers Association
- Natural Resources Defense Council
- American Petroleum Institute
- Independent Liquid Terminals Association
- National Petroleum Refiners Association
- Society of Plastics Institute

No groups have been purposely excluded from the process, and comment on this proposal is welcome from any interested party.

The EPA convened meetings with affected parties on an as-needed basis--roughly once every one to two months. At the earlier meetings, goals, objectives, and basic principles of consolidation were formulated. Subsequent meetings addressed technical issues, comparisons of similar provisions, enforcement issues, and identification of burden reduction opportunities. Ultimately, the work group provided well balanced and informed input for EPA to develop a technically feasible and enforceable consolidated rule.

III. Summary of the CAR

This section of the preamble provides a general overview of the CAR. More detailed discussions and rationale for the CAR's provisions are included in sections IV, V, and VI of this preamble.

A. Scope

One of the first decisions required for the consolidation effort addressed which regulations would be consolidated. Many options were considered, but EPA eventually decided to limit the scope of the pilot SOCMI CAR to the Federal regulations listed in table 1. These

are the Federal Clean Air Act rules that affect the SOCMI and that are consolidated in the CAR. The EPA determined that this scope was broad enough to provide significant benefits, but well defined enough to ensure a reasonable chance of success as a pilot project.

TABLE 1. SCOPE: RULES CONSOLIDATED IN THE SOCMI CAR

40 CFR part 60, subparts:	
A:	General Provisions
Ka:	Petroleum Liquids Storage[a]
Kb:	Volatile Organic Liquid Storage[a]
VV:	SOCMI Equipment Leaks[a]
DDD:	Certain Polymers and Resins Process vents[a]
III:	SOCMI Air Oxidation Process Vents[a]
NNN:	SOCMI Distillation Process Vents[a]
RRR:	SOCMI Reactor Process Vents[a]
40 CFR part 61, subparts:	
A:	General Provisions
V:	Equipment Leaks (for benzene and vinyl chloride)[a]
Y:	Benzene Storage[a]
BB:	Benzene Transfer[a]
40 CFR part 63, subparts:	
A:	General Provisions
F:	SOCMI Applicability
G:	SOCMI Storage, Transfer, and Process Vents[a]
H:	SOCMI Equipment Leaks[a]

[a]These subparts contain proposed language that refers readers to the SOCMI CAR as an optional means of compliance. Thus, these subparts are referred to as "referencing subparts."

Synthetic Organic Chemical Manufacturing Industry rules under other authorities (for example, RCRA), proposed rules, and rules potentially subject to significant changes (for example, wastewater hazardous organic NESHAP) were not included in this pilot effort. The EPA's intent was to keep the rule development process

manageable in order to develop a practical CAR in a reasonable amount of time. If the SOCMI CAR is widely perceived as useful to industry and to enforcement agencies, EPA will consider these other SOCMI rules for consolidation at a later date.

The EPA also considered the following rules for similar inclusion: 40 CFR part 60, subparts GGG for petroleum refinery equipment leaks and KKK for onshore natural gas processing equipment leaks, and 40 CFR part 63, subpart I for certain processes subject to the negotiated regulation for equipment leaks. Although these rules do refer subject sources to the CAR's referencing subparts, they do not cover SOCMI sources. Therefore, EPA decided not to allow sources subject to these rules to comply with the CAR. This decision reflects EPA’s decision to limit the coverage of the CAR to better assess the effects, enforcement, and implementation of the consolidation.

The vast majority of facilities affected by the rules in table 1 are SOCMI facilities; but some rules also affect non-SOCMI sources. For example, 40 CFR part 60, subparts Ka and Kb apply to storage vessels within SOCMI process units as well as those in non-SOCMI applications such as refineries and bulk

storage facilities. Subpart DDD of 40 CFR part 60 (for certain polymers and resins production process vents) was included in the consolidation because these production units are often located at the same facilities as SOCMI units. The process vents for these production units are often shared, and the control methods and requirements are virtually identical. The consolidated part 61 subparts for equipment leaks and for benzene storage and transfer also apply to both SOCMI and non-SOCMI facilities. The consolidated part 63 rules apply solely to SOCMI facilities. The CAR is designed primarily for SOCMI processes, although co-located non-SOCMI sources might also take advantage of the CAR under certain circumstances. Section III of this preamble includes further discussion of which sources may choose to comply with the CAR.

The EPA is also proposing consolidated general provisions for the CAR by combining applicable requirements from the 40 CFR parts 60, 61, and 63 general provisions. These consolidated general provisions would become applicable once a source becomes subject to the CAR. General provisions are included in the consolidation so that the CAR will contain all relevant

provisions, with certain noted exceptions, for sources complying with the CAR.

B. Overview of the CAR

The CAR is being proposed as a new part, 40 CFR part 65, since the rules being consolidated are located across three different parts of 40 CFR (parts 60, 61, and 63). The proposed CAR comprises subparts A through G of part 65. Part 65 will contain any future consolidated Federal air rules, as well.

The CAR is proposed as an optional compliance method for sources that are subject to one of the referencing subparts. The term "referencing subpart(s)" is used throughout 40 CFR part 65 and refers to the SOCMI regulations subject to the footnote in table 1. The CAR is designed to include all or most of the applicable provisions for a source that chooses to use the CAR as a compliance method. Sources that are not eligible or that choose not to comply with the CAR will continue to comply with the applicable referencing subparts with no change in compliance requirements.

Compliance with the CAR is allowed on a SOCMI CAR unit (SCU) basis. An SCU is analogous to the types of process units defined in the referencing subparts, and was developed specifically to describe the collection of

equipment and emission points that are eligible to choose the CAR as a compliance method. The term "SOCMI CAR unit" is defined in the proposed part 65 general provisions (Subpart A) and is further described in section IV. A of this preamble. Under certain conditions, emission points that are not part of an SCU, but are subject to one of the referencing subparts, may also choose to comply with the CAR. These conditions are further described in section IV.A.

Applicability. The CAR does not alter applicability for any source. Sources may choose to comply with the CAR only when they are sources subject to a referencing subpart and specifically referred to the CAR by that subpart. Conversely, emission points or equipment that are not subject to any referencing subparts can not become subject through any provision in the CAR.

Along with the proposed CAR, today’s notice proposes changes to the referencing subparts. These proposed changes add "pointers" to the CAR in each referencing subpart. The pointers are additions to the applicability sections that specify which sources may take advantage of the CAR and which subparts of part 65 would apply to each type of emission point.

New sources that become subject to a referencing subpart will consult the applicability provisions of that referencing subpart to determine eligibility to comply with the CAR. If a new source is part of an SCU that is implementing the CAR, the new source must also implement the CAR, or the entire SCU (existing and new components) must opt not to implement the CAR and comply with the applicable referencing subpart(s) instead. Further discussion of SCUs and options for choosing to comply with the CAR is presented in section IV.A of this preamble.

Subparts of the CAR. Figure 1 illustrates the structure of the CAR subparts. Subpart A contains the CAR's general provisions, which apply to all sources complying with the CAR. The general provisions cover applicability and definitions; the general requirements for compliance, performance tests, monitoring, recordkeeping, and reporting; administrative subjects. Note that some general requirements pertaining to Continuous Parameter Monitoring Systems (CPMS) are located in subpart G of the CAR.

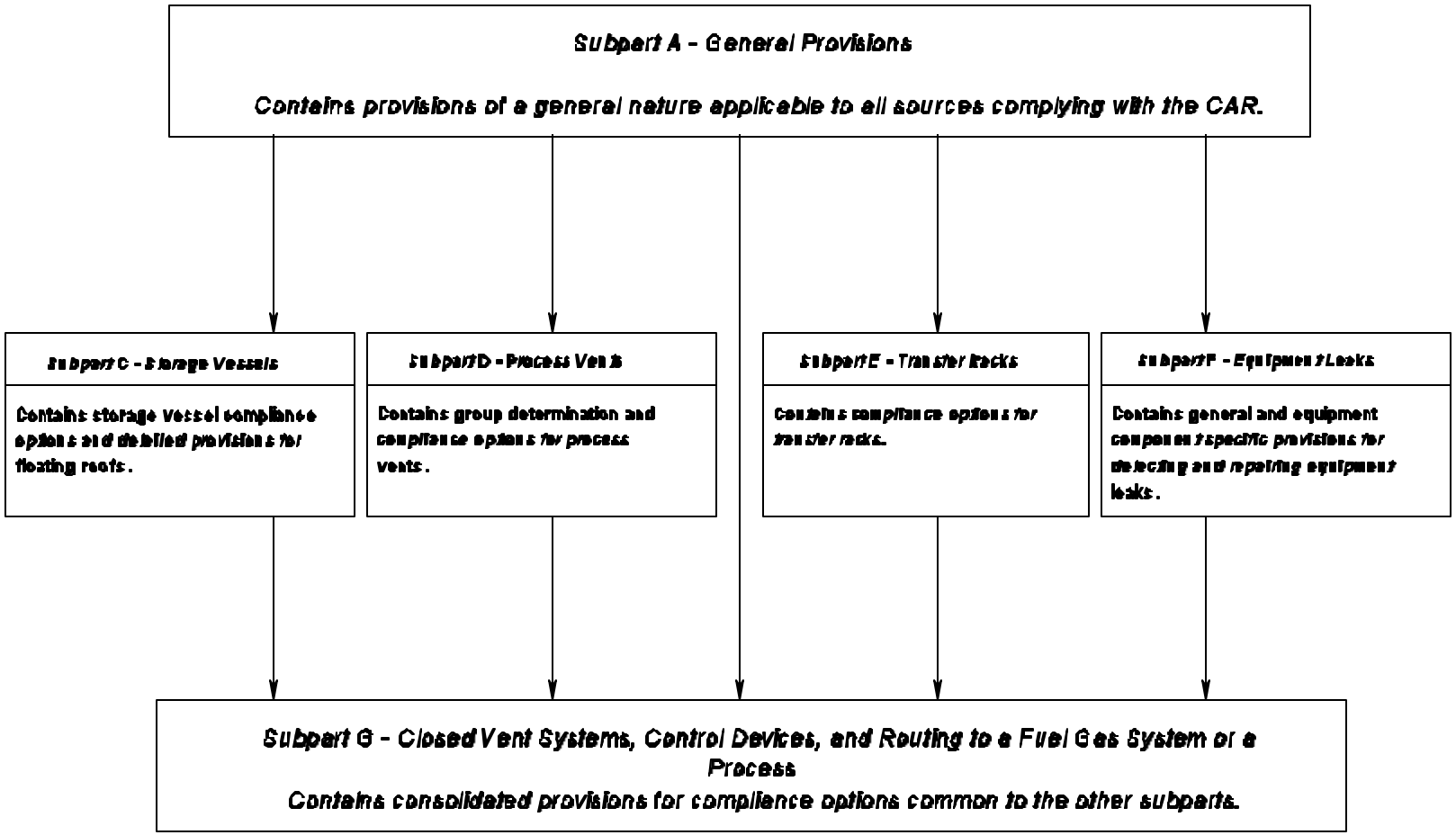

Figure 1. Structure of the CAR.

Each of subparts C through F outlines the compliance options for a particular type of emission point. (Subpart B is reserved.)

- Subpart C - storage vessels,
- Subpart D - process vents,
- Subpart E - transfer racks, and
- Subpart F - equipment leaks.

Subparts C through F also contain the emission control requirements for some of these compliance options, and the associated compliance, monitoring, recordkeeping, and reporting requirements specific to those control options. However, if an owner or operator chooses to comply by either (1) a closed-vent system and add-on control device, or (2) routing to a fuel gas system or to a process as a compliance option, the source is further referred to subpart G. Subpart G contains the emission control requirements for closed-vent systems, control devices, and routing to a fuel gas system or process, including the associated testing, monitoring, data handling, reporting and recordkeeping requirements, and general requirements related to CPMS.

IV. How the CAR Works and Its Structure

The CAR is an optional compliance method for sources subject to the referencing subparts listed in table 1 of this preamble. The CAR is designed so that, once an owner or operator has chosen to comply with the CAR for a particular source, most of the relevant provisions for that source are contained in part 65. Compliance with the CAR is allowed for the collection of equipment that meets the definition of an SCU. In addition, sources that are not part of an SCU may also choose to comply with the CAR if they are (1) subject to one of the referencing subparts, and (2) located at the same plant site with an SCU that is complying with the CAR. Therefore, an owner or operator of a SOCMI facility may choose to comply with the CAR for all or some of the regulated sources subject to the referencing subparts at the facility.

This section of the preamble describes who can use the CAR, what part of a facility can comply with the CAR, and how the parts of the facility that can comply with the CAR are delineated. The rationale for these decisions is also explained.

A. How the CAR Works

Figures 2a and 2b present a thought process that might typically be used by an owner or operator when determining whether the CAR is right for their facility. This section of the preamble steps through these figures and each of their decision points. In doing so, how the CAR works and the rationale behind the CAR and it's facets are described.

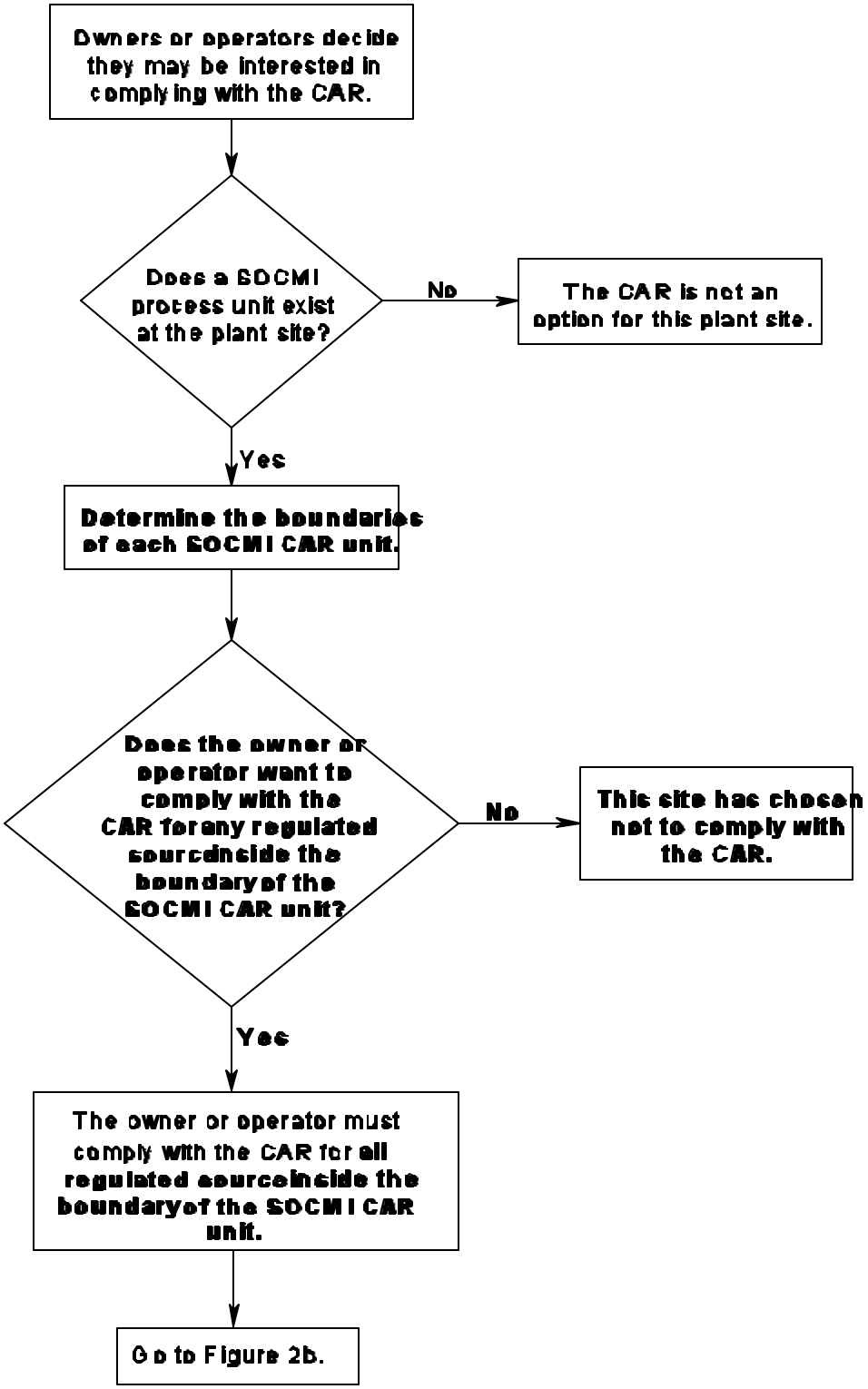

Figure 2a. How the CAR works, Part 1.

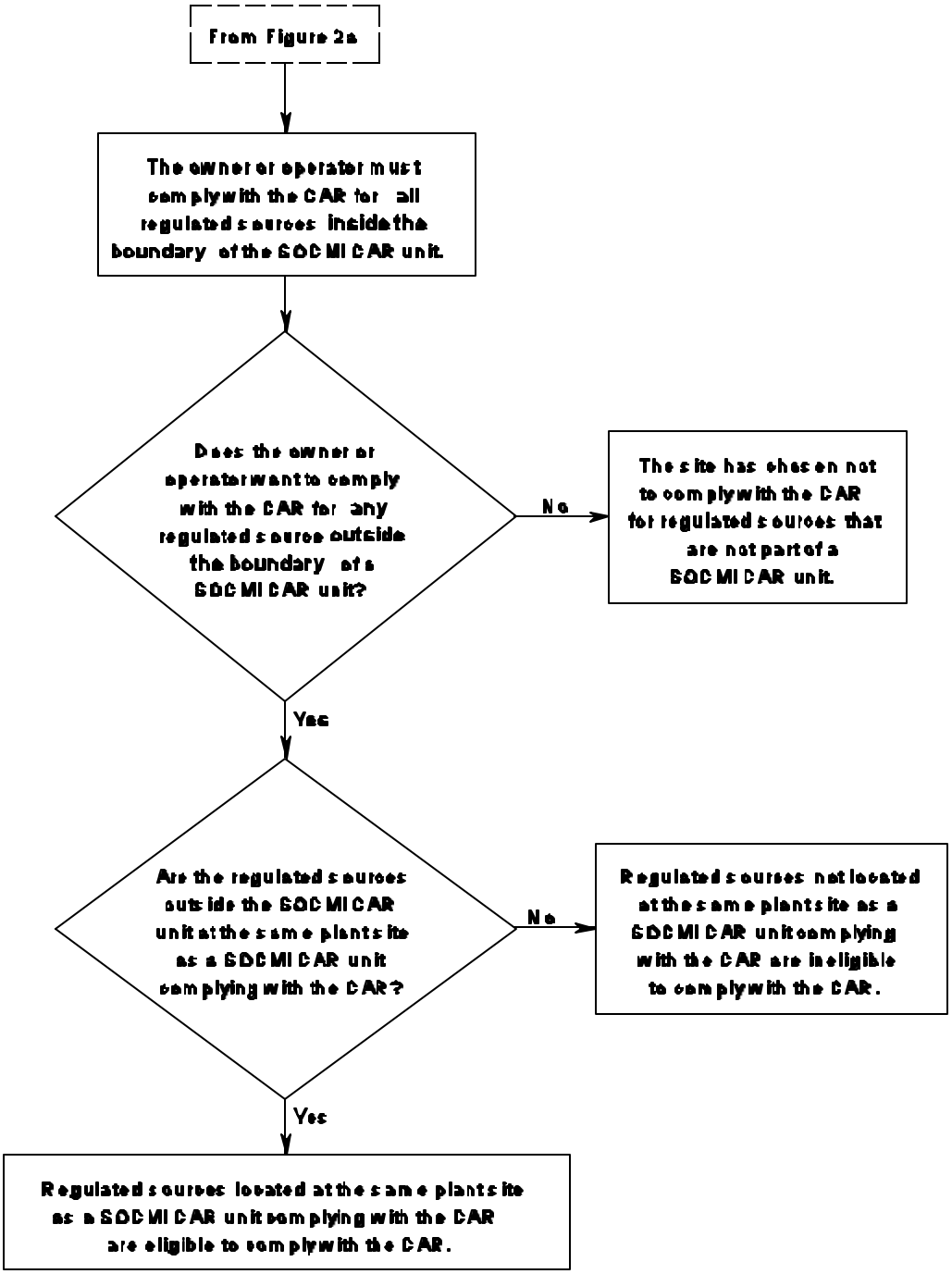

Figure 2b. How the CAR works, Part 2.

What is SOCMI? As shown in figures 2a and 2b, once an owner or operator decides that the CAR may be of interest (i.e., they are subject to some referencing subparts and are wondering what the next step is), the first consideration would be whether or not the facility is a SOCMI facility. As discussed previously, the CAR only applies to SOCMI facilities. In the CAR, a SOCMI facility is considered any facility that is subject to 40 CFR part 60, subpart III, NNN, or RRR or the HON; or a facility that would have been subject to subpart III, NNN, or RRR had construction of the regulated source commenced after the applicability date of one of these rules.

In determining what should constitute a SOCMI facility in the CAR, EPA decided that a SOCMI facility should be any facility that considers itself part of that industry. The
EPA reasoned that a facility would consider itself a SOCMI facility if it was subject to any of the SOCMI rules. The SOCMI rules are: 40 CFR part 60, subparts III, NNN, RRR,
and VV (the NSPS), and 40 CFR part 63, subparts G and H [the Hazardous Organic NESHAP (HON)]. Defining a SOCMI facility

as any facility that is subject to one of these rules is a simple matter. However, EPA also reasoned that some facilities may not have triggered a SOCMI NSPS or the HON but would consider themselves SOCMI because of the chemicals they produce. For example, crotonic acid is a chemical that is regulated as part of the SOCMI under 40 CFR part 60, subparts VV, III, and NNN, but not regulated as part of the SOCMI under the HON. Thus, a facility producing crotonic acid may not trigger the NSPS rules, but still would consider itself part of the SOCMI because it produces a SOCMI chemical. Therefore, EPA also considered facilities to be SOCMI facilities if they could trigger a SOCMI NSPS with a modification or reconstruction. The EPA considered this a reasonable decision since many non-SOCMI facilities could easily make a change that would trigger a SOCMI NSPS. The EPA decided that this concept would best be represented in the SOCMI definition based upon the construction date of the facility. This concept is handled in the definition with the following phrase: ". . . if construction of the regulated source had commenced after the applicability date of the SOCMI NSPS."

What is a SOCMI CAR unit? The basic unit for determining CAR applicability is the SCU. This new term

is needed in order to clearly designate and describe the particular combination of emission points that are eligible to comply with the CAR. The definition of SCU is modeled after the definition of "chemical manufacturing process unit (CMPU)" in the HON. The proposed CAR defines an SCU as the equipment assembled and connected by pipes or ducts to process raw materials and to manufacture an intended product. The definition goes on to explain that the basic component of an SCU is:

- a process vent subject to 40 CFR part 60, subpart III, NNN, or RRR (the referencing subparts that are NSPS for SOCMI process vents); or
- equipment subject to 40 CFR part 60, subpart VV (the referencing subpart that is the NSPS for SOCMI equipment leaks);
- a CMPU that is subject to the SOCMI HON.

Without at least one of these basic components, there is no SCU. The SCU also includes storage vessels, transfer operations, and equipment leak emission points that are associated with an SCU and are also subject to a referencing subpart. The EPA reasoned that in making the CAR optional and thereby providing more flexibility to industry, they might increase the complexity of implementing the CAR for regulatory authorities. This is because inspectors would have to know all of the

referencing subparts and the CAR, and also understand which rule the facility had chosen to comply with for each emission point. To offset this potential increase in complexity, EPA decided that facilities would have the option to comply with the CAR, but must do so at least on a process unit basis so as to include a significant portion of the facility.

A process unit is a small enough collection of emission points and equipment to provide operational flexibility to the facility, but is a large enough collection to avoid confusion and undue burden for regulatory authorities. Furthermore, SOCMI facilities are typically managed on a process unit basis. Therefore, identifying process units and complying with the same monitoring, recordkeeping, and reporting requirements by process unit would be consistent with existing management activities. However, since the term "process unit" has many different meanings and connotations across the referencing subparts, EPA decided it would be better to define a new term for the CAR -- SCU was chosen.

Assigning equipment to a SOCMI CAR unit. All storage vessels, process vents, or transfer racks connected to or operating with an SCU are not necessarily

part of that SCU. Whether or not particular emission points or equipment are part of an SCU is determined by the assignment procedures prescribed in the proposed CAR general provisions. Assignment procedures are prescribed for emission points that are commonly shared between SCUs; these include storage vessels, transfer racks, and distillation columns which have process vents. In general, these assignment procedures follow common sense decisions as to the primary purpose of the equipment. For example, if a storage tank is dedicated to an SCU, then it is clearly part of that SCU. Similarly, if the storage vessel is shared among SCUs and other process units, its predominant use determines its assignment. The assignment procedures are used to draw the SCU boundary lines at the plant site. They are modeled after the assignment procedures in the HON.

An additional HON provision included in the CAR provides flexibility for equipment leak sources. If items of equipment (for example, pumps, valves, connectors) that are assigned to a particular SCU are managed by different administrative organizations from the rest of the SCU, those items of equipment may be reassigned to a similarly administered SCU.

Many existing NESHAP also contain assignment procedures for determining applicability on a process unit basis. Under the CAR, therefore, for SCUs that are also one of the following types of process units, the boundary or defined limit of the SCU defaults to that established for the following types of process units:

- CMPU as defined in the HON,
- elastomer product process unit (EPPU) as defined in 40 CFR part 63, subpart U;
- thermoplastic product process unit (TPPU) as defined in 40 CFR part 63, subpart JJJ;
- petroleum refinery product process unit (PRPU) as defined in 40 CFR part 63, subpart CC.

Transfer operations will still need to be assigned to EPPUs, TPPUs, and PRPUs using the CAR's assignment procedures, since the rules in which these process units are defined do not include procedures for assigning transfer operations to process units.

A CMPU that is subject to the HON is, by definition, an SCU. The other types of process units noted above (EPPU, TPPU, and PRPU) would be an SCU only if they include a process vent or equipment that is subject to one of the SOCMI NSPS referencing subparts (i.e., 40 CFR part 60, subpart III, NNN, RRR, or VV), or that would have been subject to one of these referencing subparts

had construction begun after the SOCMI NSPS subparts' respective applicability dates.

Opting to comply with the CAR. As shown on figures 2a and 2b, once the facility determines the SCU boundaries, the next consideration is whether or not compliance with the CAR is desirable for any part of the SCU. In making this decision, the facility must keep in mind that compliance with the CAR is allowed an SCU basis only. Therefore, if the facility operator decides that complying with the CAR would be beneficial for any part of the SCU (for example, the storage vessels), either all regulated sources of the SCU must comply with the CAR, or all must regulated sources continue to comply with their respective applicable referencing subpart. Within an SCU, owners or operators may not choose to comply with the CAR for some emission points while continuing to comply with the referencing subparts for other emission points. Furthermore, if a facility operator has chosen to comply with the CAR for a particular SCU, then all existing and new regulated sources that are subject to referencing subparts must comply with the CAR. This includes any future additions to the SCU or any changes that trigger new source requirements.

In some circumstances, the CAR can apply to non-SOCMI emission points or equipment. The proposed CAR allows non-SOCMI emission points that are (1) subject to one of the referencing subparts, and (2) located at a plant site with an SCU that is complying with the CAR to also comply with the CAR. For example, a petrochemical plant containing one or more SCUs would also include a number of non-SOCMI emission points, such as petroleum or petroleum products storage vessels, or non-SOCMI benzene transfer racks. These non-SOCMI emission points would be subject to the same rules being consolidated for the SOCMI industry, such as 40 CFR part 60, subparts Ka, Kb, or Y, and 40 CFR part 61, subparts BB and V. Therefore, the source operator would be allowed to apply the CAR to any or all such affected non-SOCMI emission points, thus consolidating and simplifying an otherwise complex monitoring, recordkeeping, and reporting management system.

The EPA wants to ensure that, if a facility chooses to implement the CAR, a significant portion of the facility is included. The EPA intends to encourage the use of the CAR but without causing confusion concerning applicability. By requiring, at a minimum, an entire SCU to implement the CAR before non-SOCMI points can opt in,

a reasonable balance is established to allow non-SOCMI points into the CAR. The EPA decided that, if a facility has made the decision to use the CAR, it should have the additional benefit of using the CAR for other emission points or equipment at the facility that are subject to a referencing subpart. This is a logical decision since control equipment and closed-vent systems often are shared among emission points or across SCU boundaries. In addition, EPA reasoned that this decision would facilitate implementation, because if more emission points are complying with the CAR at a facility, then fewer regulations will apply to the site, and fewer differences will exist in compliance, and recordkeeping and reporting methods used at the site.

Furthermore, since this rule has been developed solely for the SOCMI, to allow compliance for individual emission points with no SOCMI sources at the same site would both complicate enforcement and make the success of the consolidation effort more difficult to assess.

The general provisions of the CAR also allow a facility to cease to implement the CAR. In such cases, the regulated source becomes subject to the applicable referencing subparts. These procedures will be further discussed in section VI.B.

B. Structure of the CAR

Because the CAR would consolidate existing regulations from 40 CFR parts 60, 61, and 63, a new part 65 was created to contain the consolidated rule. Part 65 will contain the SOCMI CAR, as well as any future rule that consolidates Federal air rules for other industries.

The CAR has been developed as a set of subparts containing all the required elements relevant to a source owner or operator who chooses to comply with the CAR. Each subpart applies to a specific type of emission point or aspect of regulation. The general provisions (subpart A) address the administrative aspects of the regulation (for example, where to send reports, timing of periodic reports, definitions, how to request an alternative means of emission limitation), and those provisions which are widely applicable to all sources (for example, prohibitions and operation and maintenance requirements). Subpart C (storage tanks), subpart D (process vents), subpart E (transfer operations), and subpart F (equipment leaks) contain the compliance options and all the specific requirements for each of those types of emission points.

Subpart G contains all the provisions on closed-vent systems and control devices, including testing, monitoring, data handling, reporting and recordkeeping, and CPMS provisions. This was created as a stand alone subpart because provisions in each of the referencing subparts for closed-vent systems and control devices are very similar. By consolidating all of these provisions, much overlap, duplication, and minor changes in monitoring, recordkeeping, and reporting will be eliminated, and the requirements will be standardized.

Much consideration was given to the structure of the CAR. The EPA assessed the pros and cons of numerous options, but concluded the most workable approach is a modular CAR. This modular approach is designed such that once a source operator decides to comply with the CAR, all or most applicable provisions would be contained in the CAR. The source operator would not need to refer to the referencing subpart after applicability is established, unless specifically directed to do so in the CAR. For example, a process vent subject to 40 CFR part 60, subpart NNN (distillation NSPS) would be referred to subpart D of the CAR for applicable process vent requirements. If controls are required, the source would subsequently be referred to the CAR subpart G for

closed-vent systems and control devices, and would not need to refer further to subpart D. Subpart G, for closed-vent systems and control devices, contains all the provisions needed to comply if a vent is routed to a control device. As noted in section VI.B of this preamble, sources complying with the CAR are subject to the CAR's general provisions (subpart A) and also to a few clearly noted provisions in the general provisions to the referencing subparts.

The CAR is also structured within each of the subparts to facilitate function and ease of use. The proposed CAR has been written with a more "user-friendly" approach, and the subparts more clearly delineate the requirements that would apply to each plant function. For example, the proposed storage vessel provisions contain distinct requirements for design, operation, inspection, and repair for each kind of storage vessel. This is intended to simplify tasks for the design group or the inspection group at the plant, and to avoid each group having to search the entire regulation for relevant requirements. The CAR's structure facilitates the consolidation of all recordkeeping and reporting activities into one system. Chemical plants subject to numerous NSPS and NESHAP could combine multiple

environmental management systems tracking multiple regulations into a single, simplified compliance effort.

V. Amendments to the Referencing Subparts

Along with the proposed CAR, today's notice also proposes changes to the referencing subparts. The proposed changes add "pointers" in the applicability sections of each referencing subpart. (The referencing subparts are indicated in table 1.) The pointers specify which regulated sources may take advantage of the CAR and which subparts of 40 CFR part 65 apply to each type of emission point. This section of the preamble outlines the amendments to the referencing subparts and how EPA implemented the decisions regarding the CAR in the referencing subparts.

A. General Concepts

The CAR uses the term "regulated source" to refer to whatever collection of equipment at a stationary source is regulated by a referencing subpart. For example, for 40 CFR part 60, subpart III, the regulated source is a process vent from an air oxidation unit; and for 40 CFR part 60, subpart VV, the regulated source is defined as equipment components at a process unit. The term "regulated source" is defined in the proposed CAR and is used throughout the CAR to refer to all of the

equipment and emission points that are regulated by the applicable referencing subparts at a plant site. The term is used throughout this preamble in the same way.

The CAR does not alter applicability for any regulated source. In order not to alter the applicability of the referencing subparts, the pointer paragraphs are placed after the applicability paragraphs of the referencing subpart. Language such as "storage vessels subject to this subpart" is used in the pointer paragraphs to emphasize that only the emission points that are subject to the referencing subparts are eligible to comply with the CAR.

It is important to note that this is also true for equipment subject to the equipment leak rules. The HON rule covers more equipment types (for example, agitators) than 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V. It is EPA’s intention that facilities choosing to comply with the CAR in place of 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, but which are not subject to the HON, would comply with the CAR only for the equipment types subject to the applicable parts 60 and 61 rules. For example, the CAR’s provisions for additional equipment types covered by the HON (for example, agitators) would not apply to sources

referenced to the CAR from 40 CFR part 60, subpart VV only. This concept prevents equipment that was not subject to requirements under a referencing subpart from becoming subject to those requirements solely due to CAR implementation.

Except for process vents, EPA decided to provide the CAR as a means of compliance only for emission points where emission reduction is required by the referencing subparts. The requirements for emission points where emission reduction is not required vary widely and are usually associated with establishing the applicability of the referencing subpart; examples of these requirements include records of vapor pressure for stored liquids, or records of the type of liquid transferred. These records are kept to show that any changes made have not caused an emission point to become subject to emission reduction. Therefore, with the exception of process vents as discussed below, only emission points subject to emission reduction under a referencing subpart are eligible to comply with the CAR. In addition, all efforts were made to not cross reference back and forth from the CAR to the referencing subparts; cross referencing would have been necessary to consolidate the requirements for emission points not subject to emission reduction.

An exception was made for process vents, however; all process vents subject to a referencing subpart can use the CAR to comply. This decision was made because in the process vent rules, the applicability cutoffs that determine whether emission reduction is required are very similar. The CAR incorporates the total resource effectiveness (TRE) index value calculation and other parameters used to determine whether a process vent must be controlled, monitored, or neither.

B. Description of Amendments

The main pointer paragraph in each referencing subpart specifies that an owner or operator may choose to comply with the CAR for all of the emission points that are part of an SCU and that require control under that subpart. Each main pointer paragraph specifies which requirements of the referencing subpart are satisfied by the CAR. The pointer refers to the applicability criteria so that only emission points subject to emission reduction are eligible to comply with the CAR, except for the process vent referencing subparts, as discussed above. The pointer paragraph also specifies the applicable subpart of the CAR. For example, a referencing subpart applicable to storage

vessels would specify that 40 CFR part 65, subpart C can be used to comply.

In 40 CFR part 61, subpart BB, the language clearly states that railcars and tank truck loading racks are eligible to use the CAR for compliance, but marine vessel loading racks are not eligible. The EPA decided not to include marine vessel loading in the CAR, because, at the time the scope of the CAR was determined, standards for marine vessels were not finalized. (Since the CAR scope was set, National Emission Standards for Marine Tank Vessel Loading Operations, 40 CFR part 63, subpart Y, were finalized.) Also, the rules for marine vessel loading racks are different enough from railcar and tank truck loading that it was not possible to consolidate these requirements with the railcar and tank truck requirements.

Also proposed in most of the referencing subparts is a new paragraph labeled "Alternative means of compliance -- affected source basis." This provision specifies that an owner or operator may choose to comply with the CAR for emission points subject to emission reduction under the given referencing subparts that are not part of an SCU but are located at the same plant site as an SCU that is complying with the CAR; these are non-SOCMI emission

points covered by a referencing subpart. This paragraph is not necessary for the referencing subparts that apply solely to the SOCMI (40 CFR part 63, subparts G and H, 40 CFR part 60, subparts III, NNN, RRR, and VV) because sources subject to one of these rules are, by definition, always a part of an SCU.

It should be noted that the proposed amendments to 40 CFR part 61, subpart V specify that if an owner or operator chooses to have equipment at a process unit comply with the CAR for a process unit that is not in a SCU but that is located at the same plant site as an SCU complying with the CAR, then all of the equipment within that unit must comply with the CAR. The EPA decided that all the equipment at a process unit must comply because it would be too confusing for implementation if individual equipment was allowed to comply with the CAR.

The proposed additions to the referencing subparts also specify that the CAR's general provisions, 40 CFR part 65, subpart A, supersede most of the provisions in the referencing subparts' general provisions (i.e., 40 CFR part 60, subpart A, 40 CFR part 61, subpart A, and 40 CFR part 63, subpart A). The provisions of the referencing subparts' general provisions that are not superseded are listed. These provisions pertain to

applicability, reconstruction, modification, and pre-startup activities. It is clarified that provisions which were required to be met prior to implementing the CAR remain in force. For instance, if a facility was required under the referencing subparts' general provisions to conduct a performance test, but the performance test had not been conducted, the facility would still be required to conduct the performance test even if it chooses to comply with the CAR. The facility would also be subject to any enforcement action that would apply for not meeting the requirements of the rule -- the CAR does not rescind any past obligations.

The proposed amendments also specify that opting to use the CAR is an "all or nothing" decision for the regulated sources contained in an SCU. They state that the owner or operator must also comply with the CAR for all emission points that are part of the SCU and that are subject to any of the referencing subparts. For example, if an owner or operator of an SCU has storage vessels in that SCU that are subject to the requirements of 40 CFR part 60, subpart Kb (the NSPS for Volatile Organic Liquid Storage Vessels), and that owner or operator decides to comply with the CAR for those storage vessels instead of subpart Kb, then all of the equipment, process vents,

transfer operations, or storage vessels that are part of that SCU must comply with the requirements in the CAR.

Additional amendatory language is added to subpart V of 40 CFR part 61 because certain sources are referred to subpart V from 40 CFR part 61, subparts F and J. Subparts F and J apply to equipment in vinyl chloride or benzene service, respectively. Therefore, the proposed amendments to 40 CFR part 61, subpart V specify that owners or operators of equipment subject to 40 CFR part 61, subparts F or J also may choose to comply with the CAR. All of the proposed amendments in 40 CFR part 61, subpart V allowing the choice to comply with the CAR would also apply to 40 CFR part 61, subparts F and J sources. These provisions include choosing to comply with the CAR on an SCU basis for all equipment and emission points at an SCU, and choosing to comply with the CAR on a regulated source basis for equipment or emission points at the same plant site as an SCU complying with the CAR.

The EPA is allowing the CAR compliance option for sources subject to 40 CFR part 61, subparts F and J primarily because these subparts refer subject sources to part 61, subpart V, and these sources are often part of SCUs. Non-SOCMI sources subject to subparts F and J can

implement the CAR, but only if there is an SCU on site implementing the CAR.

In addition to the proposed CAR-related amendments to 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V, several other amendments to these rules are being proposed with today's action. These additional proposed amendments are not necessary for implementation of the CAR; rather, they would update the rules to reflect current safety and clarity improvements for equipment leak rules. Section XI of this preamble provides details on these proposed amendments.

VI. Summary of the Proposed Rule and Significant Decisions in Rule Consolidation

A. Basis for the CAR (Optional Implementation)

The CAR is being proposed as an optional compliance alternative. Several different approaches for the CAR were considered, including mandatory compliance for SOCMI sources subject to the consolidated subparts, with varying phase-in schedules. Different options were also explored that allowed optional compliance for some sources and mandatory for others. However, the optional compliance approach reflected in the proposed CAR optimizes the benefits for affected sources while assuring that stringency will not be compromised. The

CAR provides significant benefits to sources, as described in this section and section X of this preamble, primarily through burden reduction, simplification, and clarification. Implementing agencies will realize complementary benefits in that, for sources complying with the CAR, compliance requirements will be simplified and clarified, records and reports will be considerably consolidated, and compliance determination will be more straight-forward. Because both the industry and enforcement personnel would be dealing with a single rule with consistent requirements, conflicting interpretations and misunderstandings should be reduced.

On the other hand, despite the potential benefits of the CAR, if EPA were to make the CAR mandatory, a significant burden in the short term might be created as sources made the transition to the CAR. The EPA recognizes that some SOCMI plant sites subject to only one or two of the referencing subparts would derive limited or no benefit from the consolidated rule. Chemical plants with a small number of regulated emission points (for example, a few storage tanks) and a well-established compliance plan could incur an added burden if required to become familiar with and implement the CAR. Some plants have data handling, monitoring,

recordkeeping, and reporting systems in place for the requirements and format of the existing rules; the added initial cost to comply with the CAR could be significant compared to the benefit. The relative costs and benefits realized by plants would depend on several factors, including the size of the plant, the number of regulations that currently apply, the company's perception of benefits, and long-term burden reductions that would accrue from compliance with the CAR.

In addition, if EPA were to make compliance with the CAR mandatory, it would create a conflict between maintaining current stringency levels and striving for simplicity and consolidation. To avoid increasing the stringency of applicable requirements for any affected source, the CAR would either have to consolidate at the lowest common denominator (i.e., least stringent provisions), or consist of a collection of provisions of different stringencies. The former solution is environmentally unacceptable, and the latter solution results in an overly complex rule that forfeits many of the benefits of consolidation.

In order for the CAR provisions to be at least as stringent as the underlying rules and to also achieve complete consolidation, it was necessary to select the

most stringent of the referencing subparts as the basis for the CAR. In this case, the HON was deemed to include the most stringent control options. Although several other referencing subparts contain the same control requirements (for example, for process vents), the HON provides additional compliance flexibility in many cases. This flexibility has been adopted in the CAR.

The Agency concluded that the presumption of a mandatory CAR was inconsistent with a simplification. Sources can choose to implement the CAR or continue to implement the underlying subparts, depending on their situation and what they see as more advantageous.

Enforcement representatives supported the simplicity of the CAR over the numerous existing rules. The benefit to enforcement personnel is not as great for an optional CAR as it would be for a mandatory CAR, since the implementing agency would still need to support implementation and enforcement of the underlying rules as well as the CAR. However, the implementation burden will be eased at those sources that choose the CAR. In addition, sources implementing the CAR may increase their emission reductions since the CAR will be more stringent for some emission points.

The EPA weighed the advantages and disadvantages of the various approaches and concluded that an optional CAR with one set of requirements would be the most workable and acceptable.

As the development of the CAR proceeded, the provisions in each of the referencing subparts were carefully assessed for relative stringency as well as for the relative merits of the language and presentation of the requirements. The EPA concluded that the HON provided the best starting point for developing consolidated provisions for the CAR as an optional compliance mechanism. The HON was promulgated in 1994 (with several subsequent amendments) and reflects an improved understanding of control approaches for the SOCMI. Furthermore, the control provisions of the HON, in general, represent the most stringent and comprehensive pollution control requirements of the referencing subparts consolidated in the CAR. Therefore, they provide the most appropriate level of control for the CAR, given EPA's objective of not compromising stringency in consolidation. In addition, where the HON and another subpart apply to the same emission point, the HON requirements generally override those of the other subpart, with some exceptions.

Over the years during which the referencing subparts were promulgated, EPA and the SOCMI have continuously enhanced their understanding of emission control technology for SOCMI sources. Development of the HON benefitted from this enhanced understanding and from significant industry input regarding the operation of SOCMI facilities. Because the HON was developed to reflect a refined approach to regulating the SOCMI, it reflects substantial burden reduction, clarity of language, and flexibility in compliance options.

The EPA strives to continually reduce the compliance burden associated with regulations promulgated under the Act. As both EPA and State agencies have gained experience with and understanding of compliance and enforcement issues, EPA's regulatory approaches have evolved to incorporate more streamlined and flexible compliance approaches. The HON provisions include many elements of flexibility that substantially reduce the compliance burden. The HON language also makes explicit many requirements that are implied in the other referencing subparts. Such clarifications promote consistent compliance and enforcement and, in some cases, constitute a burden reduction by eliminating guesswork and uncertainty.

While the HON reflects an updated approach to SOCMI regulation, many of the basic elements of the referencing subparts are still very similar to the HON. For storage vessels, the provisions in 40 CFR part 60, subpart Kb and 40 CFR part 61, subpart Y are very similar to the corresponding HON provisions (40 CFR part 63, subpart G). The most significant differences among storage vessel provisions occur between the HON and 40 CFR part 60, subpart Ka. However, there are markedly fewer sources subject to subpart Ka than to the other storage vessel subparts consolidated.

Likewise, the HON's provisions for process vents are very similar to those in all of the consolidated process vent rules. In fact, the performance standards are virtually the same across all consolidated process vent regulations. The CAR's provisions for transfer operations consolidate 40 CFR part 61, subpart BB and the HON transfer operation provisions (40 CFR part 63, subpart G). The HON provisions provide increased compliance flexibility over subpart BB without compromising stringency.

Equipment leak provisions in the CAR are also based on the HON language but include some significant improvements. These improvements do not change

stringency but enhance the simplicity, clarity, and "user-friendliness" of the provisions. Subpart G of the CAR, the closed-vent system and control device provisions, represents a different approach to the order and presentation of regulatory requirements. While the CAR subpart G is based on the HON's language, its organization and structure are different in that the closed-vent system and control device requirements for all emission points (i.e., storage, transfer, process vents, and equipment leaks) with associated closed-vent system and control devices are all presented in one consolidated subpart.

While the HON has provided a good starting point for the CAR, the consolidation effort included substantial modification to some of the HON language as well as important additions and deletions. Many of the modifications are clarifications of HON language or changes that incorporate CAR terminology. All provisions in each of the referencing subparts were assessed and compared for consolidation. In some cases, language from a referencing subpart other than the HON was deemed more appropriate for the CAR. The following sections of this preamble (VI.B through VI.H) provide a detailed description of each subpart of the CAR and the

significant decisions regarding (1) changes to HON language, and (2) the ramifications of using the HON language for sources referenced from 40 CFR parts 60 and 61. Also noted are instances where language from referencing subparts other than the HON is used.

B. General Provisions

The part 65 general provisions consolidate the general provisions applicable to SOCMI sources from subparts A of 40 CFR parts 60, 61, and 63. In addition, provisions in the HON, 40 CFR part 63 subparts, F and G, that are general in nature are also consolidated in the part 65 general provisions. These particular provisions are designated in the HON as overriding the corresponding requirements in the part 63 general provisions. These overriding provisions apply to SOCMI sources and therefore were consolidated in the proposed CAR general provisions. (The HON overrides are listed in table 3 of 40 CFR part 63, subpart F).

The consolidated general provisions focus on administrative aspects and broad requirements that are generally applicable to all sources complying with the CAR, such as definitions, operation and maintenance requirements, general recordkeeping and reporting procedures, and compliance determination. Also included

are administrative provisions concerning availability of information, state authority, delegation, circumvention, addresses for report submittal, and incorporation by reference. Although the general provisions to the referencing subparts contain provisions regarding add-on control equipment, testing, and monitoring, these types of requirements are consolidated in the CAR's subpart G as described in section III.B of this preamble.

Consolidated general provisions for the CAR eliminate much of the complexity of the general provisions to the HON. In the CAR general provisions, an "override" table for general provisions, such as that in the HON, is not necessary, since all applicable provisions have been brought into, or are referenced in, the CAR. All of the applicable provisions that are general in nature are contained in one CAR subpart, eliminating the complexity inherent in the HON where general requirements are contained in three different subparts (40 CFR part 63 subparts A, F, and G). Non-applicable requirements have been eliminated. For example, no continuous emissions monitoring system (CEMS), opacity, or particulate matter provisions are included in the CAR since they are not applicable, thus

reducing the amount of text that must be read and understood.

Although every effort has been made to make the CAR a stand-alone rule, as noted in section IV above, there are certain requirements in the general provisions to the referencing subparts that are not addressed in part 65 and that still remain applicable to sources complying with the CAR. Requirements dealing with pre-startup activities, applicability, modification, and reconstruction are still governed by the underlying general provisions in 40 CFR parts 60, 61, and 63. The part 65 general provisions include a table (table 1 of 40 CFR part 65, subpart A) specifying the paragraphs and sections in each part's general provisions that still apply to sources complying with the CAR. Since the CAR does not alter the applicability of any of the underlying subparts, these general provisions regarding applicability must also remain applicable.

In addition, owners and operators who choose to comply with the CAR are still obligated to fulfill requirements that applied while they were complying with a referencing subpart. For example, if a facility is required by a referencing subpart to complete a performance test, opting to comply with the CAR does not

remove the requirement to conduct a performance test or protect the source from enforcement actions for not completing the test.

Discussion in the following paragraphs highlights the primary differences between the general provisions for the proposed CAR and those for the referencing subparts.

Applicability. Regulated sources may comply with the CAR only if they are subject to one of the referencing subparts and are specifically referenced to part 65. Further discussion of eligibility to comply with the CAR and how the eligibility is presented in the referencing subparts is contained in sections IV.A and V of this preamble, respectively.

The applicability provisions also include requirements for implementation of the CAR. An implementation schedule is required and must be established either through a title V permit application or permit modification for title V sources, or in the Initial Notification of Part 65 Applicability for non-title V sources. In either case, the implementation schedule can not extend for more than 3 years, and the provisions prohibit any gaps in compliance between complying with the referencing subpart and implementing

the CAR. A maximum of a 3-year implementation period is allowed because there will be some facilities that will need time to install equipment or otherwise prepare for compliance with the CAR for some individual emission points. In these cases, the facility can begin taking advantage of many of the burden reductions by complying with the CAR for most emission points while preparing for compliance for a few emission points. These few emission points would continue to comply with the appropriate referencing subpart. Many facilities will be able to comply with the CAR with few adjustments or additions at their facility, and a 3-year implementation schedule will not be necessary.

As described above in section IV.A, new sources that become subject to a referencing subpart must consult the applicability provisions in that referencing subpart to determine eligibility to comply with the CAR. New regulated sources (for example, storage vessels or distillation vents) that are part of an SCU that is complying with the CAR would also have to comply with the CAR, or the entire SCU (including the new regulated source) would have to opt not to comply with the CAR. For new sources choosing upon startup to comply with the

CAR instead of the applicable referencing subpart, the implementation date is at initial startup.

The proposed CAR also provides for owners or operators deciding to no longer comply with the CAR and to comply, instead, with the applicable referencing subpart(s). Title V sources must propose a transition date in a title V permit amendment; non-Title V sources may propose a transition date in a periodic report or in a separate notice. The provisions requiring compliance on an SCU basis would still apply, and owners or operators must make the transition to the referencing subparts for an entire SCU, not for individual emission points. The transition must ensure that no gaps in compliance occur; the SCU must be in full compliance at all times with either the CAR or the applicable referencing subparts.

Definitions: general. The CAR consolidates the definitions from the 12 referencing subparts, 40 CFR part 63, subpart F and the general provisions of 40 CFR parts 60, 61, and 63 into one definition section. In developing the definitions for the CAR, EPA assessed all of the definitions in the referencing subparts and all of the definitions in the applicable general provisions. Many terms defined in the CAR have been

defined in one or more of these subparts. In some cases, slight variations exist in definitions for which no substantive difference was intended. The EPA recognized that multiple definitions for the same term or phrase has led to confusion in the past. Therefore, a single set of definitions was developed for implementing the CAR and is included in the proposed general provisions.

Since the HON language provides the basis for the CAR, the HON definitions are used in the CAR for most terms. However, definitions have been added or modified in the CAR for several reasons. New terms have been defined either to reduce wordiness and redundant language, or to designate a single term to replace many similar terms from all the referencing subparts. In some cases, definitions from the HON have been modified to improve clarity or to make requirements more explicit. A few terms in the CAR are taken from referencing subparts other than the HON.

The goal of consolidating definitions in the CAR general provisions was to provide clear definitions and to avoid using different words to mean the same thing. The more recent SOCMI rules elaborate on definitions to avoid misinterpretation or implementation problems that arose in earlier rules. The newer definitions expand and

elucidate, but they do not change the original intent of the rule. The more significant definition changes and additions are noted as follows.

Definitions: new. Several terms not defined in any of the referencing subparts or their general provisions are introduced in the CAR. Some of these terms incorporate important concepts that need to be defined for the CAR; these include the following.

A new definition for "empty or emptying" for storage vessels was added for clarification. This definition helps to clarify when a storage vessel is considered empty. In particular, lowering the stored liquid level so that a floating roof rests on its legs, as necessitated by normal operations, is not considered emptying. Further discussion of issues associated with the emptying of storage vessels is presented in the Storage Vessel section of this preamble (section VI.C).

A new definition for "low throughput transfer racks" was added to clarify requirements for these racks that are subject to the closed-vent systems and control device requirements. Low throughput transfer racks require a design evaluation, while high throughput transfer racks require a performance test.

The term "closed-vent system shutdown" was added to the CAR to distinguish a shutdown affecting a closed-vent system from a shutdown affecting a process unit. Different requirements apply for process unit shutdowns and for closed-vent system shutdowns, and the two terms therefore need to be distinguished.

Several new terms were added to the CAR to provide a single general term to replace several different terms used in the referencing subparts. These include the following.

Definitions for "regulated material," "in regulated material service," and "regulated source" were created for the CAR to generalize the pollutant [volatile organic compounds (VOC), total organic compounds (TOC), hazardous air pollutants (HAP), etc.] and the source (affected facility, affected source, etc.) being regulated. The referencing subparts specify the regulated pollutant(s) and define the source, either in the title of the standard or in the applicability provisions prior to referring sources to the CAR. Therefore, while the term used in the CAR is new, pollutants and sources regulated in the referencing subparts do not change in the CAR.

"Process unit" and "process vent" are defined in the CAR to encompass the definitions from all of the

referencing subparts. The definition of "process unit" includes the equipment specified by the definition of "chemical manufacturing process unit" in the CAR. The CAR also provides a definition for the "process unit" which is to be used when there is no definition for the term in the referencing subpart.

"SOCMI CAR Unit" was added to the CAR definitions to describe the boundary of the entity subject to the CAR. A detailed discussion concerning SCUs is included in section IV.B of this preamble.

Other new terms were defined in the CAR to reduce wordiness or redundancy. A new definition for "control system" was added to simplify language referring to control devices and their associated closed-vent system. A control system is simply the combination of a closed-vent system and a control device. Using a single term to include both closed-vent systems and control devices simplifies the language.

Three new definitions were added to describe internal and external floating roof failures: "failure, EFR", "failure, IFR type A", and "failure, IFR type B." Two new definitions were added to describe which process vents require monitoring and which ones do not: "Group 2A process vents" and "Group 2B process vents."

Adding these definitions avoids having to repeat lengthy text describing the specific floating roof failures or the two types of Group 2 process vents each time they are referred to in the regulation.

Definitions: modified HON definitions. Many of the definitions incorporated from the HON have been modified, primarily for clarity of language or to specify the particular types of emission points (for example, equipment leaks) to which a term applies. The modifications to the HON definitions are described as follows.

To comply with the HON process vent requirements, an owner or operator has several compliance options, one of which is to collect and route process vent emissions to a control device. There are two broad categories of control devices, combustion devices (such as a boiler or incinerator) and recapture devices (such as a condenser or absorber). Absorbers, condensers, and carbon adsorbers are often used as recovery devices designed to return recovered material to the process; if the recovered material from these devices is disposed of, then the device qualifies as a recapture device and can be used as a control device.

The HON contains similar definitions for "control device" in both subparts F and G. The CAR definition is based on the HON definitions, which include language stating that for process vents in general, a product recovery device can not be used as the control device if the owner or operator is complying by routing emissions to a control device. Recovery devices are equipment normally used for the purpose of recovering chemicals for fuel value, use, reuse, or for sale; control devices, on the other hand, are equipment that reduce emissions of regulated material to the atmosphere through combustion or some other means.

The CAR includes additional language in the control device definition clarifying that some particular recovery devices can be considered control devices. This requirement is the same in the HON, however, the HON does not clarify it in the control device definition. In summary, a recovery device is allowed to be considered a control device for process vents if (1) it was installed prior to 1993, (2) it is the last recovery device before venting to the atmosphere, (3) it is capable of meeting the 98 percent reduction standard, but it is not capable of achieving the 20 parts per million (ppm) standard, and (4) the recovery device must comply with control device

requirements if the recovered material is disposed. The use of recovery devices with process vents is further discussed in section VI.E of this preamble.

In the definition of "equipment," the CAR includes new language clarifying that the definition applies only to equipment leak provisions. The word "equipment" is used in a more general sense in other subparts.

The CAR definition of malfunction differs from the HON in that it includes monitoring equipment as equipment to which the malfunction provisions apply. The HON definition of malfunction incudes air pollution control equipment, process equipment, or a process, but does not include monitoring requirement.

In the definition of "open-ended valve or line," the reference in the HON definition to "pressure relief valves" was changed to simply "relief valves" since it is intended to also include relief valves that do not necessarily relieve pressure.

The definition of "organic monitoring device" is taken from the HON but has been modified to clarify that an organic monitoring device can be used at locations other than at an exiting recovery device.

Process heaters and boilers both are types of enclosed combustion devices. General requirements for

enclosed combustion devices, as well as specific requirements for process heaters versus boilers, are contained in the CAR. When comparing the process heater definitions in the referencing subparts confusion exists as to which enclosed combustion devices are process heaters and which are boilers. The "process heater" definition in the CAR is based on the HON definition, but the phrase "enclosed combustion" is added for clarity. In addition, the CAR adds language specifically including heating water as a secondary function of a process heater. The HON definition could have been interpreted to exclude heating water as a function of process heaters.

In the CAR, the HON definition of "recapture device" was modified to clarify that, for purposes of monitoring, recordkeeping, and reporting, recapture devices are subject to the same provisions as recovery devices. The same sentence was added to the definition of "recovery device" to reinforce this clarification.

The definitions of "repair" and "first attempt at repair" are very similar to the HON definitions but were modified in the CAR to clarify that the definitions apply to equipment leak requirements and not to other emission points such as storage vessels.

Similarly, the definition of "set pressure" is from the HON subpart H but is clarified in the CAR to specify that it applies only to equipment leak provisions.

"Routed to a process or route to a process" is defined as it is in the HON subpart H, except that in the CAR the phrase "by hard-piping or a closed-vent system" is deleted. Emissions vented to a process are not considered to be vented through a closed-vent system and therefore are not subject to the closed-vent system requirements. This change is made for clarification and consistency with the CAR's use of the closed-vent system terminology, and it does not affect the intent or the regulatory requirements. Striking "by hard-piping" allows flexibility in the types of equipment (i.e., ductwork) that can be used to route to a process.

The CAR's definition of "closed-vent system" is taken from the definition in subpart G of the HON, but changes were also made to this definition to help clarify which equipment is included in a closed-vent system and, therefore, subject to the closed-vent system requirements. The CAR definition of closed-vent system excludes systems that transport gas or vapors back to a process. Under the CAR, a closed-vent system is a system routing vapors to a control device; piping that routes

vapors back to a process is not considered a closed-vent system. The CAR definition of "closed-vent system" also has additional language added to exclude vapor collection systems that are part of a tank truck or rail car, and to clearly describe where the system begins on transfer racks. It should be noted that the phrase "open to the atmosphere" does not include air or inert gas intakes for systems where gas make-up is needed to prevent pulling a vacuum.

The CAR definition of "run" for a performance test combines the definitions from the general provisions of 40 CFR parts 60, 61, and 63. As such, it adds language to the HON definition clarifying that a run may be either intermittent or continuous, within the limits of good engineering judgement.

The definition "temperature monitoring device" is changed in the CAR to require an accuracy of ± 1.2 degrees Celsius, as opposed to ± 0.5 degrees Celsius in the HON. The EPA believes, based on investigations undertaken in this effort, that temperature monitoring devices with the ± 1.2 degrees Celsius accuracy are more widely available, are in place at more plant sites, and are adequate for demonstrating compliance.

The definition of "total resource effectiveness index value or TRE index value" as defined in the HON was modified in the CAR to better describe the purpose of the index. This modified definition is considered more useful for compliance purposes.

The definition of "total organic compounds" is similar to the definitions in the referencing subparts. One aspect of the definition, however, could not be consolidated. Total organic compounds, or TOC, is a term in the TRE index value equations. As discussed in more detail under the process vent section (see section VI.D), the TRE index value determination cannot be consolidated because of the different approaches presented in the HON and the non-HON process vent referencing subparts. To maintain the necessary distinction for TRE index value determinations, the TOC definition in the CAR states that, for the non-HON referencing subparts, TOC does not include compounds "that the Administrator has determined do not contribute appreciably to the formation of ozone."

A few definitions in the CAR are taken from referencing subparts other than the HON because the terms are not defined in the HON. These include, for example, "distance piece" from 40 CFR part 60, subpart VV and "stuffing box pressure" from 40 CFR part 61, subpart V.

These are useful terms in the CAR and definitions for them are considered helpful for understanding equipment leak provisions.

As HON definitions were incorporated into the CAR, some editing was required to remove references to specific provisions in the HON. Generally, the references to HON provisions were edited to refer to the corresponding provision in the CAR, or in some cases, the definitions were edited to incorporate the meaning or context of the referenced provision. For example, a definition for "initial startup" has been developed for the CAR to specify the point of initial startup for various cases and situations. This definition encompasses all of the different situations described in the referencing subparts that entail an "initial startup." These include new or reconstructed sources as well as certain specified additions or changes not defined by the referencing subparts as a new source. The CAR definition of "initial startup" incorporates the description of additions and changes from § 63.100(l) and (m) of the HON that would trigger an "initial startup."

Definitions: changes to definitions of 40 CFR Parts 60 and 61. The use of HON definitions as the basis for the CAR implies changed definitions for sources referred

from the other referencing subparts. In general, these differences do not constitute substantive changes to the rule, but provide improvements in clarity and simplification of requirements. For example, some of the CAR terms, while not defined in the part 60 and 61 referencing subparts or their general provisions, are used in their regulatory language (for example, initial startup). Other terms defined in the CAR introduce new concepts that were not needed in the part 60 and 61 referencing subparts. For example, the CAR provides new means of compliance such as fuel gas systems and vapor balancing systems; therefore, these terms are defined in the CAR. However, most of the differences in definitions between the CAR and the non-HON referencing subparts result from the CAR incorporating a HON definition that is different from the corresponding non-HON definition. The more significant definition changes relative to the non-HON referencing subparts are as follows.

The CAR incorporates the HON definition of "alternative test method" which requires that alternative test methods be validated using Method 301 of appendix A of 40 CFR part 63. Method 301 validation, a more recently developed approach unavailable to older rules, is not required by the non-HON referencing subparts. The

EPA now uses Method 301 to validate proposed alternative test methods. Therefore, requiring its use by the regulated source simply ensures consistency in evaluating alternative methods, and will codify what is already being done.

In 40 CFR part 60, subpart DDD and 40 CFR subpart 61, subpart BB, the definition of "car seal" includes the regulatory requirement to replace a broken car-seal with a new seal. In general, definitions are not appropriate locations for enforceable requirements. Therefore, the CAR adopted the definition from the HON and 40 CFR part 60, subpart RRR. The requirement for replacing broken car-seals is included in the closed-vent system provisions of subpart G of the CAR.

The CAR's definition of "closed-vent system" is taken from the definition in subpart G of the HON but has additional language added to exclude vapor collection systems that are part of a tank truck or rail car, and to clearly describe the system boundaries for transfer racks. The CAR definition differs from those found in 40 CFR part 60, subparts III, NNN, and RRR with respect to this clarification for vapor systems.

The CAR includes the definition of "continuous parameter monitoring system" from part 63. This term

replaces the "monitoring device" definition in part 60 and is used for consistency; it does not constitute a change in monitoring requirements.

The CAR's definition of "connector" is take from the HON and explicitly excludes certain types of connectors that are included under the definitions of "connector" in 40 CFR part 60, subpart VV and 40 CFR part 61 subpart V. The CAR excludes joined fittings that are welded completely around the circumference and, for purposes of recordkeeping and reporting, inaccessible fittings and ceramic or ceramic lined fittings.

"Halogenated vent stream or halogenated stream" is defined in 40 CFR part 60, subparts III, NNN, and RRR based on parts per million by volume (ppmv) of halogenated compounds in the stream (20 ppmv or greater). The CAR incorporates the HON definition, which defines a halogenated stream on the basis of mass emission rate of halogen atoms (0.45 kilograms per hour). Further discussion of issues associated with determination of halogenated vent streams is included in section VI.D of this preamble.

The CAR definition of "liquids dripping" is taken from the HON subpart H. It is more explicit than the definitions in 40 CFR part 60, subpart VV and 40 CFR

part 61, subpart V in that it includes examples of what constitutes indications of liquids dripping.

"Process unit shutdown" is defined in all of the referencing subparts for equipment leaks. The CAR uses the definition from the HON subpart H, which differs from the other referencing subparts in clarifying when a process unit shutdown has occurred. The CAR definition explicitly states that a process unit shutdown has occurred only when (1) the shutdown is planned, (2) it occurs under appropriate safety constraints, and (3) repairs can be effected. Furthermore, a "process unit shutdown" has not occurred if the shutdown is (1) unplanned, and (2) lasts for too short a time for process material to be cleared from the process unit, and results in greater emissions than would occur with delay of repair.

The CAR definitions of certain control devices include several changes relative to the referencing subparts. The basic definition of "boiler" is similar across all the process vent referencing subparts. However, the definition in 40 CFR part 60, subpart RRR and the HON contain additional language stating that "boiler" does not include incinerators. The HON definition also states that "boiler" does include

industrial furnaces. The CAR definition includes both these additions (incinerators are not boilers, industrial furnaces are boilers) as well as a third addition stating that process heaters are not boilers.

The CAR's definition of "incinerator" is unmodified from the HON. The definition in 40 CFR part 60, subparts III and NNN, and 40 CFR part 61, subpart BB specifically state that an incinerator "does not extract energy in the form of stream or process heat." However, the CAR definition clarifies that there can be a recovery section to an incinerator as long as it is a separate section that is not manufactured or assembled as a single unit with the combustion section. The CAR definition also clarifies, relative to subparts DDD and III that an incinerator can use auxiliary fuel to heat waste gas.

The CAR definition of "process heater" provides a similar clarification that, although heating water can not be the primary function of a process heater, heating water or generating steam can be a secondary function.

The definitions of "repair" and "first attempt at repair" are consistent with those in 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V, but they include additional language from the HON stating that

monitoring to verify repair is required as part of the repair.

The definition of "start up" is taken from the HON. It clarifies what is included in "start-up" definitions in parts 60 and 61 by specifying some examples of equipment and activities included in start up.

Compliance with standards and operation and maintenance requirements. In § 65.3, the CAR general provisions consolidate provisions regarding compliance with operation and maintenance requirements. These provisions are consistent with the provisions in 40 CFR part 63. The main source of burden reduction and clarity improvements for these provisions lies in the fact that provisions contained in 40 CFR part 63 subparts A, F, G, and H have been consolidated in one location. Small wording changes were made for clarity and to modify text to fit the CAR structure. For example, the HON states that use of acceptable operation and maintenance procedures can be determined based on (among other things) a startup, shutdown, and malfunction plan. The CAR provisions clarify that the startup, shutdown, and malfunction plan is optional for equipment leaks, unless the equipment is equipped with a control device, in which case a startup, shutdown and malfunction plan is

required. The startup, shutdown and malfunction plan would be used to determine acceptable operation and maintenance procedures only in cases where such a plan is required. Other clarifying language consists of more descriptive paragraph titles and introductory sentences clearly indicating which standards are addressed in each subsection.

The CAR's provisions on compliance are also organized differently from the HON. The CAR contains all compliance requirements together at the beginning of this section (§ 65.3), and moves the detailed requirements for performance tests and the startup, shutdown, and malfunction plan (which are included within the HON compliance section) to their own separate subsections. With this arrangement, provisions in the CAR are easy to locate by section and subsection headings.

In reviewing the operation and maintenance provisions for consolidation, EPA noted that the HON does not specify that monitoring must be conducted during startup, shutdown, and malfunction. Of course, if the monitor itself is malfunctioning, monitoring would not be required, assuming that any minimum data availability requirements are met. While the HON makes reference to monitoring data for periods of startup, shutdown, and

malfunction in the provisions regarding excursions that occur during such periods, there are no explicit requirements that such monitoring take place. Therefore, in the CAR, EPA explicitly requires that monitors must be in operation except when they are malfunctioning or except to avoid damage caused by contemporaneous startup, shutdown, or malfunction with other equipment. The EPA's discussions with industry representatives indicate that there have been differing interpretations regarding monitoring during startup, shutdown, and malfunction, but that requirements to monitor during these periods would not substantially increase the monitoring burden. Without data from periods of startup, shutdown, and malfunction EPA can not determine the extent of an exceedance where normal operation has been misidentified as a startup, shutdown, or malfunction. Nor would EPA have the data to compare the effectiveness of techniques to minimize emissions during such episodes. As a result, monitoring data for periods of startup, shutdown, and malfunction are considered essential and are explicitly required in the CAR.

The EPA has also clarified what provisions do not apply during startup, shutdown, and malfunction. The HON broadly states that the provisions of 40 CFR part 63,

subparts F, G, and H do not apply during startup, shutdown, and malfunction. This has been clarified in the CAR to specify that it is the emission standards and established parameter ranges that do not apply during startup, shutdown, and malfunction. The EPA reasoned that this more specific reference more accurately reflects the intent of the rule.

Recordkeeping. The recordkeeping section of the CAR general provisions sets forth basic requirements related to duration of records retention, and availability and accessibility of records. Again, a primary benefit of these provisions is that they merge all the general recordkeeping and reporting provisions for all regulated sources into one place. While the requirements are substantially the same as those in the HON, burden reductions are achieved through simplification, clarification, and elimination of redundancy.

The CAR requirements for records retention are clearer than those in the referencing subparts in that they explicitly state record retention times for title V sources (5 years) and non-title V sources (2 years, unless a referencing subpart specifies otherwise.) While the 5-year retention time for title V sources applies for all records required under the Act, retention time for

title V sources is not stated explicitly in the 40 CFR part 60 and 61 general provisions.

The provisions for where the retained records must be kept is one of very few instances in the CAR where the requirements are not consolidated. In this case, two different provisions are given: one that applies to sources that are subject to the HON and a second provision that applies to sources subject to the 40 CFR parts 60 and 61 referencing subparts. The provision that applies to HON sources is from the HON. It states that records must be retained on site for 6 months and must be accessible within 2 hours. For the remaining 4 and ½ years, the records may be retained offsite. The provision that applies to the 40 CFR parts 60 and 61 sources states that records must be retained on site for 2 years, but may be retained off site for the remaining 3 years. The HON provision resulted from the settlement agreement for the HON litigation. The EPA considers it important to retain this provision as revised under the litigation for HON sources. For this provision, EPA considers that it is not appropriate to expand the applicability beyond the HON. The EPA is concerned that allowing records to be stored offsite after 6 months will make it difficult for an inspector to determine

compliance. Under the HON, EPA has allowed records to be taken off site after 6 months to determine how well this approach works and to assess whether any inspection issues arise. At this time, EPA does not have sufficient information to warrant expanding the scope of this provision. Therefore, a different provision is provided for non-HON referencing subparts.

Reporting. The reporting requirements in the CAR general provisions pertain to reports that are required for all or most complying sources. Notifications and reports that are specific to particular emission points are addressed in the subparts for each particular type of emission point. The general provision reporting requirements include a Notification of Initial Startup, an Initial Notification of Part 65 Applicability for non-title V sources, and an Initial Compliance Status Report.

Notification of Initial Startup is required within 15 days after initial startup for any regulated source that has implemented the CAR at initial startup. The notification under the CAR is similar to the initial notification in the referencing subparts.

Initial Notification of Part 65 Applicability is the only new separate report required in the CAR. It is

required for non-title V sources and must include identification of each subject emission point and its applicable part 65 subpart, and a proposed implementation schedule. As an alternative to "identifying each emission point," the process unit containing the emission points can be identified along with the kind of emission point in the process unit that will comply. Title V sources are not required to submit this notification since this information would be included in their title V permit application or modification request.

The Initial Compliance Status Report is required for all new regulated sources complying with the CAR and is due within 240 days after the applicable compliance date set in the referencing subpart, or 60 days after the initial performance test, whichever is earlier. The contents of the Initial Compliance Status Report pertain primarily to performance tests and are different for each type of emission point. The reporting requirements are therefore specified in the applicable subpart. Since sources may be required to conduct more than one performance test, the CAR allows the information on each performance test to be submitted separately, 60 days after each test is completed. The CAR allows more time to submit the performance test than the referencing

subparts because the CAR will affect more emission points at a facility. The EPA deemed it appropriate to allow more time to complete all of the performance tests and reports.

The general provisions reporting requirements also specify the timing and frequency of periodic reports. Only semiannual periodic reports are required. The CAR has clarified and simplified when the periodic reports are due and what the reporting period is. The CAR allows more time (60 days after the end of each 6-month period) for periodic reports than the NSPS general provisions (30 days), because the combined report required by the CAR will be larger and will take more time to prepare. The CAR's periodic reports, like those in the HON, cover multiple emission points; the 60 day reporting date is taken from HON.

The CAR has greatly simplified the language regarding report submittal. The CAR's provisions on where to send reports are based on the HON, but reduce six paragraphs of text to one short paragraph. The HON requires that all reports be sent to EPA Regional Offices, and also to State agencies once authority has been delegated to the State. Since reports generally must now be sent to both offices under title V, the CAR

simply requires that all reports be submitted to the relevant Regional Office and State agency. The CAR also includes a new provision allowing Regional Offices to waive reporting to EPA.

Another new provision in the CAR allows an owner or operator to submit semiannual reports on the same schedule as the title V periodic reports. Furthermore, if a semiannual report requires the same information as that submitted with a title V report, the semiannual report need only reference the title V report for the information. In addition, a source owner or operator can arrange with the Administrator a common schedule for reporting, and may, upon approval, adjust the postmark or time period deadline to coincide with state reporting schedules. This added flexibility for reporting schedules can reduce the number and frequency of report submittal for sources complying with the CAR.

Startup, shutdown, and malfunction. In general, owners and operators choosing to comply with the CAR, including non-HON sources, are required to develop and implement a written plan for operating and maintaining the source during periods of startup, shutdown, and malfunction. These provisions are based on the startup, shutdown, and malfunction requirements from the

40 CFR part 63 general provisions and the HON (§§ 63.151 and 63.152 of 40 CFR part 63, subpart G). Changes have been made to fit the CAR format, but the intent and purpose of the startup, shutdown, malfunction plan have been maintained as in part 63. As with the HON, this plan is optional for equipment complying with subpart F of the CAR (the equipment leak provisions), except that it is mandatory for equipment equipped with a control device. However, any control devices used for compliance with the equipment leaks provisions are subject to subpart G of the CAR, rather than subpart F, and therefore require a written plan for startup, shutdown and malfunction.

The general provisions for parts 60 and 61 do not require a startup, shutdown, and malfunction plan. However, the ultimate effect of the CAR plan is to reduce the reporting burden associated with startup, shutdown and malfunction. As long as a startup, shutdown, or malfunction is handled according to the plan, sources need only report that the event occurred. The report can be submitted as a semiannual notice, or it can be submitted as part of the periodic report. This procedure replaces the part 60 and 61 requirements to submit detailed reports for each startup, shutdown, and

malfunction. Therefore, even though the plan must be maintained, the CAR potentially reduces the total number and complexity of the reports.

The CAR does not adopt the 40 CFR part 63 general provision requirement that the startup, shutdown, and malfunction plan be incorporated into the source's title V permit. In keeping with the memorandum "Incorporation of Startup, Shutdown, Malfunction Plans into Sources' Title V Permits" from the Director of OAQPS to Regional Air Directors (January 18, 1996), regarding incorporation of the startup, shutdown, and malfunction plan into title V permits, the CAR clarifies that the plan must be maintained on-site but not necessarily incorporated by reference into a title V permit. The permit must, however, include the enforceable requirement to have a plan and to maintain the plan on-site. Since the plan is required to be periodically updated, incorporation by reference would make a title V permit modification necessary for each revision to the plan and would, therefore, be counter-productive.

The CAR also contains revised provisions regarding reasons for finding a startup, shutdown, malfunction plan to be inadequate and requiring that it be revised. Plans are considered inadequate under the HON if they fail to

provide for the operation of the regulated source during startup, shutdown, and malfunction to minimize emissions to at least the levels required by all relevant standards. However, EPA decided that emissions during startup, shutdown, and malfunction, while needing to be minimized in accordance with good air pollution control practice, can not always be minimized to the levels required by the standards. It is impractical, as well as contradictory with other provisions, to expect sources to continually meet applicable emission standards while experiencing a startup, shutdown, or malfunction. Plans under the CAR must only provide that emissions be minimized to the extent practical in a manner consistent with good air pollution control practices.

Although the provisions of 40 CFR 63.6(e)(1)(i) of subpart A are not included in the CAR, these provisions are likely to be required in future rulemakings. These provisions state:

> At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.

The HON, as it was revised by 62 FR 2721, January 17, 1997 specifically overrides this provision of the part 63 general provisions. The CAR incorporates the HON provisions because it is the simplest approach that upholds the language negotiated in the HON litigation settlement, and EPA has applied it to part 60 and part 61 sources for simplicity and consistency. It should be noted that the HON, through the general provisions [40 CFR 63.6(e)(3)(vii)(B)], requires that the startup, shutdown, and malfunction plan include provisions specifying how an owner or operator will "provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices. . ." The CAR incorporates this provision. The HON also requires that during a startup, shutdown, and malfunction ". . . the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical." This provision acts to replace the provisions of 40 CFR 63.6(e)(1)(i) of subpart A in the HON and the CAR. However, EPA believes that explicitly requiring operation consistent with good air pollution control practices at all times is not

unreasonable and is likely to continue to be required in future rulemakings.

Certain provisions in the part 63 general provisions regarding immediate reporting of periods of startup, shutdown, and malfunction have not been included in the CAR. These provisions require an immediate report of any actions taken during a startup, shutdown, or malfunction that are not consistent with the startup, shutdown, or malfunction plan. The EPA determined that such reports appear to be inconsistent with provisions from subpart G of the HON requiring that such actions be reported in the periodic report rather than an immediate report. The CAR incorporates the provisions from the HON subpart G, since they require reports that are sufficient to ensure continuous compliance and are potentially less burdensome. The CAR also allows startup, shutdown, and malfunction reports, title V periodic reports, and CAR periodic reports to be submitted together.

A semi-annual summary report of the occurrences and durations of each startup, shutdown, and malfunction during which excess emissions occur is required by the CAR general provisions. The report is the companion to the records specified in §§ 65.162(a) and 65.163(c) of the CAR, which not only require records of occurrences

and durations, but also provide for other records associated with startup, shutdown, and malfunction (such as a record that the procedures in the startup, shutdown, and malfunction plan were followed). The summary report is required if, during a semi-annual reporting period, (1) the total duration of periods of inoperation or malfunction of a CPMS is equal to or greater than 5 percent of the total operating time for the reporting period, or (2) the total duration of periods of startup, shutdown, and malfunction during which excess emissions occur for a regulated source are equal to or greater than 1 percent of that regulated source's operating time for the reporting period. This summary report is included in the startup, shutdown, and malfunction report, which can be included in the periodic report. The HON does not specify that this information be submitted with the startup, shutdown, and malfunction report. The EPA considers this an important addition to the start-up, shutdown, and malfunction provisions, because it would highlight when a startup, shutdown, and malfunction condition exists for a significant amount of time, and would also indicate a condition that happens frequently during a semi-annual period. Nevertheless, this is a substantial burden reduction from the referencing NSPS,

which require detailed reports on the causes of excess emissions and summary reports when the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period, and when CPMS downtime is less than 5 percent of the total operating time for the reporting period.

Waivers and alternatives. The CAR consolidates the mechanism for requesting alternatives and waivers for monitoring, recordkeeping, and reporting. These provisions describe what is required of the applicant, and the procedures for approval or denial of the alternative or waiver. The CAR specifically allows alternatives for recordkeeping as well as monitoring, while the referencing subparts general provisions specify alternative monitoring methods only.

The CAR also includes procedures for requesting approval of an alternative means of emission limitation for design, equipment, work practice, or operational standards, as do specific subparts in part 60, the part 61 general provisions, and the HON. The CAR's language is based on language from the HON, subpart F, but the CAR clarifies that alternative means of emission limitation are not applicable to performance standards.

Performance standards do not specify a means to limit emissions, so any means is already acceptable.

The CAR general provisions include consolidated administrative requirement sections on "Availability of Information and Confidentiality," "State Authority," "Prohibited Activities and Circumvention," and "Incorporation by Reference." The CAR includes minor wording changes and clarifications to the part 63 language; for example, in the prohibitions provisions, the prohibition on failing to report is eliminated and replaced throughout the CAR with the specific requirements to report.

C. Storage Vessel Provisions

The storage vessel provisions consolidate the requirements of 40 CFR part 60, subparts Ka (petroleum liquids storage) and Kb (volatile organic liquids storage), 40 CFR part 61, subpart Y (benzene storage), and 40 CFR part 63, subpart G (HON storage). The referencing subparts will direct storage vessels to subpart C of the CAR, which specifies the compliance options for storage vessels. Subpart C contains the control requirements for floating roofs only. Subpart C references subpart G for the control requirements for control devices (including flares) and routing to a

process or fuel gas system. This split in requirements facilitates consolidation and reduces text. For example, the flare provisions do not have to be listed in multiple places in the CAR. This structure clarifies and simplifies the referencing subparts which may present the flare requirements on different bases, in different formats, and in multiple locations (including the individual general provisions).

There are several compliance options for storage vessels, but not all storage vessels qualify for all options. Owners and operators of storage vessels containing liquid with a low (less than 76.6 kilo-Pascal) maximum true vapor pressure have the option to comply by using an internal floating roof (IFR), external floating roof (EFR), or an EFR converted into an IFR. Storage vessels under the CAR equipped with floating roofs are only required to comply with the provisions in subpart C of the CAR. However, there are other control options available to all storage vessels, including:
(1) routing emissions through a closed-vent system to a flare or control device, and (2) routing emissions to a process or fuel gas system. Those vessels equipped with a closed-vent system or that have emissions routed to a process or fuel gas system must also comply with

subpart G of the CAR. For those vessels, subpart C specifies a 95 percent reduction control efficiency for control devices and it provides for 240 hours per year downtime for planned routine maintenance of flares or control devices. In addition, subpart C clarifies that the performance requirements for flares and control devices do not apply during planned routine maintenance or control system malfunctions.

An allowance for downtime for planned routine maintenance of control devices is contained in both 40 CFR part 61, subpart Y and the HON. The downtime allowance is included in the CAR in subpart C, while an associated record is required with the other control device records in subpart G. The 40 CFR part 60, subparts Ka and Kb do not include this allowance.

Subpart Y of 40 CFR part 61 and the HON storage vessel provisions provide downtime for planned routine maintenance for all storage vessel control devices. The HON allows 240 hours per year and subpart Y allows 72 hours per year. The EPA believes that for SOCMI storage vessels, it is acceptable to allow 240 hours per year downtime for routine maintenance for control devices, thus providing operational flexibility without creating a significant potential for environmental

degradation. The EPA maintains that it may be appropriate for storage vessels associated with other industries to be allowed less downtime depending on the use and maintenance activities of the industry.

New CAR structure and other significant changes from the HON. This section identifies the rationale and benefit of the structure of the CAR storage vessel provisions. It also outlines the significant differences between the storage vessel provisions in the referencing subparts and those in the CAR. In some cases, the CAR clarifies the language adopted from the HON; in others, HON concepts have been extended to the other storage vessel rules. While the CAR incorporates the HON storage vessel provisions, the CAR provisions have been structured to better match procedures and operations at a plant. The CAR structure is a new approach to all of the referencing subparts. At a plant site, the personnel responsible for designing or re-designing storage vessels are not typically the same personnel responsible for operating the vessels. Likewise, different personnel are in charge of inspecting vessels, and they may not be the same personnel that repair the vessels. In addition, plant environmental staff may be in charge of keeping

records and making reports although they have no other storage vessel responsibilities.

Based on industry suggestions, the provisions for IFRs and EFRs are organized into design, operation, inspection, repair, and recordkeeping and reporting requirements. This more closely reflects how plant personnel actually function in complying with the referencing subparts and the modular format is clearer for each audience. Storage vessel operators, for example, do not necessarily need to be familiar with the inspection requirements.

The CAR also clarifies the storage vessel requirements of the referencing subparts by specifying how floating roofs should be monitored. While the HON provisions, which form the basis of CAR provisions, require only annual inspection of floating roofs, industry representatives were concerned that the requirement in each of the referencing subparts that IFRs and EFRs must float at all times implies that continuous monitoring is required; however, no explicit provisions are provided for demonstrating continuous compliance. The EPA does not consider continuous monitoring necessary to ensure that roofs remain floating at all times; EPA considers annual observation to be adequate. The CAR

requires that roofs be inspected for floating status during an annual inspection and at any other time the roof is viewed. This clarification was deemed necessary to provide a practical means to ensure that IFRs and EFRs float at all times, and it provides a means of achieving the environmental protection intended by the referencing subparts in a manner that is potentially less burdensome to the industry.

Another clarification to the referencing subparts incorporated into the CAR is the operating requirement to empty a tank whenever the roof is resting on the leg supports. All the storage vessel referencing subparts state that when the roof rests on the leg supports, the process of filling, emptying, or refilling the vessel shall be continuous and accomplished as soon as possible. This has been interpreted to mean that the liquid level in a vessel can be dropped below the leg level only when the vessel is to be completely emptied. This can result in either: (1) an effective "loss" of available tank capacity if the owner or operator maintains the level at an adequate margin above the leg supports to prevent fluctuations without resting the roof on the legs, or (2) a requirement to completely empty the vessel if fluctuations lower the liquid level below the leg level.

Emptying a vessel would increase the vapor space between the roof (as it rests on the leg supports) and the liquid level, thus increasing emissions. Emptying a vessel can also result in significant expense in maintaining extra tanks or barges to handle the emptied liquid.

The intent of the provision in the referencing subparts is to prevent the liquid level from rising and falling while the roof is resting on the supports. While the roof is on the supports, fluctuations in the liquid level generate emissions by increasing the vapor space between the roof and the liquid level as the liquid level falls, and then pushing these vapors out of the vessel as the level rises. Emissions are minimized if the vapor space is minimized. Not requiring emptying the tank if the liquid level falls below the roof supports would minimize the vapor space. Emissions are also minimized when the liquid level is raised during a continuous fill to a point where the roof is again floating, without an intervening drop in the liquid level. The CAR language is a revision of the language in the referencing subparts which requires only that once the roof is resting on the legs, the process of filling or refilling must be continuous and done as soon as practical. The CAR definition of "empty" or "emptying" is also clarified to

specify that when the liquid level drops below the roof supports during normal operation, the event is not considered emptying. Therefore, none of the provisions that must occur upon emptying are triggered. (The note in the HON provisions to this effect is not needed with the clarifications in the CAR.)

Since resting the roof on its leg supports while the tank is in service is not a common occurrence, this revision is unlikely to significantly affect emissions, but the revision provides operational relief to the owner or operator when unforeseen inventory problems force the liquid level to drop below the leg supports. It should be noted that a new recordkeeping requirement has been created to document when this occurs [§65.47(e)]. However, the benefits of added operating flexibility and of the clarified language, which helps avoid interpretation conflicts, far outweigh the slight additional burden of creating a new record.

Another significant burden reduction for storage vessels concerns time extensions for repair and for seal gap measurements of unsafe vessels. Under several of the referencing subparts, a vessel is required to be repaired within 45 days if failures (as defined for storage vessel floating roofs) are found during the vessel inspection.

If the vessel cannot be repaired within 45 days, a single extension of up to 30 days to empty the vessel and remove it from service may be requested from the Administrator. The provisions in the proposed CAR allow up to two extensions of up to 30 calendar days each without prior Administrator approval. The source operator is only required to document the basis for the extension and retain records of repairs and report them in the next periodic report. Extending the exemptions from the HON to all storage vessels complying with the CAR creates a consistent approach to compliance. Allowing extensions for repair creates operational flexibility without significantly affecting emissions.

The CAR also incorporates the HON’s more flexible provisions for instances where performing seal gap measurement may be unsafe. The source operator is allowed up to two extensions of up to 30 days each to empty and remove a vessel from service once it is determined to be unsafe. The referencing subparts other than the HON do not include special provisions for instances where performing seal gap measurements would be unsafe. Allowing extensions for safety purposes incorporates that latest "common sense" approach to seal gap measurement procedures.

The concept of an EFR converted into an IFR is contained in the HON but is not included in the other storage vessel referencing subparts. No additional requirements are specified in the HON. Instead, it clarifies which EFR requirements and which IFR requirements apply to these storage vessels. The CAR incorporates this clarification by including a special section for converted storage vessels. The section points out which provisions should be followed, but does not otherwise contain additional requirements. This clarification incorporates the most current approach to control and better represents situations that can occur in the industry.

Other changes from the referencing subparts. Several burden reducing changes were made to the recordkeeping and reporting provisions for storage vessels. The changes from the referencing subparts create a consolidated program that will increase clarity and compliance while reducing industry burden. These changes are discussed below.

The proposed CAR provides for 90 days as the time within which gap measurements would be required once a vessel that had been out of service for over 1 year is refilled. The HON and 40 CFR part 61, subpart Y also

allow 90 days; however, 40 CFR part 60, subparts Ka and Kb specify 60 days. Therefore, the 90 day allowance would provide a burden reduction for part 60 storage vessels complying with the CAR.

The timing of reports for storage vessels has been standardized in subpart C of the CAR. For both the prior notice of gap measurements and notice of vessel filling or refilling, the CAR retains the same 30-day requirement included in each of the referencing subparts. However, the CAR requires results of defect inspections, seal gap measurement results, and seal gap exceedences to be reported in the periodic semiannual report, as they are in the HON. These reports in 40 CFR part 60, subparts Ka and Kb, and 40 CFR part 61, subpart Y are required either 30 or 60 days after the inspection, depending on the regulation. The CAR's consolidated submittals provide a reporting burden reduction for 40 CFR part 60, subparts Ka and Kb, and 40 CFR part 61, subpart Y sources.

Notifications for refilling a vessel that has been emptied and notifications prior to seal gap measurement of EFR's are required as in the HON. However, where these notifications are also sent to a State or local agency, a copy to EPA is not required. In reviewing the

use of these notifications, EPA determined that the States and local agencies used the reports to observe refilling in cases where they are the delegated authority. The State or local agency may also waive these notifications.

The proposed CAR provisions require less information for seal gap measurement reports than the HON does. For example, for EFR seal gap measurements, sources would not be required to report raw data or calculations of each measurement, as specified in the HON provisions. Only the result of the gap measurement calculations that indicate noncompliance are required under the CAR; vessels with seal gap measurements that are in compliance need only be listed. Because the more detailed raw data would still be retained as an onsite record, EPA believes that reporting it would be unnecessary.

Records of inspections have also been streamlined in the proposed CAR. For example, 40 CFR part 60, subpart Kb requires sources to record the condition of each component inspected. The CAR requires only a record that the inspection has been performed on a specific vessel, the date of inspection, and a reference to the type of inspection performed. These records could consist of a simple checklist of subject storage vessels

with dates entered for particular inspections performed. The proposed CAR requires a description of the condition of a component only if a problem is detected.

Additional requirements resulting from the consolidated program. This section details the provisions of the CAR that are based on the HON language and that introduce changes to the other referencing subparts. These changes, which may impose additional burden, primarily to subpart Ka tanks, as detailed below, should be considered in relation to all the positive advantages of consolidating the design requirements as well as those previously discussed for storage vessel complying with the CAR.

The requirements for storage vessels previously complying with 40 CFR part 60, subpart Ka are significantly different under the CAR. These differences primarily include design requirements for floating roofs and the allowance for a vapor mounted seal for an EFR. Modeled after the HON provisions, the CAR design specifications require a secondary seal above a vapor mounted seal for an IFR, and they do not allow vapor mounted seals for an EFR. Subpart Ka of 40 CFR part 60 allows vapor mounted seals for EFRs and does not specify types of seals for IFRs. In general, it is expected that

storage vessels subject to 40 CFR part 60, subpart Ka will require upgrading in order to comply with the CAR's floating roof design requirements.

Other differences include the CAR's requirements for seal gap measurement and IFR inspection and repair procedures. Owners and operators with storage vessels subject to 40 CFR Part 60, subpart Ka are required to have "no gaps" in the secondary seal, but the rule does not provide any explicit procedures for determining compliance. The CAR's explicit procedures provide clarity. Likewise, the CAR’s explicit requirements for repair procedures and time frames are now included for storage vessels previously complying with 40 CFR part 60, subpart Ka. Similarly, subpart Ka of 40 CFR part 60 does not specify any IFR inspection or repair provisions. The explicit CAR provisions, based on the HON, are new to sources subject to 40 CFR part 60, subpart Ka. Another design requirement that would be new to these storage vessels is the CAR provision requiring that covers on the roof be gasketed.

Design requirements for guide poles are found in the HON and are used in the CAR. The CAR requires gasketed caps on unslotted guide poles (except for antirotational devices equipped with a welded cap) and gasketed floats

(or other devices) on slotted guide poles. Both of these requirements are new to 40 CFR part 60, subparts Ka and Kb and 40 CFR part 61, subpart Y.

D. Process Vent Provisions

The process vent provisions consolidate the process vent requirements of 40 CFR part 60, subparts III (air oxidation process vents), NNN (distillation vents), and RRR (reactor vents), and part 63, subpart G (HON process vents). The process vents subpart in the CAR, subpart D, provide significant opportunity for consolidation because the process vent referencing subparts are similar in their structure and requirements.

Subpart D of the CAR contains all the provisions for the performance standards; determining if control, monitoring, or neither is required; TRE index value determinations; process changes; and monitoring, reporting, and recordkeeping for vents that comply without the use of either a recovery or control device. Vents that comply by using recovery or control devices are also subject to subpart G of the CAR for further provisions regarding operation, monitoring, recordkeeping and reporting for control and recovery devices. This section discusses subpart D of the CAR; section V.G and H discuss subpart G of the CAR.

Language clarification and consolidation. This section presents the rationale and use of some of the terminology used in the process vents subpart of the CAR. It points out the initial confusion or repetitive language in the referencing subparts as well as the changes proposed in the CAR. The control requirements for vents are the same across all the referencing subparts and each also has provisions for using TRE index values for classifying vents into three categories, as follows: control required, no control required but monitoring required, or no control required and no monitoring required. While the performance standards for vents are the same in the referencing subparts, the language used to describe the three vent classifications is not. The 40 CFR part 60 rules use long text descriptions that cite TRE index value, concentration, and flow rate to describe each vent classification every time the language refers to a vent classification. The HON uses "Group 1" and "Group 2" to distinguish process vents where control is and is not required, but the HON also uses long descriptions whenever Group 2 is mentioned to describe if monitoring is required or not. These different approaches not only create confusion but also significantly expand the language.

The CAR expands on the HON terms that describe each vent classification by establishing nomenclature for each classification. Process vents where control is required are referred to as "Group 1." Process vents where control is not required but monitoring is required are referred to as "Group 2A." Process vents where neither control nor monitoring are required are referred to as "Group 2B." This change allows for less overall text and makes the rule easier to read and understand, thereby resulting in better compliance and facilitating enforcement. The consistent terminology for these vents throughout the CAR also reduces confusion in recordkeeping and reporting and makes classification of specific vents easier. The remainder of this section will refer to process vents by using the Group 1, Group 2A, and Group 2B terminology to indicate the vent classification specified by the CAR or by the referencing subparts.

Consolidation of requirements. This section discusses which process vent provisions and approaches in the referencing subparts were consolidated to create the CAR process vent subparts. The significant changes, including discussions of the rationale and benefits of the changes, are highlighted below.

The consolidated requirements for process vent group determination is summarized in table 2. Several vent characteristics (TRE index value, flow rate, and concentration) are used in the referencing subparts to

determine group status. However, variability exists across the referencing subparts in the values that are used for these characteristics. Where possible the CAR has consolidated these criteria to propose a rule that is consistent for all vents.

TABLE 2. THE CAR PROCESS VENT GROUP DETERMINATIONS

Vent stream characteristic	Group assignment		
	1	2A	2B
Total resource effectiveness (TRE)	≤1.0	>1.0 to 4.0	>4.0
	and	and	or
Flow rate	≥0.011 scmm	≥0.011 scmm	<0.011 scmm
	and	and	or
Pollutant concentration[a]	≥300 ppmv TOC	≥300 ppmv TOC	<300 ppmv TOC
	≥50 ppmv HAP	≥50 ppmv HAP	<50 ppmv HAP
Control	Control required	No control; monitor required	No control and no monitoring

[a]Process vents subject only to 40 CFR part 60 subpart III or 40 CFR part 63, subpart G are not eligible for the 300 ppmv TOC concentration cutoff. Process vents subject to 40 CFR part 63, subpart G are eligible for the 50 ppmv HAP concentration cutoff. Process vents subject to only the 40 CFR part 60, subparts are not eligible for the 50 ppmv HAP concentration cutoff.

Each of the process vent subparts being consolidated used a TRE index value to determine group status. The

40 CFR part 60 rules and the HON use similar parameters (for example, flow rate, heating value) but different coefficients in the equations, yielding different TRE index values. The CAR contains a single equation along with accompanying tables containing all the needed coefficients. The coefficients vary depending on process vent stream parameters and the referencing part (HON or NSPS). The single equation eliminates the need to duplicate in the CAR many pages of equations from the referencing subparts. While the new equation looks different from those in the referencing subparts, it yields the same TRE index values and, therefore, does not change any applicability determinations.

The different coefficients for the HON and the NSPS rules are necessary to avoid altering the stringency of the referencing subparts. The TRE index equations essentially are used to determine whether or not a particular vent stream is cost-effective to control (in terms of cost per unit of pollution reduced). The coefficients of the TRE equation vary because source category specific decisions were made pertaining to acceptable levels of cost-effectiveness in each rule. Consolidating to a single set of coefficients would

change the TRE index value and, therefore, change the applicability criteria of the referencing subparts.

There are some minor differences among the referencing subparts in the provisions regarding the numerical levels for TRE index value, flow rate, and concentration that are used in determining group status (Group 1, Group 2A, or Group 2B).

Group 2A vents are required to monitor certain parameters to ensure that the TRE index value remains above 1.0 (a TRE index value of less than 1.0 indicates that control is required). Two of the referencing subparts, 40 CFR part 60, subparts NNN and RRR, specify a TRE index value criterion of 8.0, below which monitoring is required; these are Group 2A vents. The two other referencing subparts have a Group 2A TRE index value criterion of 4.0. Statistically, there is a chance that the actual TRE index value could fluctuate during normal operation to less than 1.0 if the calculated TRE is less than the Group 2A criterion. This is why monitoring is required for Group 2A process vents (i.e., to ensure that the TRE index value does not fall below the 1.0 criterion).

After reviewing the development history of these cutoffs for each rule, EPA determined that the

probability of the TRE fluctuating from a value in the range of 4.0 to 8.0 to less than 1.0 is small compared to the probability of it fluctuating from a value in the range of 1.0 to 4.0 to less than 1.0. In the CAR, EPA proposes a TRE index value cutoff of 4.0 for consistency. Thus, vents with TRE index values greater than 4.0 (i.e., Group 2B) would not have to monitor. This consolidation would result in no impact on emissions because the vents in question were never subject to control requirements; they were only subject to monitoring requirements.

The low flow rate criterion for Group 2B status was similarly consolidated in the CAR. The cutoffs in the referencing subparts range from 0.005 standard cubic meters per minute (scmm) in the HON to 0.008 scmm in 40 CFR part 60, subpart NNN to 0.011 scmm in 40 CFR part 60, subpart RRR. Subpart III of 40 CFR part 60 does not contain a low flow rate criterion. The EPA proposes to use 0.011 scmm in the CAR. Based upon an analysis of EPA’s process vent database, EPA concluded that the population of process vents with a flow rate between 0.005 and 0.011 scmm would be very small. This data analysis is documented in more detail in the following memorandum available in the Docket: "Process Vent Applicability Criteria," from

Greg DeAngelo, Eastern Research Group, to Rick Colyer, EPA, dated July 17, 1998. In the case of air oxidation vents (i.e., those subject to 40 CFR part 60, subpart III), EPA believes that no vents will have flow rates below 0.011 scmm because of the high flow rates in the vent streams from these unit operations.

The low concentration cutoff for Group 2B status also was consolidated. Based on an analysis of EPA process vent database, EPA considered it appropriate to extend the 300 ppmv TOC low concentration cutoff from 40 CFR part 60, subpart RRR to subpart NNN sources, but did not apply the cutoff to subpart III sources. Air oxidation process vents subject to 40 CFR part 60, subpart III can have low concentrations but very high flow rates that could potentially result in significant mass emissions of regulated pollutant even at low concentrations. The 50 ppmv HAP concentration cutoff was retained for 40 CFR part 63, subpart G sources because the concentration cutoff is in terms of HAP and no direct, consistent relationship can be established between HAP and TOC emissions given the many different types of processes across the industry.

Another concept that was taken from the HON and used in the CAR is the procedures for monitoring a Group 2A

process vent that meets the Group 2A criteria without the use of a recovery device. In other words, the process vent has the characteristics of a Group 2A process vent "naturally," without the addition of a recovery device. In this case, because the standard monitoring parameters for recovery devices do not apply, the CAR specifies that the owner or operator should determine the appropriate parameters to monitor. Under this case-by-case determination, the proposed monitoring parameters, monitoring schedule, and recordkeeping and reporting procedures would be submitted to the Administrator for approval and then become the provisions for the process vent. This concept is a clarification to the part 60 rules, which do not address process vents that are Group 2A "naturally."

Engineering assessment. The CAR allows the use of engineering assessment in lieu of testing to determine vent characteristics. Engineering assessment is allowed when determining vent stream flow rate and concentrations and TRE index value for verifying Group 2B status. Halogenated vent stream status can also be determined using engineering assessment. Compared to testing, engineering assessment is a less burdensome approach to determining vent stream characteristics. Allowing

engineering assessment for verifying Group 2B status does not decrease environmental protection because any process vent with an estimated TRE index value between 1.0 and 4.0 must be tested and is potentially subject to control. Using engineering assessment for process vents with a TRE index value above 4.0 also allows facilities to focus attention on vents where control or monitoring is expected to be required.

Engineering judgement is allowed in the process vent referencing subparts of part 60 only for TRE index value determination after a process change is made, but it is not allowed for the initial determination of vent characteristics. Also, the specifications included in the CAR of what an engineering assessment entails, and the examples of engineering assessment, are not in the process vent NSPS.

The HON does not allow the use of engineering judgement for the initial determination of concentration and flow rate to verify Group 2B status. These vents would have to be tested to evaluate the concentration or flow rate. The CAR allows engineering assessment for the initial determination of low concentration and flow rate. The EPA has determined that engineering assessment is appropriate for these low concentration and/or low

flow rate streams. This assessment is available for review by an inspector who can always request that a test be conducted if needed.

Other burden reductions. There are several other minor provisions based on HON provisions that are consolidated in the CAR for consistency, simplicity, or to provide burden reduction. They are discussed below.

As in all the referencing subparts, the CAR requires that the group status of the process vent must be evaluated whenever a process change is made. The part 60 rules list examples of process changes, and these lists are similar to the examples in the HON, except that the HON list includes changes in production rates as an example of a process change. The CAR includes production rate changes as examples of process changes.

Likewise, the CAR includes the HON provisions regarding where to locate the sampling site for purposes of determining the vent stream characteristics. The CAR approach essentially specifies that the sampling site should be located after the last recovery device but prior to the control device inlet (and prior to release to the atmosphere). In addition to this same requirement, the part 60 process vent referencing subparts also provide sampling site provisions for

streams that are mixed prior to venting to a control device. In these provisions, calculations are required to back-calculate the effect of the control device on the individual streams that are mixed. The EPA determined that this back-calculation was not necessary, because a determination of the efficiency for the control device to reduce the mixed stream is a good indication of the efficiency to reduce emissions from individual streams. These 40 CFR part 60 provisions, therefore, were not adopted in the CAR.

The net heating value equation in the CAR specifies that the concentrations of the individual compounds are to be determined on a wet basis. All of the process vent referencing subparts and the general provisions of 40 CFR parts 60 and 63 contain a net heating value equation, but the equation is presented in several different forms across the rules with respect to whether or not the concentration component of the equation is on a wet or dry basis. Some equations specify wet basis, but some equations specify dry basis and include a correction for the water vapor content of the vent stream. With the exception of 40 CFR part 60, subpart III, all the equations are mathematically equivalent, so the results are the same. In subpart III,

the equation is given in the wet basis form, but the provisions do not require that it be on a wet basis. Because industry input indicated that the wet basis form for the equation is more prevalent, the wet basis form is used in the CAR and the concentration is required to be on a wet basis. This is a possible change for 40 CFR part 60, subpart III since some owners or operators subject to subpart III may have been calculating net heating value using concentration on a dry basis in the equation meant for wet basis concentrations. These owners or operators would therefore need to recalculate the net heating value under the CAR.

A change has been proposed to subpart III, however, specifying that the concentration should be on a wet basis (62 FR 45369, August 27, 1997). Note that this Federal Register citation refers to changes in test methods; the actual text of the proposed amendment to subpart III is in the air docket at A-97-12 or on the web at http://www.epa.gov/ttn/emc. Once this change is final, subpart III and the CAR will be consistent on this issue.

The HON has a requirement to report which criteria (TRE index value, concentration, or flow rate) a process

vent meets to qualify as a Group 2B vent and to report the test results (if any) accompanying the determination. Under the CAR, records of test information must be maintained, but no reports are required. The report is required only to identify which vents are Group 2B. It does not have to list which criteria each vent meets. This reporting requirement operates in conjunction with the CAR's approach to reporting process changes. If a process change is made that does not result in upgrading the group status (for example, Group 2B to Group 2A), then only a statement to that effect is required. This is a burden reduction because if a process vent that meets Group 2B status for one criterion now meets Group 2B status for a different criterion following a process change, only a brief report would be required rather than test results, engineering assessments, or the like. All records of calculations after a process change are still required to be kept.

Halogenated vent streams. Some concerns may exist in the consolidated process vent rules for halogenated process vents subject to 40 CFR part 60, subparts III, NNN, or RRR but not subject to the HON. Two separate but related issues exist: (1) whether a vent stream is

halogenated, and (2) how to control a halogenated vent stream.

The TRE index value is a function of whether the vent stream is halogenated or nonhalogenated. The CAR and all of the referencing subparts direct the owner or operator to use one set of coefficients to make the TRE index value calculation for a halogenated vent stream, while another set of coefficients must be used to make the TRE index value calculation for a nonhalogenated vent stream. The CAR provisions consolidate the definition of a halogenated vent stream using the HON definition. The definition specifies that when the mass emission rate of halogen atoms contained in the organic compounds is equal to or greater than 0.45 kilogram per hour, the process vent stream is considered halogenated.

This is potentially an important issue for process vents subject to one of the part 60 process vent referencing subparts, because those rules define halogenated streams differently. A stream is considered halogenated if it contains 20 ppmv or greater halogens (versus 0.45 kilograms per hour under the CAR). The consolidation of this definition in the CAR could result in a halogenated vent in the NSPS rules becoming a nonhalogenated vent in the CAR, or vice versa. With the

different set of coefficients for calculating TRE index values for halogenated and nonhalogenated vent streams, this could change the TRE index value of a vent and, therefore, the group status. If a group status changes as a result of the CAR, a different control and/or monitoring requirement may be triggered.

The EPA believes this is an insignificant difference because only a small subset of vents might have different halogenated status under the CAR versus the NSPS process vent rules. Also, the majority of sources subject to the process vent NSPS are also subject to the HON. Therefore, this difference would have little effect on rule applicability.

The HON provisions for process vents also include additional control requirements for halogenated Group 1 process vents, while the other referencing subparts do not specify any additional control. The HON prohibits flaring of halogenated vents and specifies that a halogen reduction device must be used if the process vent is to be combusted. The proposed CAR includes the HON provisions regarding flares and halogen reduction devices for combusted halogenated Group 1 process vents. Based on industry input, EPA believes that halogenated vents

are very rarely flared because the flare tip corrodes under these conditions.

These are substantial changes from the 40 CFR part 60 rules (especially the possibility of requiring the installation of a halogen reduction device such as a scrubber) that may prove to be an impediment to some sources that otherwise may wish to use the CAR. The EPA believes that the total population of process vents that contain halogens, are Group 1, and are subject to a 40 CFR part 60 rule, but that are not subject to the HON is small. The EPA specifically requests comment on this issue.

E. Transfer Rack Provisions

The transfer rack provisions consolidate the transfer rack requirements of 40 CFR part 61, subpart BB (benzene transfer operations), and 40 CFR part 63, subpart G (HON transfer racks). Transfer racks complying through the use of a control device are referred to subpart G of the CAR, thereby eliminating much of the regulatory text contained in the transfer sections of the referencing subparts.

The CAR transfer provisions are based on the transfer provisions of the HON. The only significant change relative to the HON provisions involves

elimination of a recordkeeping requirement. The HON requires that records be kept of liquids transferred through each transfer rack. The EPA has determined that this record is not necessary for transfer racks complying with the CAR. The intent of the record in the HON was to determine if the liquids being transferred triggered the HON control requirements for the transfer rack. Since control is required for all transfer racks complying with the CAR, this record is not needed.

The primary benefit of using the CAR for transfer racks subject to 40 CFR part 61, subpart BB is to extend the same compliance options of the HON to non-major SOCMI sources subject to subpart BB.

The HON allows vapor balancing as an alternative to the installation of a control device. The process of vapor balancing consists of returning vapors expelled from the vehicle being loaded through vapor lines to the storage vessel being emptied. This option is not contained in 40 CFR part 61, subpart BB. Vapor balancing is an option under the HON because EPA determined that it reduces emissions by at least 98 percent and is therefore an acceptable alternative to a control device. Consequently, vapor balancing is included in the CAR to

provide flexibility for non-major SOCMI sources subject to subpart BB.

In addition, the CAR clarifies the definitions of vapor balancing and closed-vent system. Vapor balancing systems are not subject to the closed-vent system equipment leak provisions. Previously, the referencing subparts used different approaches and terminology, creating confusion about whether or not an individual section of the transfer rack was part of the process or part of the closed-vent system. The consolidated definitions clarify the issue. See the discussion of the definitions in section VI.B of this preamble for more information.

"Vapor collection system" is the term used in the referencing subparts to describe the equipment that collects and transports transfer rack emissions. Throughout the CAR, uniform language is adopted that refers to this type of equipment as "closed-vent systems." This standardization, along with the revised definitions, further clarifies which sections of the transfer rack are included in the closed-vent system and which are process piping.

The HON also introduces two other compliance alternatives that can be used for transfer racks, neither

of which are included in 40 CFR part 61, subpart BB. Emissions from transfer racks can be routed either to a process or to a fuel gas system. These options are consistent with EPA's current approach to emissions control and provide operational flexibility while maintaining environmental protection. During the development of the HON, EPA determined that both of these alternatives reduce emissions by at least 98 percent and are therefore acceptable alternatives to a control device. Therefore, these two options are included in the CAR's provisions for transfer racks.

The CAR allows two alternatives for demonstrating leak tightness for tank trucks and rail cars. Source operators may rely on either a Department of Transportation tank certification for tank trucks and railcars, or Method 27 test results and documentation. The HON allows both of these alternatives, recognizing that either is an acceptable means of demonstrating leak tightness of tank trucks and railcars. However, because it was drafted prior to the DOT certification program, 40 CFR part 61, subpart BB does not make this choice available for transfer racks and specifies only Method 27. Allowing this alternative in the CAR provisions provides a potential for burden reduction

because owners and operators of tank trucks and railcars are already required to keep the DOT certifications under DOT regulations. Under the CAR they do not have to perform Method 27 in addition to keeping the DOT certification. This alternative provides for a significant reduction in recordkeeping burden in 40 CFR part 61, because subpart BB required several ancillary records related to Method 27 to be kept by the owner or operator of the transfer rack. These records are not necessary in conjunction with the much simpler records needed for the DOT certifications.

The HON also allows an owner or operator to use a control device to reduce the organic concentration of transfer rack emissions to 20 ppmv, (on a dry basis, corrected to 3 percent oxygen) as an alternative to reducing emissions by 98 percent. However, 40 CFR part 61, subpart BB does not provide this alternative, so the CAR includes this option as a means of flexibility for transfer rack compliance.

Achieving a 98 percent reduction of a vent stream that initially has a very low concentration can be infeasible or unreasonably costly. Allowing a 20 ppmv concentration in addition to a 98 percent reduction provides operational flexibility without compromising

environmental protection. This is an example of extending the more up-to-date procedures of the HON to sources subject to 40 CFR part 61, subpart BB.

The CAR adopts the control requirements of the HON for halogenated transfer rack vent streams. These requirements are similar to those discussed in section VI.D of this preamble for halogenated process vents. These are new requirements for transfer racks subject to 40 CFR part 61, subpart BB. The EPA does not expect the new requirement to affect many vent streams because few transfer racks that are subject to 40 CFR part 61, subpart BB will contain halogens in sufficient quantity to be considered halogenated by the CAR.

F. Equipment Leak Provisions

The proposed CAR's equipment leaks provisions consolidate the equipment leaks requirements of 40 CFR part 60, subpart VV (SOCMI equipment leaks), 40 CFR part 61, subpart V (the generic equipment leak requirements for 40 CFR part 61, subparts F [vinyl chloride] and J [benzene]), and part 63, subpart H (HON equipment leaks).

Applicability of the CAR's equipment leak requirements is determined by applicability provisions in the referencing subparts. These provisions specify the

components that would be subject to the CAR. The provisions of the CAR apply only to those components that are subject to the referencing subparts and are specifically referred to the CAR. The CAR does not alter the applicability of the referencing subpart. For example, the equipment leak provisions of subpart VV of 40 CFR Part 60 state that subject equipment includes all pumps, valves, compressors, pressure relief devices, sampling connection systems, open-ended lines, and connectors that contain or contact a process fluid that is at least 10 percent VOC by weight. When the CAR is applied, only those same components would be subject to the provisions in the CAR. Thus, even though the CAR contains provisions for agitators, the agitator provisions would not apply to a source subject only to 40 CFR part 60, subpart VV, because agitators are not covered by 40 CFR part 60, subpart VV.

This section of the preamble discusses the CAR provisions for alternative monitoring for valves, connector monitoring, the overall improvements to the structure of the equipment leaks provisions in the CAR, provisions from the HON that were clarified or improved through incorporation into the CAR, and significant changes between the provisions of 40 CFR part 60,

subpart VV and 40 CFR part 61, subpart V and those contained in the CAR.

Alternative monitoring program for valves. The most significant difference between the equipment leaks provisions in the CAR and those in the referencing subparts is the CAR's innovative approach for monitoring valves for leaks. The CAR alternative monitoring program can significantly reduce the amount of burden associated with monitoring valves for leaks without increasing the emissions of regulated pollutants to the environment. The valve monitoring program is discussed below.

The premise for the CAR alternative monitoring program is that industry data and experience have shown that, at some facilities, some valve populations tend to leak more frequently than others. The referencing subparts require valve monitoring on a process unit basis, such that a certain number of valves that tend to leak frequently may continually force all of the valves in the process unit to be monitored frequently. Separate process units can qualify for less frequent monitoring if the percent leaking valves in the process unit falls to a small enough number. The CAR alternative monitoring program extends this concept by allowing subgrouping, within or across process units, to determine the valves

that must be monitored. Each subgroup correlates to a specific monitoring frequency based on the percent leaking in that subgroup.

Under the CAR alternative, the owner or operator can place valves that are expected to leak more frequently into one subgroup. Because these valves leak more frequently they would be monitored more frequently. Then, the valves in the other subgroups can qualify for less frequent monitoring because the valves that leak more frequently will not be included in their percent leaking calculations. This is conceptually the same as the current programs which allow different monitoring frequencies for different process units, in that the performance of a given process unit does not disqualify another process unit from less frequent monitoring. The primary difference in the CAR alternative monitoring program is that subgrouping can be based on site-specific factors other than process unit boundaries.

The main benefit of the CAR alternative monitoring program is to allow facilities to focus on valves that tend to leak, while relieving the burden of monitoring valves that tend not to leak and achieving essentially the same level of environmental protection provided by the referencing subparts. The cost of monitoring, which

is a significant burden to the industry, is thereby reduced without creating a greater potential for negative environmental impact.

Several safeguards have been built into the CAR alternative monitoring program to ensure that the level of environmental protection does not deteriorate. First, to initially qualify for the CAR alternative monitoring program, the overall performance of all valves in the alternative monitoring program must be less than 2 percent leakers. Also, if the overall performance of the valves in the alternative monitoring program fails to meet the program's required 2 percent leak rate, as determined through semi-annual performance checks, the entire population of valves in the alternative monitoring program would revert to the original valve monitoring program. As a result, each process unit would revert to the monitoring frequency dictated by the percent leaking valves observed. This may also introduce monthly monitoring for many valves. The EPA considers this possibility a significant incentive for owners or operators to maintain good performance at plant sites employing the subgrouping program.

In addition, valves with less than one year of monitoring data (or valves not monitored within the last

12 months) must initially be placed into the most frequently monitored subgroup. Provisions to restrict switching valves between subgroups are included to prevent circumvention. These provisions, discussed below, ensure that valves cannot be moved back and forth between subgroups to hide or diminish the impact of leaking valves on the percent leaking valves calculations.

Under the proposed alternative, a valve can be moved into a less frequently monitored subgroup only when data have been collected that demonstrate that the valve has not leaked during the entire monitoring period of the subgroup to which it is moving (for example, no leaks for the past 12 months before moving a valve into an annually monitored subgroup). Therefore, valves with a demonstrated lower incidence of leaks can migrate into the longer monitoring period subgroups. Because even a few leaking valves in a subgroup can disqualify the subgroup for the longer monitoring periods, it is anticipated that owners and operators will be very cautious when considering whether or not to move suspect valves into the longer monitoring period subgroup.

To move a valve into a more frequently monitored subgroup, the valve must have been monitored during the

most recent monitoring period for the group it is moving from, and it must have had its monitoring results included with the group from which it is moving. The intent of this safeguard is to prevent leaking valves from being shuttled out of a subgroup to protect that subgroup from triggering a more frequent monitoring period.

The placement and subsequent reassignment of valves into subgroups is a decision that will be made on a case-by-case basis by the owners and operators. The alternative program takes advantage of the knowledge of the process that the owner or operator possesses. At a given facility, for example, valves operating under certain temperatures or valves located adjacent to certain pieces of equipment may be more likely to leak. No single set of criteria can be applied to the entire industry, as the characteristics of valves that are more likely to leak at one facility may not be the same at another facility.

Some additional records and items to include in the periodic reports are necessary for this program to ensure compliance. These records and reporting items consist essentially of recording which valves are initially assigned to each subgroup, which valves have subsequently

been reassigned, and the results of the semiannual performance checks. The burden associated with retaining these records and making these reports is far outweighed by the savings in reduced monitoring.

The other aspect of the valve program is the ability to earn longer monitoring periods with good performance. The HON currently allows a series of extended monitoring periods based on improved performance, culminating with an annual monitoring period for process units with less than 0.5 percent leaking valves. The CAR equipment leaks subpart introduces an additional 2-year monitoring period for process units with less than 0.25 percent leaking valves. This extended monitoring period would be available to valves whether or not the owner or operator chooses to use the alternative subgrouping program for compliance. Since 0.25 percent of a typical valve population (either a process unit under the base monitoring program or a subgroup under the CAR alternative monitoring program) is a very small number of leaking valves, EPA considers this change a logical extension of the original monitoring periods specified in the HON. Furthermore, it has the potential to substantially reduce monitoring costs without increasing long-term emissions to the environment.

Revised monitoring program for connectors. Another major difference between the CAR and the referencing subparts is the approach taken to control equipment leak emissions from connectors. The HON is the only referencing subpart with connector monitoring provisions, but the CAR's approach to connector monitoring requires much less frequent monitoring for SCUs with good performance histories.

For connectors, as for valves, the monitoring periods have been extended. The HON is the only referencing subpart that specifies periodic monitoring for connectors, and it contains provisions for extending the monitoring period to once every 4 years if the percentage of leaking connectors is less than 0.5 percent. The CAR extends the HON concept to an 8-year monitoring period for process units with less than 0.25 percent leaking connectors, while introducing connector monitoring to sources previously complying with the sensory monitoring requirements of 40 CFR part 61, subpart V and 40 CFR part 60, subpart VV. This approach for connectors applies on an SCU basis; subgrouping similar to the alternative valve monitoring program is not allowed.

The EPA believes that the extended 8-year monitoring period is warranted for connectors which can achieve and maintain a leak rate of less than 0.25 percent. The lower threshold will forbid any poorly performing connectors from qualifying. In addition, connectors are static pieces of equipment without any moving parts. They are much less likely to leak than dynamic pieces of equipment like pumps and valves.

As a safeguard built into the provisions allowing an 8-year monitoring frequency, the CAR requires at least half of the connectors to be monitored within the first 4 years. The process unit must have less than 0.35 percent leaking connectors to remain in the 8-year program; failing the percent leak criteria means the owner or operator must monitor the rest of the values within the next 6 months. The result of this monitoring will then determine the new monitoring period. The 0.35 percent criterion was selected so that, if 0.35 percent (or more) of the first half of the connectors leak, the overall connector population will be monitored, and the overall results will be used to determine the monitoring frequency.

The changes for valves and connectors introduce concepts designed not only to significantly reduce the

burden of complying with equipment leak inspections but also to maintain environmental protection. The EPA believes that the safeguards incorporated into the new programs for valves and connectors are sufficient to meet both of these goals.

CAR structure. Some of the improvement to the CAR subpart F entails restructuring with the intent to isolate and emphasize the different provisions in a manner more consistent with typical plant operation. For example, monitoring for leaks and leak repair are presented separately because the personnel at a plant site responsible for these two activities are not necessarily the same. In addition to creating a "user-friendly" format, the other goal of restructuring is to avoid repetition of requirements. Equipment identification provisions, for example, are presented once rather than duplicated for each equipment type discussed.

In general, the equipment leaks subpart of the CAR is structured in the following manner. Provisions common to all equipment types (such as equipment identification, monitoring for leaks, and leak repair) are consolidated and presented once, at the beginning of the subpart. Following these provisions are component-by-component

standards (for example, for valves and for pumps). After the standards sections, the subpart contains alternatives for batch units and for enclosed process units as well as recordkeeping and reporting requirements for all equipment.

The general benefit of this structure is that plant personnel need to be familiar with only the portions of the subpart that affect them. Personnel responsible only for component repair, for example, can refer to two or three sections in the subpart and do not have to read all of the sections. A discussion of some of the more specific benefits of structure improvements follows.

Two sections have been created through restructuring: "Instrument and Sensory Monitoring for Leaks" and "Leak Repair." This restructuring is intended to more closely relate the structure of the equipment leaks subpart to the way plants are configured and operated. The referencing subparts contain the leak detection and repair provisions for each type of component within the section for that component. EPA believes that significant consolidation and simplification can be achieved by combining the leak detection and leak repair provisions into one set of provisions, since they are very similar or identical for

the different types of components. Instrument leak detection procedures are the same across the components, including the method used, calibration, monitoring procedure, and leak identification.

The same is true for leak repair procedures. All of the referencing subparts include provisions for repair within 15 days (first attempt within 5 days), removal of leak identification, delay of repair, and recordkeeping. Many of the CAR's recordkeeping provisions are contained in the new leak detection and repair sections because the personnel detecting and repairing the leaks are generally the same ones who create and maintain the records. Only leak detection and repair specific to individual components or situations are retained in the individual sections addressing those components.

An additional restructuring was achieved by creating a parallel construction for the equipment component sections which have similar types of provisions. The standards for valves, pumps, connectors, agitators, pressure relief devices in liquid service, and instrumentation systems are broken into parallel paragraphs addressing compliance schedule, leak detection, percent leaking component calculations, and leak repair, where these provisions are applicable. Any

special provisions for that component follow the standardized paragraphs. A consistent structure for these sections enables the owner or operator to more easily understand the requirements for each component and facilitate the owner or operator's compliance activities.

For consistency and clarity, all owners or operators controlling equipment leak emissions with closed-vent systems and control devices or by routing to a process or to a fuel gas system are also subject to subpart G of the CAR. Subpart F of the CAR specifies 95 percent or greater control efficiency for control devices before referring all three of these compliance options to subpart G. Subpart G then provides the consistent, consolidated procedures for the control device or routing emissions to a process or fuel gas system.

Clarifications and improvements from the HON. In addition to consolidating primarily on the HON requirements, the CAR makes some significant clarifications, changes, and improvements to the HON provisions. These issues, some of which also constitute changes for sources referenced from the other two equipment leaks referencing subparts, are discussed in more detail below. This section discusses changes to provisions taken from the HON. In cases where the HON

and the non-HON requirements are substantially identical, the discussion in this section is equally applicable to all three referencing subparts. When the discussion applies to all three equipment leak referencing subparts instead of only the HON, the discussion is specially noted.

Identification of subject equipment has been simplified for all sources complying with the CAR. It is not necessary to individually identify each piece of equipment, as long as equipment subject to the CAR can be distinguished from other equipment through means of a plant site plan, log entries, process unit boundaries, or another method. This does not preclude the use of individual equipment identification, but it does offer flexibility and the opportunity for burden reduction as a source does not have to track a complex numbering scheme for compliance. For example, the CAR simplifies identification of connectors by allowing them to be identified by grouping or area. Closed-vent systems and control devices, pressure relief devices, and instrumentation systems must be identified, but the CAR provisions do not specify particular formats. The referencing subparts, on the other hand, require lists of identification numbers for individual pieces of

equipment; the CAR is more flexible and thus reduces the recordkeeping burden. Such flexibility, however, does not relieve an owner or operator's responsibility for the ability to locate components at the plant site.

Regarding unsafe-to-monitor or difficult-to-monitor equipment, the HON requires owners or operators to develop a written plan for monitoring the equipment, but does not explicitly require the monitoring. The CAR clarifies that monitoring of the equipment is required according to the written plan that is developed.

The CAR clarifies that compressors designated as operating with an instrument reading less than 500 ppm, as well as pressure relief devices, are subject to a performance standard as opposed to a work practice standard with respect to instrument monitoring. Thus, if a compressor is monitored using Method 21 and an instrument reading of 500 ppm or greater is detected, it is a violation of the standard. If a pressure relief device is monitored 5 days after a pressure release and an instrument reading of 500 ppm or greater is detected, it is also a violation of the standard. These are clarifications, not changes, from the HON.

The CAR maintains the HON provisions with respect to the monitoring instrument specifications and calibration

procedure. However, the CAR includes provisions for adjusting instrument readings for instruments that cannot meet the Method 21 performance criteria. The CAR also allows calibration with gases other than methane or n-hexane where the instrument does not respond to either of these compounds.

Provisions in all three referencing subparts require monitoring only when equipment is in regulated material service, in service of an acceptable surrogate VOC, or in service of any other detectable material. The CAR does not include the "acceptable surrogate VOC" phrase because it is redundant and confusing in relation to "any other detectable material."

As discussed earlier in this section, the HON and the CAR allow owners or operators to monitor valves and connectors less frequently when the percentage of leaking components is low. Monitoring data collected prior to implementation of a referencing subpart can be used to qualify initially for less frequent monitoring, even if the data were obtained with minor departures from the CAR's monitoring procedures and methods. The CAR further clarifies the original HON language by indicating that (1) earlier data may be used only for initial qualification, and (2) this provision includes initially

qualifying for annual monitoring. The original HON language was unclear whether older data could be used all the time, and whether old data could be used to qualify initially for annual monitoring. Both CAR clarifications are consistent with EPA's determination of the original HON intent.

The CAR clarifies language dealing with repair of leaks. Leaks must be repaired within 15 days of detection, unless the leak qualifies for delay of repair. Provisions in all three referencing subparts allow for delay of repair ". . .if the repair is technically infeasible without a process unit shutdown." This language potentially discourages any attempts at repair between the 15th day after detection and the next process unit shutdown, since a successful repair within that period would then disqualify one from the original delay of repair. Some equipment leaks legitimately qualify for delay of repair, yet they can be repaired after the 15-day repair deadline and before the next process unit shutdown. These repairs can be effected by continued repeat attempts over time until the leak is repaired. In order to eliminate the potential disincentive to attempt repair of leaks after the fifteenth day, the CAR revises the wording of this provision to state that delay of

repair is allowed if repair "within 15 days after a leak is detected" is technically infeasible without a process shutdown.

The CAR adds some flexibility for calculation of percent leaking valves by allowing the calculation for either a single process unit or a group of process units. Owners or operators must commit to one of these approaches by their CAR implementation date, and perform all subsequent percent leaking calculations on the same basis. The basis may be changed through revision of the operating permit or other appropriate notification.

The CAR also simplifies the calculation procedure by not incorporating a partial credit for removed valves. Industry representatives indicated that this credit was little used and overly complicated the equation. The simplified equation, along with the reduction in burden associated with the alternative monitoring programs and the extended monitoring periods, outweighs any negative aspects of not including the complex procedures necessary to use the credit for removed valves.

Another complicated procedure from the HON was not incorporated into the CAR. In order to provide a credit for removed and allowed nonrepairable connectors, the HON contains multiple equations for determining the percent

leaking connectors and contains complicated recordkeeping and testing provisions. Based on industry comment that these credits complicated the procedures, added recordkeeping burden, and were seldom used, the EPA decided not to include them in the CAR.

The CAR does not incorporate the valve quality improvement program (QIP) found in the HON. The goals of the QIP and of the CAR's subgrouping procedures are the same--to focus attention and effort on poorly performing valves. Owners and operators are expected to be able to subgroup their valves such that valves with continuing problems will be re-assigned into a single subgroup (which will likely be subject to quarterly or monthly monitoring). The additional focus and financial incentives for improvement inherent in the CAR make the QIP for valves unnecessary.

The pump section has also been improved and clarified. The CAR clarifies that documentation of weekly visual checks need only include a record that the check was conducted; pump-by-pump documentation is not required. The CAR also clarifies what constitutes leak repair when indications of liquid dripping are observed during the visual inspection. "Repaired" in this situation means that the indications of liquid dripping

have been eliminated. In addition, an owner or operator may show that the liquids dripping are not process fluid (for example, the liquids dripping are condensate).

The CAR replaces the term "agitator" with "agitator seal" to more accurately convey the intent of the requirement. The agitator itself is not subject to leaking; rather, the agitator seal is subject to leaking.

The CAR incorporates the HON's alternative provisions for batch processes and modifies these provisions to allow additional flexibility regarding the required use of pressure measurement devices. The HON requires a device with a precision of ±2.5 millimeters of mercury in the range of the test pressure and the capability to measure pressures as high as the relief set pressure of the pressure relief device. Under the CAR, when such a device is not reasonably available, owners and operators may use an alternative pressure measurement device if the duration of the test is extended as specified.

Significant changes from the non-HON equipment leak referencing subparts. This section summarizes the significant differences between the equipment leak provisions of 40 CFR part 61, subpart V and 40 CFR part 60, subpart VV and those of the CAR. Some of the

changes that are also clarifications and improvements from the HON are discussed in the preceding section.

The CAR's equipment leaks provisions do not apply to equipment in vacuum service. While 40 CFR part 61, subpart V and 40 CFR part 60, subpart VV require a record of equipment in vacuum service, the CAR follows the approach in the HON and does not specify this record. Also, the CAR exempts equipment that is intended to be in regulated material service less than 300 hours per calendar year, as the HON does. Although there is an identification record associated with this exemption, having the exemption is a net burden reduction for 40 CFR part 61, subpart V and 40 CFR part 60, subpart VV sources complying with the CAR.

The CAR also incorporates the HON clarification that equipment not containing process fluids is not subject to the equipment leak provisions. When 40 CFR part 61, subpart V and 40 CFR part 60, subpart VV were drafted, rules typically did not explicitly state what did not apply. These non-HON equipment leak referencing subparts are intended to apply only to equipment containing process fluids; the rules do not, however, explicitly exempt equipment that does not contain process fluids. Since the drafting of these rules, the EPA's philosophy

has shifted and this explicit clarification from the HON has been used in the CAR.

Provisions regarding alternative means of emission limitation were consolidated into one set of requirements. The CAR requires public notice in the Federal Register if the Administrator approves an alternative means of emission limitation. This public notice is not specifically required in 40 CFR part 61, subpart V, but public notice is required by section 112 of the Act.

Sources subject to the non-HON equipment leak referencing subparts would benefit from the general identification requirements of the CAR, which allow whatever identification scheme makes the most sense at a given facility. However, the CAR introduces some new component-specific identification provisions for these sources, such as special identifications for pressure relief devices or instrumentation systems. The CAR language provides a net burden decrease associated with equipment identification.

Although 40 CFR part 61, subpart V and 40 CFR part 60, subpart VV include procedures that are considered to comprise first attempt at repair for leaking valves, these subparts do not contain parallel

procedures for first attempt at repair for leaking pumps. HON language is used in the CAR to clarify what is meant by first attempt at repair for pumps.

An additional burden reduction and clarification is achieved by incorporating the HON definition of "repair" with the leak repair requirements. Both 40 CFR part 61, subpart V and 40 CFR part 60, subpart VV require valve monitoring for two successive months before the leaking valve identification can be removed. The CAR follows the HON language and allows the removal of the identification after the valve is "repaired," which by definition includes follow-up monitoring.

The CAR also adopts the HON provisions for records of delay of repair, allowing owners and operators to develop written procedures for delay of repair and to simply cite relevant sections of their written procedures as the record of reason for delay. In addition, the CAR includes the HON's exemption for unsafe-to-repair connectors.

Provisions contained in the CAR for connectors are taken from the HON. These include periodic instrument monitoring with a leak definition of 500 ppm; less frequent monitoring for good performance; special provisions for difficult-to-monitor or unsafe-to-monitor

connectors; and exemptions from monitoring, recordkeeping, and reporting requirements for inaccessible, ceramic, or ceramic-lined connectors.

For sampling connection systems, the CAR contains flexible language from the HON allowing purged process fluid to be collected, stored, and transported to one of several systems or facilities. One option from the HON [transporting the purged process fluid to a National Pollutant Discharge Elimination System (NPDES) Group 1 wastewater stream or to an NPDES-permitted facility] is allowed in the CAR for HON sources only. As explained in more detail in section XI, sources subject to 40 CFR part 61, subpart V cannot be eligible for this option because the option requires an absence in the stream of particular organic HAP listed on table 9 of 40 CFR part 63, subpart G; however, any source subject to 40 CFR part 61, subpart V will contain benzene or vinyl chloride, two of the compounds listed in table 9. This option is not allowed for sources subject to 40 CFR part 60, subpart VV because purged materials for these sources may contain VOC species which are not HAP, and thus, were not evaluated along with the organic HAP species when the option was developed for the HON.

G. Closed-Vent Systems, Control Devices, and Routing to a Fuel Gas System or a Process

Subpart G of the CAR addresses the closed-vent system control devices, and routing vent streams to fuel gas systems or process equipment. Subpart G consolidates requirements from all of the storage vessel, process vent, transfer rack, and equipment leak referencing subparts (including the general provisions and continuous process vent provisions from 40 CFR part 60, subpart DDD).

Subpart D of the CAR does not consolidate the process vent provisions of 40 CFR part 60, subpart DDD with those of 40 CFR part 60, subparts III, NNN, RRR and the HON because these subparts differ in terms of the applicability criteria for control. Subpart DDD of 40 CFR part 60 differs from the NSPS and the HON in that it does not use TRE index value, flow, or concentration to determine if control is required for the vent. Also, subpart DDD does not have provisions included in the NSPS and the HON requiring monitoring for vents that are not required to be controlled. The control requirements for subpart DDD process vents, however, are essentially identical to those in 40 CFR part 60, subparts III, NNN,

RRR, and the HON and were able to be consolidated in subpart G of the CAR.

The EPA has significantly restructured these provisions from all of the referencing subparts. Table 3 summarizes the sections of subpart G of the CAR. After short applicability, definition, and standards sections (§§ 65.140 to 65.142), subpart G is organized as follows: §§ 65.143 to 65.156 addresses the requirements for equipment, operating, performance tests (or compliance determinations for flares) and monitoring for closed-vent systems, for routing to a fuel gas system or process, and for each type of recovery or control device specified in the referencing subparts (for example, flares, incinerators, absorber); §§ 65.157 to 65.158 addresses performance test and flare compliance determination requirements and procedures; and §§ 65.159 to 65.165 addresses data handling, CPMS, recordkeeping, and reporting requirements for closed-vent systems, recovery and control devices, and routing to a fuel gas system or process.

TABLE 3. STRUCTURE OF 40 CFR PART 65, SUBPART G

Section	Content
65.140	Applicability

Section	Content
65.141	Definitions
65.142	Standards (roadmap to subpart G)
65.143	Closed-vent systems requirements
65.144	Routing to fuel gas systems and processes
65.145-65.155	Control and recovery devices requirements
65.156	General monitoring requirements
65.157-65.158	Performance test and flare compliance determination requirements and procedures
65.159-65.163	Data handling and recordkeeping
65.164-65.166	Notifications and reports

The standard section, § 65.142 of subpart G of the CAR, acts as a roadmap to subpart G. All of the CAR subparts reference a specific paragraph of § 65.142. These paragraphs outline the specific sections of subpart G that apply to a given situation.

In addition to the overall restructuring, the individual device sections (§§ 65.145 - 65.155) are organized in the same general manner: sections begin with a discussion of equipment and operating requirements, are followed by paragraphs discussing flare compliance determinations or performance test

requirements, and conclude with paragraphs discussing monitoring requirements. This makes it easier to find specific information on the device of interest.

A number of decisions were made by EPA in the consolidation of these provisions. These decisions are discussed below in subsections that are in the order that they appear in subpart G of the CAR. Decisions made in the consolidation of subpart G provisions on monitoring, recordkeeping, and reporting provisions associated with closed-vent systems, control and recovery devices, and routing to a fuel gas system of a process are discussed in section VI.H.

Closed-vent systems. The language in the HON provides the basis for language in subpart G. The primary change to the HON closed-vent system language is the restructuring to meet the format used elsewhere in the CAR. That is, in this case, to separate the provisions into equipment and operating requirements (including by-pass monitoring), inspection requirements, inspection procedures, and leak repair provisions. Specific clarifications to the HON language are discussed below.

Clarifying improvements were made to the consolidated closed-vent system inspection procedures.

For example, the HON requires that the calibration gas be no more than 2000 ppm higher than the leak definition. This requirement in the HON is given in a generic section, to apply to various leak definitions. Since the leak definition for closed-vent systems is 500 ppmv, the CAR specifies a calibration gas concentration limit of 2500 ppm for multiscale instruments for closed-vent systems. In addition, the HON requires that an instrument response factor, if used, to be based on the mathematical average response factor for the given process fluid. Since the process fluid composition can vary considerably, EPA reduced the burden of this provision in the CAR by specifying the response factor be based on a representative response factor, which could apply to a family of process fluids. This avoids numerous response factor calculations for process fluids that are only marginally different in composition.

The CAR does not adopt a HON requirement to inspect storage vessel closed-vent systems during filling of the vessel. Pressure in a storage vessel closed-vent system, and therefore potential leaks of regulated material, is not a function of filling, since storage vessels are designed to relieve at low pressures. This requirement is not found in any of the other referencing subparts.

The HON transfer operations has a provision that repairs must be made no later than 15 calendar days after the leak is detected or at the beginning of the next transfer loading operation. The EPA decided, as a clarification, to extend this concept to all emission points, that is, that repair can be extended longer than 15 days if the closed-vent system is not in use. The proposed CAR requires repair no later than 15 calendar days or at the beginning of the next introduction of vapors to the system.

Several aspects of the HON that are adopted in the CAR provide clarity and, in some cases, burden reductions, relative to the other referencing subparts. A summary of the significant changes from the other referencing subparts follows.

The CAR clarifies that closed-vent systems must be operating at all times when emissions are vented to them. Although this requirement is explicitly stated in 40 CFR part 60, subparts VV and DDD, and 40 CFR part 61, subpart V it is only implied in the other referencing subparts that it is necessary to have the closed-vent system in operation when emissions are vented to it. The requirement derives from the general provisions requirements in each part to ". . .operate and maintain

any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices. . ." Also, a similar requirement for control devices is stated in many rules. Explicitly stating the requirement improves all the rules by making the compliance requirements clear.

For equipment in a closed-vent system that can divert the stream away from the control device and to the atmosphere, the owner or operator is required to either (1) install, maintain, and operate a flow indicator that takes a reading at least every 15 minutes, or (2) to secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. The HON exempts certain equipment (pressure relief valves needed for safety purposes, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines) from these requirements. The EPA has incorporated this exemption into the CAR as a clarification for the non-HON referencing subparts.

The closed-vent system provisions of 40 CFR part 60, subpart DDD, and 40 CFR part 61, subpart BB require the owner or operator to car-seal open all inline valves in a closed-vent system (valves leading to the control device). The other referencing subparts present this

requirement by specifying either flow indicators or car-sealed closed valves on all lines diverting the stream away from the control device and to the atmosphere. For consistency, the car-sealed closed or flow indicator approach is followed in the CAR.

The CAR requires bypass monitoring. Instead of bypass monitoring for lines that can divert the vapors in a closed-vent system away from the control device to the atmosphere, 40 CFR part 60, subparts III and NNN contain process vent flow monitoring provisions prior to the control device. The CAR does not allow this method of monitoring for bypasses. The EPA decided that the methods used by the HON and many of the other referencing subparts are more relevant. Monitoring the vent flow does not ensure that bypasses are not taking place. Regulated sources currently using flow monitors under 40 CFR part 60, subparts III and NNN would have to switch to bypass monitoring in order to use the CAR. Furthermore, this change will be a significant burden reduction for many sources. Many process vents not subject to the HON but subject to 40 CFR part 60, subparts III and NNN, are routed to control devices subject to the HON through common closed-vent systems which are subject to the HON. These vents can, under the

CAR, perform only the bypass monitoring requirements of the HON instead of also having their vent flow measured under 40 CFR part 60, subparts III and NNN.

The language used in the closed-vent system inspection provisions of the CAR are based on the more recent work practice approach of the HON and 40 CFR part 60, subpart VV for closed-vent system inspections. The requirement to "operate with no detectable emissions" as stated in 40 CFR part 60, subpart Kb and 40 CFR part 61, subpart Y, and the requirement of 40 CFR part 60, subpart Ka to "collect all VOC vapors and gases discharged from the storage vessel" are not included in the CAR. The EPA concluded that the HON work practice inspection language was more specific and easier for enforcement and compliance, while achieving the intent of the referencing subparts.

The CAR also retains the distinction between hardpiping and ductwork made in the HON and 40 CFR part 60, subpart VV closed-vent system inspection provisions. Hardpiping and ductwork have different leak inspection requirements. This distinction does not exist in 40 CFR part 61, subparts V, Y and BB. Also, HON provisions covering situations where it is unsafe or

difficult to inspect the closed-vent system were applied to the CAR.

Fuel gas systems and processes. Fuel gas systems consist of piping and control systems that gather gaseous streams and return them to combustion devices for use as fuel gas. For such systems, the CAR adopted the equipment and operating requirements as well as compliance determination procedures from the HON.

The EPA reasoned that the explicit HON provisions for routing emissions to a process or to a fuel gas system should be allowed in the CAR when the owner or operator chooses or is required to comply with storage vessel, transfer, or equipment leak control requirements. The emission point types covered by the HON are the same as those covered by the referencing subparts. While developing the HON, EPA determined that routing emissions to a fuel gas system or process provides sufficient control, in most cases in excess of 98 percent reduction. None of the non-HON referencing subparts explicitly allowed this option. (See 61 FR 43703, August 26, 1996, for further discussion of this issue.)

Note that the option of routing to a fuel gas system or to a process is not provided for process vents in the CAR, since, based on the CAR's definition of process

vents, these vent streams are not considered to be process vents unless or until they are vented to the atmosphere.

Non-flare control devices for storage vessels and low-throughput transfer racks. The HON was used as the basis for the CAR language for this section. The structure is similar to the other sections of subpart G with an equipment and operating requirements, a design evaluation or performance test requirements, and a monitoring requirement paragraph. Although the language is based on the HON, it is important to note that this section represents a consolidation of HON storage vessel and HON low-throughput transfer rack provisions. Low-throughput transfer racks are racks that transfer less than a total of 11.8 million liters per year of liquid containing regulated materials.

The storage vessel and HON low-throughput transfer rack provisions are very similar. The only differences are: (1) the HON storage vessel provisions require a design evaluation and the HON transfer provisions allow a choice between a design evaluation or performance test; and (2) the low-throughput transfer rack provisions in the HON require the monitoring parameters and ranges to be identified, as does the HON storage vessel provision,

but it also requires specific monitoring devices to be installed depending on the control device being used.

The CAR allows a choice of a design evaluation or performance test for both storage vessels and transfer racks. The EPA reasoned that a performance test could be used in place of a design evaluation since it is more definitive than a design evaluation in many cases. The CAR clarifies the HON transfer monitoring provisions by consolidating the provisions of the HON storage vessels. Also, EPA clarifies in the CAR that when a performance test is conducted the facility can specify the parameters to be monitored and their appropriate ranges. Continuous monitoring is not required for either storage vessels or transfer racks unless this is specifically required in the monitoring plan which identifies the parameters to be monitored and the monitoring range. This is as required in the HON storage vessel provisions and a clarification to the transfer rack provisions.

The storage vessel subparts, 40 CFR part 60, subpart Kb and 40 CFR part 61, subpart Y, do not allow for a performance test instead of a design evaluation, so the CAR provides a flexibility that was previously unavailable in these rules. The performance test/design evaluation options are summarized below:

(1) The owner or operator may choose to do a design evaluation instead of a performance test to set the monitoring parameters. The requirements for determining the monitoring parameters were taken from the HON--the owner or operator chooses the parameters, the ranges, and the monitoring frequency based on site-specific information, manufacturer's specifications, engineering judgment, or other significant information.

(2) The owner or operator may vent to a shared control device that must comply with the performance testing requirements of the CAR. The requirements for this case are taken from the HON. There are minimal records and reports for this case, because the facility is already keeping records and submitting reports for the other emission point that shares the control device. The EPA reasoned that requiring just the performance test instead of the design evaluation would be acceptable, as the performance test provides the information necessary to assure the control device can perform at the level needed to meet the standard.

(3) The owner or operator may choose to do a performance test instead of a design evaluation. This is the new option under the CAR; it is not contained in any of the referencing subparts except for the HON transfer

rack provisions. This option applies the provisions for determining parameter ranges as described in the option for storage vessels and low-throughput transfer racks conducting a design evaluation on a non-shared control device (option 1).

Subpart BB of 40 CFR part 61 does not provide for a design evaluation instead of performance test for low-throughput transfer racks. The EPA reasoned that performance tests should not be required for subpart BB low-throughput transfer racks for the same reason that they are not required for HON low-throughput transfer racks. At this low level of throughput it is difficult to organize a performance test because of the infrequent loading of tank trucks or railcars. (See Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry -- Background Information for Final Standards. Volume 2A: Comments on Process Vents, Storage Vessels, Transfer Operations, and Equipment Leaks. Final IS. EPA-453/R-94-003a. pp 4-13 - 4-14.) Also, EPA recognizes that many of the subpart BB transfer racks at a SOCMI facility will be subject to the HON. Therefore, this provision is already available to these subpart BB transfer racks.

Subpart Ka of 40 CFR part 60 requires submission of a monitoring plan for control devices (including flares), but it contains no requirements to monitor per the plan or to report. The CAR storage vessel non-flare control device provisions are more prescriptive than the subpart Ka provisions, but EPA believes that there are very few subpart Ka storage vessels using closed-vent systems and control devices for compliance. In the spirit of consolidation, and noting that the CAR is a compliance alternative, the design evaluation and compliance determination provisions are based on the HON language.

Provisions in the HON, 40 CFR part 60, subpart Kb, and 40 CFR part 61, subpart Y, all provide the equivalent of a design evaluation in the case where storage vessel vapors are controlled by a non-flare control device. The CAR language, as based on the HON, has several details required in the design evaluation that are not required in subparts Kb and Y. Specifically these details pertain to information that must be included in the design evaluation given the type of device. For instance, the CAR specifies for enclosed combustors that, if applicable, the design evaluation must include the autoignition temperature of the stream being combusted,

the flow rate, the combustion temperature and the residence time. The CAR also specifies the information required for carbon adsorbers and condensers. Subparts Kb and Y do not contain these details. The EPA is requiring these details in the CAR because these are the pieces of information that would be contained in a design evaluation whether it be for a HON or subpart Kb or Y storage vessel. By specifying these as requirements, the CAR is clearer and will avoid miscommunications when design evaluations are prepared.

Subpart Kb of 40 CFR part 60 and 40 CFR part 61, subpart Y require a minimum residence time of 0.75 seconds and a minimum temperature of 816° C for enclosed combustion devices. Enclosed combustion devices with temperature and residence time greater than or equal to these minimums need only indicate in the documentation that this condition exists and no other documentation is required. The CAR has the same provision but uses a minimum temperature of 760° C and a minimum residence time of 0.5 seconds, as does the HON. The EPA chose the HON values to incorporate in the CAR because it was determined under the HON that these values are appropriate to obtain the necessary emissions reduction. Also, by using the HON values, the enclosed combustors

meeting the minimums in subparts Kb and Y would also meet the minimums under the HON.

The requirement in 40 CFR part 60, subpart Kb and part 61, subpart Y to include in the design evaluation report the manufacturer's design specifications for the control device was not incorporated into the CAR because most controls are not purchased as a package; other requirements in the CAR will provide sufficient reports of the control device specifications.

Non-flare control devices used to control equipment leaks. A section of subpart G of the CAR contains the equipment, operating, and monitoring requirements for non-flare control devices used to control equipment leak emissions. Very similar language is used in all three equipment leaks referencing subparts. This section clarifies that a performance test is not required for control devices used only to control emissions from equipment leaks.

The requirement to operate the control device at all times when emissions are vented to them is explicitly contained only in 40 CFR part 60, subpart VV, but the requirement can be inferred for the other subparts as outlined above in the general closed-vent system discussion.

Flares. Equipment and operating provisions for flares are consolidated into this section of the CAR from many referencing subparts, including the general provisions from 40 CFR parts 60 and 63. The flare equipment and operating requirements, flare compliance determination procedures, and monitoring provisions are consolidated, as discussed below.

The EPA identified that the HON requirement for pilot flame monitoring could be read to call for monitoring of each pilot flame, which was not the intent of the HON. The wording was clarified to require a device capable of "detecting that at least one pilot flame is present." The EPA also decided that to increase the flexibility of the rule, flare flame monitoring would be allowed as it is allowed in 40 CFR part 60, subpart DDD. Any outage of the flame or pilot flame would be reportable under the CAR.

The HON language is used in the CAR for clarification on performing the Method 22 visible emission tests for flare compliance determinations at transfer operations with loading cycles of less than 2 hours. The observation under Method 22 is required to extend for 2 hours. Under the CAR, the observation can be conducted for the complete loading cycle for loading

cycles less than 2 hours. Subpart BB of 40 CFR part 61 does not have this provision.

The heating value formula for flares from 40 CFR part 60 general provisions is used throughout the CAR because this equation is believed to be the most prevalent in use. Using the part 60 general provisions equation consolidates and clarifies the equations, which were presented in the various referencing subparts with different terms, different formats, and on different bases (wet or dry). The various equations, however, all yield the same results if correctly applied, but the different representations caused confusion. The heating value equation for part 60 process vents, for example, was changed from a dry to a wet basis to be identical to the part 60 general provisions equation. Note that a "D" variable instead of a "C" variable for concentration is used in this equation to distinguish net heating value concentration from another concentration variable used in earlier equations in the CAR.

The CAR includes a requirement that is essentially the same as provisions in 40 CFR part 60, subpart DDD requiring flare flame or pilot monitors to be operated during any flare compliance determination. This is a common sense provision that is not explicitly stated

elsewhere, and it is included in the CAR for consistency and clarity.

Incinerators. For the most part, the HON language was used as the basis for the incinerator provisions in the CAR. Incinerator operating requirements from 40 CFR part 60, subparts VV and DDD were used in the CAR to explicitly require that incinerators shall be operated at all times when emissions are vented to them. The actual part 60 requirements specify that the incinerators shall be operated at all times when emissions may be vented to them. This was clarified in the CAR to read "are vented to them" because the part 60 requirement could be interpreted to require continuous operation of the device even when not receiving emissions. In addition, while this requirement is not explicitly stated in the HON for incinerators, it is an implied general control device requirement that the control device must be operating. This provision has been added to all the control device sections but is only mentioned here.

In addition, a provision from the NSPS process vent rules (40 CFR part 60, subparts DDD, III, NNN, and RRR) was included in the incinerator section. This provision specifies what should be done if an owner or operator decides to replace an existing control device with

another control device. The HON does not specify what should be done in this case, and the NSPS language specifies that the notice be made 90 days before the change. The NSPS language was used in the CAR, but modified to state that the notification of the change must only be made prior to the change. This notification can be included in an amendment to a title V permit or, if title V is not applicable, in a separate notice that can be part of a periodic report. The addition of this provision adds clarity. This provision was added to every control device section but is only mentioned here.

To clarify when initial performance tests are required, the CAR added language regarding incinerator performance test requirements. The HON language exempting an owner or operator from the requirement to conduct a performance test if the incinerator burns hazardous waste and meets the requirements of RCRA was included in the CAR for all sources subject to performance test requirements. The EPA has determined that these incinerators are adequately tested under the RCRA program. (61 FR 43708, August 26, 1996) This exemption also applies to design evaluations and performance tests for storage vessels and low-throughput transfer racks and is included in the section of

subpart G regarding non-flare control devices used on storage vessels and low-throughput transfer racks.

Boilers and process heaters. Although the HON language for boiler and process heater requirements was used for the basis of the requirements in the CAR, 40 CFR part 60, subparts DDD, III, NNN and 40 CFR part 61, subpart BB contain essentially the same requirements for boilers (subpart RRR of 40 CFR part 60 contains requirements identical to the HON.) One exception is that some of the referencing subparts do not contain the exemptions from performance tests and from monitoring for vents introduced as primary fuel or for boilers or process heaters larger than 44 MW. An exemption from performance testing and monitoring when the vent stream is mixed with the primary fuel, or for boilers or process heaters larger than 44 MW, was taken from the HON and included in the CAR. The basis for this decision by EPA to allow these exemptions is contained in Reactor Processes in the Synthetic Organic Chemical Manufacturing Industry -- Background Information for Promulgated Standards (EPA-450/3-90-016b). This document explains that a vent stream introduced with the primary fuel would be expected to have an emissions reduction greater than 98 percent because temperatures are higher when the vent

stream is passed through the flame front. The EPA has also outlined in this document that large boilers and process heaters are expected to achieve an emission reduction greater than 98 percent. These exemptions also apply to design evaluations and performance tests for storage vessels and low-throughput transfer racks and is included in the section of subpart G regarding non-flare control devices used on storage vessels and low-throughput transfer racks.

The requirement in 40 CFR part 61, subpart BB and in 40 CFR part 60, subparts DDD, III, and NNN for records to be kept of the periods of boiler or process heater operation is not included in the CAR. The record of boiler or process heater periods of operation is not necessary as it is a safety hazard to introduce gas into an idle combustion device. Therefore, vent streams are not expected to be vented to the boiler or process heater unless the device is operating, so a record of when the device is or is not operating is not needed.

Absorbers, condensers, and carbon adsorbers used as control or final recovery devices. Subpart G of the CAR covers absorbers, condensers, and carbon adsorbers in four sections of the subpart. Section 65.150 covers absorbers as control devices, § 65.151 covers condensers

as control devices, and § 65.152 covers carbon adsorbers as control devices, and § 65.153 covers all three devices when they are used as final recovery devices. The recovery device section (§ 65.153) is specifically for devices that are used as final recovery devices on Group 2A process vents. When these devices are used as control devices (i.e., a recapture device on a Group 1 process vent, or a recovery or recapture device on a transfer rack) §§ 65.150 through 65.152 apply, as applicable.

Very few changes were made to the HON language for these devices, except for the restructuring of provisions (discussed in sections IV.B and VI.A of this preamble), the addition of the NSPS process vent provision on changing control devices and the requirement to be operating at all times when emissions are vented to them (both discussed in this section under incinerators). Changes to the other referencing subparts are discussed below.

Subpart BB of 40 CFR part 61 for benzene transfer operations does not contain provisions for condensers and absorbers. It does allow carbon adsorbers equipped with organic monitoring devices to be used. In the CAR, the

absorber and condenser provisions are available for all referencing subparts, including subpart BB.

In addition, under 40 CFR part 61, subpart BB for benzene transfer operations, only organic monitors could be used for determining compliance with the standard when using a carbon adsorber. Under 40 CFR 60, subpart DDD, only organic monitors could be used for determining compliance with the standard when using an absorber, condenser, or carbon adsorber for control of a continuous process vent. In the CAR, as in the HON, either an organic monitoring device or a regenerative stream flow monitoring device is allowed for carbon adsorbers; an organic monitoring device or a condenser exit temperature monitoring device is allowed for condensers; and an organic monitoring device, or a scrubbing liquid temperature monitoring device and a specific gravity monitoring device is allowed for absorbers. Halogen scrubbers and other halogen reduction devices. Halogen reduction device requirements have been consolidated into one section rather than listed in the individual control device sections. These HON requirements have been included in the CAR for all process vents and transfer operations. The other referencing subparts did not have specific halogen vent stream requirements, so the CAR is

potentially introducing some additional requirements for halogenated vent streams subject to the non-HON referencing subparts, if the owner or operator chooses to comply with the CAR.

Other control devices. This section (§ 65.155) of subpart G outlines the requirements for control devices other than those specified in §§ 65.147 through 65.154. The CAR differs from 40 CFR part 60, subparts DDD, III, NNN, and RRR in that more detail is given in the CAR on the information that must be provided to the Administrator in order to obtain approval for other devices. Under the NSPS, the Administrator specifies the appropriate monitoring procedures for the device. Under the CAR, a plan is submitted that includes the proposed monitoring, reporting, and recordkeeping procedures. By providing more details on the information to be submitted and by allowing the facility to propose monitoring, EPA believes this will clarify the information needed and aid in communication during the process of reviewing these plans.

Subpart DDD of 40 CFR part 60 and 40 CFR part 61, subpart BB also contain a general duty requirement that specifies that the facility must "provide the Administrator with information describing the operation

of the control device. . .that would indicate proper operation and maintenance. . ." for non-listed control devices. The EPA did not include the general duty requirement in the CAR in favor of the more specific monitoring requirements for non-listed control devices from 40 CFR part 63, general provisions, and the HON.

Under the CAR, approval authority for the monitoring recordkeeping, and reporting requirements for other control devices is delegated to the states as it is under the HON and part 61. Under the NSPS process vent referencing subparts, this authority is not delegated. The decision to delegate authority is consistent with state authority under title V. The EPA considered that authority should be delegated for this approval across all the rules in order to consolidate the provisions. Also, many of the facilities subject to the NSPS process vent referencing subparts are also subject to the HON, therefore the authority would already be delegated to the States in many instances.

H. Monitoring, Recordkeeping, and Reporting

This section describes the CAR provisions from subpart G regarding performance tests, monitoring, recordkeeping, and reporting requirements. These provisions are included in subpart G, rather than in the

general provisions, because they are specific requirements for closed-vent systems, control and recovery devices, and routing to a fuel gas system or process.

Many significant differences exist between the CAR provisions on monitoring, recordkeeping and reporting (which generally follow the HON provisions), and these same provisions in the non-HON referencing subparts. This section provides a brief description of the differences. For a more complete discussion of the HON recordkeeping program see the HON proposal preamble (57 FR 62608, December 31,1992), the promulgation preamble (59 FR 19407, April 22, 1994), and the Background document at promulgation (Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry -- Background Information for Final Standards, Volume 2E: Comments on Recordkeeping, Reporting, Compliance and Test Methods, EPA-453/R-94-003e).

Both the CAR and the part 60 and 61 subparts require monitoring of the same control device operating parameters. However, the CAR requires a site to justify and set site-specific operating parameter ranges for control and recovery devices. The site can set the

operating parameter ranges to be the same as the NSPS established ranges. The control or recovery device operating parameters are monitored and if the monitoring results, on a daily average basis, fall outside the parameter range, then there is an excursion and it must be reported. The CAR allows one excused excursion before the excursion is considered a violation. The HON allows six excused excursions in the first semiannual reporting period (this would be in the first year of being subject to the HON), five excused excursion in the second semiannual reporting period, and so on, until one excused excursion is allowed in the sixth and all subsequent semiannual reporting periods.

The CAR provisions are different from the non-HON referencing subparts where specific monitoring ranges are given in the rules depending on the control or recovery device being used. In 40 CFR part 60 and 61, 3-hour averages are required of the monitored parameters. These 3-hour averages are compared to the monitoring ranges specified in the rules. If a 3-hour average is outside the range in the rule it must be reported, and the out-of-range values may trigger the Administrator to require another performance test. If the performance test indicates that the control or recovery device is not

performing at the required level, the facility would be in violation.

The CAR allows owners or operators to use the ranges from the non-HON referencing subparts as the operating parameter ranges for the sources accustomed to those ranges; or, a source can justify a site-specific range. However, any excursions after the one excused excursion would be considered a violation.

One change made to these HON provisions in the CAR pertains to the records of continuous monitors. In the HON, the owner or operator has the option of maintaining a record of (1) each measured value, or (2) block average value for intervals up to 15-minute averages. The CAR also contains these options. In addition, a third option is given that allows retention of hourly average data and the most recent three valid hours of continuous records. The EPA decided to allow this option as a burden reduction, because many computer systems currently in use in the SOCMI industry only archive hourly data and "over-write" the raw data every few hours, because of the massive amount of storage that would be required to maintain records of data on a more frequent basis. Typical SOCMI process computer systems handle thousands of data points, so that even hourly records involve tens

of thousands of data records each day. The CAR alternative has been provided to allow use of these existing systems without requiring installation of new computer systems or parallel paper (strip chart) systems. The EPA felt it was necessary to require the most recent three valid hours of records so that an inspector would have the necessary data to determine whether averages were correctly calculated. The EPA reasoned that 3 hours of data are sufficient for checking on potential programming error. By requiring the most recent 3 hours, the EPA ensures a randomness to the 3 hours of data available to check. The CAR specifies valid hours because an invalid hour of monitoring may not contain the necessary data for the average verification. By providing for adequate data to demonstrate that the hourly average is correctly calculated, no reduction in compliance assurance is anticipated and very large initial and ongoing costs for new recordkeeping systems are avoided for many SOCMI facilities.

The following paragraphs describe additional burden reductions and clarification changes made in the monitoring, recordkeeping, and reporting sections of subpart G.

General monitoring requirements. The CAR specifies which monitoring data must be kept and used for compliance when a primary CPMS and a backup are being used. This clarification is not explicit in parts 60 or 61.

The CAR adopts the requirements from 40 CFR parts 61 and 63 general provisions for the immediate repair or replacement of CPMS parts to correct routine malfunctions. These requirements are not in the general provisions of 40 CFR part 60. This requirement spells out good practices as required under 40 CFR 60.11(d) and 60.13(e) and (f), 40 CFR part 60, subpart A.

In addition to the provisions to request alternative monitoring and recordkeeping procedures allowed under all referencing subparts, the CAR, as does the HON, specifically allows nonautomated CPMS in certain situations. Although nonautomated CPMS are allowed, the provisions do require data to be collected, no less frequently than hourly. Therefore, EPA believes that nonautomated CPMS would be a real option only for facilities where the cost of automation would not be justifiable. A small batch operation is an example where the cost may not be justifiable.

Performance tests and flare compliance determination requirements. The CAR allows 180 days to complete required performance tests, and 60 days to submit the report after the performance test. The general provisions to part 60 allow up to 180 days and the General Provisions to part 61 allow 90 days for conducting the performance test and submitting the report. The General Provisions to part 63 allow 180 days to conduct the performance test and 60 days to submit the report, while the HON specifies 150 days to conduct the test. The EPA adopted the time frame from the part 63 general provisions because it provides the greatest amount of time to conduct the performance test and prepare the report; this more expansive time frame is appropriate for the CAR, given the potentially large number of performance tests and reports that would need to be completed. The shorter length of time from part 61 would not be appropriate for the CAR because the CAR covers several emission point types, and the shorter time frame could make the organizing of the performance tests and the preparing of reports more difficult.

The referencing subparts do not clearly indicate what activities must be performed during a performance test for a flare. The CAR does not use the term

"performance test" for flares; for the purposes of distinction and clarity, the CAR refers to "flare compliance determinations." Some HON provisions for performance tests should be included in the CAR's flare compliance determination, but many should not. The provisions that do apply are adopted from the performance test language in the HON, but are modified to apply to flares. Examples of the provisions that apply to flare compliance determinations are the provision that the Administrator may require a flare compliance determination at any time and the provision on flare compliance determination waivers. The EPA considers this a clarification.

The CAR excludes a provision from both 40 CFR part 61, subpart BB and the HON that requires a closed-vent system routing emissions from a transfer rack to a control device to be inspected prior to a performance test being conducted. The inspection is a leak detection inspection using Method 21. The EPA did not include this provision in the CAR because the closed-vent system is already under the requirement to be inspected initially and annually. This initial and periodic inspection is sufficient to ensure that the closed-vent system does not leak during the performance

test. Also, closed-vent systems on other types of emission points are not required to be inspected prior to a performance test.

Sources are not required to conduct a performance test to comply with the CAR if a performance test has been conducted previously using the same test method required by the CAR and under the same operating conditions that currently exist. This exemption is not in any other referencing subparts other than the HON.

Additionally, the CAR allows performance tests and compliance determinations to be waived through written request to the Administrator if the Administrator determines that (1) the source is being operated in continuous compliance, (2) the source is operating under a compliance extension under 40 CFR part 63, or (3) the source is operating under a compliance waiver under 40 CFR part 61.

Performance test procedures. The CAR specifies that each performance test will consist of three separate runs using the applicable method; each run must be at least an hour in duration; and compliance will be determined using the arithmetic mean of the results of the three runs. This language is taken from the general provisions for 40 CFR part 60. The HON has similar language, but

40 CFR part 61 has no equivalent. Thus the CAR clarifies the requirements for part 61 sources.

The CAR requires that performance tests be conducted during "maximum representative operating conditions for the process." It clarifies this requirement by specifying that, during the performance test, the control device may be operated at maximum or minimum representative operating conditions for monitored control device parameters, whichever results in lower emission reduction. The general provisions of 40 CFR parts 60 and 63 also require performance tests at maximum capacity and at representative operating conditions of the process. Subparts III, NNN, and RRR of 40 CFR part 60 require performance tests to be conducted at ". . .full operating conditions and flow rates. . ." The general provisions of 40 CFR part 61 require the performance test to be run ". . .under such conditions as the Administrator shall specify. . ." None of the non-HON referencing subparts, nor any of the general provisions, contain the additional clarifying provisions that the control device may be operated under maximum or minimum representative operating conditions, whichever results in lower emission reduction. The CAR provisions represent the intent of

all of the referencing subparts and add some additional clarity.

For transfer racks, the CAR provides details on how a performance test must be conducted for control devices capable of continuous vapor processing and for intermittent vapor processing systems. Subpart BB of 40 CFR part 61 does not specify these details for transfer racks and requires performance tests to be conducted over a complete loading cycle. The explicit provisions of the CAR are useful for transfer racks because loading a tank truck or railcar can take much longer than an hour. For long loading cycles it makes sense to base the test run on how the control device works instead of on the loading cycle.

The CAR clarifies the performance test requirements for a boiler or process heater with a design input capacity less than 44 MW that is used as a control device. The CAR requires the inlet sampling site to be located so that it measures the pollutant concentration in all vent streams and primary and secondary fuels. Therefore, the percent reduction is determined for all vent streams and primary or secondary fuels. This clarification is not in 40 CFR part 60, subpart DDD, III, or NNN.

Subpart BB of 40 CFR part 61 allows the use of Method 25B to determine concentration for calculating the percent reduction efficiency. The CAR does not allow this method because Method 25B can only be used when a primary constituent in the vent stream is assumed. In a consolidated rule for SOCMI, an industry that varies significantly on vent stream composition, a method that is not flexible can not be specified. Method 25B can always be requested as an alternative method, on a case-by-case basis.

For combustion devices that do not use supplemental combustion air, the CAR does not contain the provision in 40 CFR part 61, subpart DDD which specifies that the concentration shall not be corrected to 3 percent oxygen when calculating the percent reduction or outlet concentration. Rather, the CAR and all of the other referencing subparts require the concentration to be corrected to 3 percent oxygen for all combustion devices. The EPA requests comment on what effect this may have on subpart DDD sources.

Performance test records. The CAR includes the requirement for records to be kept of the location where a vent stream is introduced into a boiler or process heater. However, the CAR does not include the

requirement contained in 40 CFR part 60, subpart DDD to also keep these records for incinerators. Subpart DDD is the only referencing subpart that has this requirement. Incinerators are required to have performance tests and continuous monitoring conducted. Conversely, boilers and process heaters that have their vent stream introduced with the primary fuel (in the flame zone) are not required to have performance tests or continuous monitoring conducted. Therefore, it is not necessary to locate where the vent stream is introduced in an incinerator for a determination of compliance, because performance tests and continuous monitoring are required. The EPA considers this a burden reduction.

The CAR requires records of the percent reduction or pollutant concentration to be determined at the outlet of the combustion device, on a dry basis corrected to 3 percent oxygen. While 40 CFR part 61, subpart BB does not explicitly require that the percent reduction be recorded for boilers less than 44 MW design input capacity, it is generally understood that these records are required. The CAR therefore clarifies the intent of subpart BB.

Non-flare control and recovery device monitoring records. The CAR reduces the requirements for CPMS calibration records by requiring only those records that are necessary to determine the accuracy of the readings. The CAR requires retention of only the "as found" and "as left" readings whenever an adjustment is made that will effect the CPMS reading, and a "no adjustment" statement otherwise. Compared to referencing subpart language requiring retention of "all" calibration records, the CAR language significantly reduces the number of potential records that must be retained and adds clarity to what is needed.

Under the CAR, the option to use a data compression system for control and recovery device data handling is allowed. Owners or operators may request approval of an automated data compression recording system that does not record values at a set frequency, but records values that meet set criteria for variation from previously recorded values. Under the 40 CFR parts 60 and 61 referencing subparts, this data compression option was not previously offered. Although EPA does not generally recommend expanding the application of this data compression option until experience is gained with the impact of such record-reduction systems on compliance determinations and

enforcement, this provision is extended in the CAR to 40 CFR parts 60 and 61 sources to provide HON sources this flexibility, which was previously provided to them, and to facilitate consolidation of the rules.

Other records. Section 65.163 contains requirements for "Other Records." Under the CAR, closed-vent systems that contain bypass lines keep only hourly records of flow indicator operation and diversion detection. Subpart RRR of 40 CFR part 60 requires "continuous records." The EPA determined that continuous (i.e., 15-minute records) records are not necessary to ensure compliance in this case, but rather continuous monitoring with a record made once per hour indicating whether there was flow (and therefore, bypass) at any monitored time within the hour. Similarly, 40 CFR part 60, subpart DDD, RRR, and NNN require continuous records of pilot flame monitoring results, while the CAR requires hourly records like the HON and the 40 CFR parts 60 and 63 general provisions flare requirements.

The CAR does not include the provision from 40 CFR part 60, subparts DDD and RRR and 40 CFR part 61, subpart BB, and the HON transfer provisions that requires a description to be maintained of the vent stream. The description must contain a schematic recording of all

valves and vent pipes that could vent the stream to the atmosphere. The EPA decided that this record would not be required in the CAR because of the burden associated with keeping a description with an up-to-date schematic. These types of descriptions are difficult to keep up-to-date because of the frequency with which the routing systems change. Also, the facility can explain the system at an inspector's request with the aid of other drawings, equipment leak records, and visually. An inspector could also request this description to be provided at the time of the inspection.

The CAR incorporates language from the HON which recognizes unsafe or difficult-to-inspect equipment in a closed-vent system which allows less frequent monitoring of such equipment. This allowance is not in 40 CFR part 61, subpart V. The CAR therefore provides some flexibility in dealing with this type of equipment.

For car seals, the CAR requires monthly visual inspection with records that indicate when a car-seal is broken. The 40 CFR part 60, subpart RRR requirement to record the serial numbers of car-seals and to maintain this record when car-seals are replaced is not in the CAR. Thus, the necessary record is whether a car-seal is broken and not exactly which car-seals are in place. Not

having to record the serial numbers of all car-seals provides a burden reduction to subpart RRR sources.

When equipment leaks are detected in a closed-vent system, 40 CFR part 61, subpart V and 40 CFR part 60, subpart VV require records of information such as repair method, the signature of owner or operator, and expected date of successful repair. These requirements are not included in the CAR. In the spirit of consolidation, EPA considers that the records specified in § 65.163(a)(3) adequately document the necessary information for leaking equipment. The required records are: the instrument and the equipment identification number; the operator name, initials, or identification number; the date the leak was detected, the date of the first attempt at repair, the date of successful repair of the leak; maximum instrument reading measured after the leak is successfully repaired or determined to be nonrepairable; the reason for a delay of repair, if there is a delay; and copies of the periodic reports if records are not maintained on a computerized database.

The CAR includes requirements for records to be maintained of locations where a vent stream is introduced into the boiler or process heater, and of instances when this location is changed. This requirement is also

included in the referencing subparts. However, as a burden reduction, the CAR does not contain the requirement in 40 CFR parts 60 and 61 to report this information. This information is helpful to the implementing agency if a change is made and the vent stream no longer will be introduced with the primary fuel; in these cases, a performance test may be necessary. If so, a notification and report of the performance test are required. Therefore, these cases will be reported. In the other situations, these records can be reviewed, as needed, at the facility.

The CAR provides additional flexibility regarding the notification to the Administrator that a performance test is being conducted. Although this flexibility is not currently provided in the referencing subparts, it is consistent with revisions proposed in 61 FR 47840, September 11, 1996 (Recordkeeping and Reporting Burden Reduction). The CAR specifies what should be done if there is a delay in conducting the scheduled performance test. The CAR requires the owner or operator to provide at least 7 days notice prior to the rescheduled date of the performance test, or to arrange a rescheduled date by mutual agreement with the Administrator. The EPA

recognizes that unforseen situations happen and that provisions for rescheduling are useful.

The CAR allows a request to be submitted at any time for the use of alternative test methods. The general provisions of 40 CFR part 61 includes time constraints on when an alternative test method may be requested (i.e., 30 days after the effective date or, for new sources, not later than with the notification of anticipated startup). Although all general provisions allow an alternative test method to be requested, the other general provisions do not specify a time frame within which the request must be submitted. The EPA considers it a clarification to not specify a time frame within which the request must be submitted, because an alternative test method may be requested for performance tests other than at startup. It is not necessary to have the test method approved 30 days after an effective date or by the notification of anticipated startup as long as it is approved in time to conduct the performance test on schedule.

VII. Delegation of the CAR to State Authorities

Many States have obtained delegation to implement and enforce the CAR’s referencing subparts. These States' authority to implement and enforce the underlying NSPS or NESHAP rests on the State code, and the

delegation of authority by EPA to the State in turn rests on the State's ability to implement and enforce those Federal requirements.

By today's action, EPA is proposing to consolidate and somewhat revise certain provisions contained in parts 60, 61, and 63, for affected SOCMI sources, such that regulated sources would be allowed to comply with those newly revised provisions in the CAR. These regulatory revisions could result in the need for subsequent action at the State level to revise the State code and to submit an updated delegation request to EPA, which could then necessitate additional Federal administrative procedures, before the source could take advantage of the CAR and before the State could enforce it. State rulemaking and EPA action on delegation requests are time consuming, often taking several years. In the interim, the source may be unable to avail itself of the CAR benefits, because the CAR could apply at the Federal level while the NSPS and NESHAP continue to apply through the State's code until the State's code can be amended.

The EPA does not wish such a situation to impede adoption of the CAR by a source. Indeed, EPA encourages implementation of the CAR at the earliest possible date following promulgation of the final rule. A streamlined

approach to implement the CAR under delegated State authorities is thus an important ingredient to the success of the rule consolidation effort.

In order to facilitate and expedite delegation and implementation of the CAR, EPA is taking two steps. First, EPA is proposing to recognize the CAR as an alternative compliance approach to the individual subparts being consolidated. This step, as discussed below, may allow sources in some States to begin to use the CAR immediately after promulgation while still remaining in compliance with the existing State code of regulations upon which delegation is based. The EPA believes this will be a useful approach for States that have the ability to recognize approved alternatives under the existing State regulations on which delegation rests. Second, to minimize administrative delays, EPA is proposing to waive the need for formal delegation of the CAR where the State is already delegated authority to implement the underlying NSPS or NESHAP subparts. Both of these proposed actions are discussed in more detail below.

A. Approval of the CAR as an Alternative Compliance Approach

The NSPS and NESHAP being consolidated in today's proposal, and the statutory authorities from which those rules stem, provide for the approval of alternative means of emission limitations and for appropriate alternative testing or monitoring methods as approved by the Administrator. To facilitate and expedite implementation, EPA is proposing to approve the CAR as a comprehensive alternative set of compliance requirements to the NSPS and NESHAP which it consolidates, specifically 40 CFR part 60 subparts A, Ka, Kb, VV, DDD, III, NNN and RRR; part 61 subparts A, V, Y, and BB; and part 63 subparts A, F, G, and H. This pre-approved alternative would be available for all sources to which the CAR applies.

The intent of this approval is to allow States and sources immediate use of the CAR, by providing a mechanism through which States can implement and enforce the CAR prior to undertaking additional State rulemaking. By designating the CAR as an approved alternative compliance approach under the existing NSPS and NESHAP, EPA seeks to provide a doorway within the existing State code and delegated authorities through which the CAR can

be accessed, utilized, and enforced. This approach may eliminate or minimize the need for State rule revisions and delegation updates.

The Administrator is proposing approval of the CAR as an alternative means of compliance with the individual subparts listed above.

The CAR streamlines and revises much of the existing monitoring, record keeping, and reporting procedures of the underlying NSPS and NESHAP standards, without changing the basic control requirements or monitoring methods. Today's proposal is intended to simplify implementation of the standards, to reduce EPA, state, and industry burden in complying with the rules, and to facilitate compliance monitoring, while having no adverse effect on the accuracy, quality, and timeliness of the compliance monitoring data. EPA is proposing that all of the provisions of the CAR serve in whole as an alternative compliance approach for the subparts which it consolidates. To simplify implementation, the CAR can be used directly as an alternative compliance approach, without prior application or request to EPA. The CAR simply requires notification that the alternative approach would be implemented.

The EPA expects that comprehensive approval of the CAR as an alternative compliance approach for the existing NSPS and NESHAP which it consolidates will facilitate and expedite implementation by states and local agencies. EPA is today proposing to revise the underlying NSPS and NESHAP regulations such that the CAR would be recognized as an alternative approach to the existing NSPS and NESHAP provisions for sources opting into the CAR. However, EPA is aware that the unrevised NSPS and NESHAP regulations will, at least for an interim, remain the enforceable provisions in many states, absent state rulemaking to incorporate the CAR. The NSPS and NESHAP as they are currently adopted by the state also remain federally enforceable in those states where they form the basis of delegation by EPA to the state. Today's proposed action to approve the CAR as an alternative compliance approach clarifies EPA's intent that compliance with the CAR should serve to fulfill a source's obligations to comply with applicable NSPS and NESHAP consolidated therein, even in cases where the unrevised NSPS and NESHAP still reside in the state or local code. States may rely on this approval under the existing NSPS and NESHAP to allow sources expedited use of the CAR, and may enforce the CAR as an approved

alternative compliance approach for the existing NSPS and NESHAP in accordance with the current delegation of authority to the state.

The EPA is providing notice and opportunity for comment on this proposed action to approve the CAR as an alternative compliance approach to 40 CFR part 60 subparts A, Ka, Kb, VV, DDD, III, NNN and RRR, part 61 subparts A, V, Y, and BB, and part 63 subparts A, F, G, and H. Comments are requested with regard to both the validity of this approval and to the usefulness of this mechanism for expediting implementation of the CAR.

B. Policy on Delegation of the CAR

Today's proposed rule was developed based on consolidating the existing requirements of Parts 60, 61, and 63 that apply to SOCMI, without changing the applicability or reducing the stringency of the existing regulations. For this reason, EPA believes that, where a State has been delegated authority to administer all of the applicable rules under Parts 60, 61, and 63, no further delegation of authority is necessary in order for such State to administer the CAR. The EPA therefore proposes to allow a State to administer the CAR without further action by EPA if such State has been delegated

the authority to administer each of the applicable referencing subparts.

However, States that lack delegated authority to administer any of the referencing subparts that apply at a source that seeks to implement the CAR must obtain such delegation prior to allowing that source to comply with the CAR.

The EPA requests comment on this proposed delegation policy.

VIII. Incorporating CAR Requirements into the Title V Permit

Title V of the Act and EPA's operating permits regulations at 40 CFR part 70 require all "applicable requirements" (standards or requirements under the Act, as defined at 40 CFR part 70.2) to be included in the operating permit for any source that is required to have an operating permit. Since a permit can contain only the applicable requirements in effect at the time it was issued, or last revised, any newly-promulgated requirements (such as those in the CAR) would not be in the permit until the permit is revised to include them. Revising the permit is also necessary if a source adopts substitute requirements under the CAR, since without a permit revision, the source would be in non-compliance

with the provisions of its operating permit. Consequently, once a source adopts the CAR, to the extent that the existing permit terms will be replaced or modified by provisions of the CAR, the permit must be revised to delete those permit terms and add the applicable CAR provisions. This section discusses the processes by which permits would be revised to incorporate provisions of the CAR.

Under 40 CFR part 70.7, operating permits may be revised through one of three mechanisms: administrative amendments, minor permit modifications, or significant permit modifications. The administrative amendment process is for: (1) changes that are trivial or administrative, such as typographical errors, or change of ownership; (2) changes that provide more frequent monitoring or reporting; (3) incorporating terms of preconstruction permits that meet the compliance requirements of section 70.6 and that were issued under a process that has been "enhanced" to provide EPA and public review; or (4) other changes similar to these that have been approved by EPA in a State part 70 program. Any change resulting from CAR requirements will add the CAR as an applicable requirement to the source’s permit, and therefore, is not likely to be a trivial or

administrative change. In addition, the CAR will usually require less rather than more frequent monitoring or reporting. Consequently, CAR requirements do not appear to be eligible as administrative amendments.

To determine if incorporation of CAR requirements qualifies as a minor permit revision, the type of change that might arise from the CAR must be evaluated against the relevant criteria of §§ 70.7(e)(2)(i)(A)(*1*) through (*6*). If the change does not meet any of these criteria (the criteria are written in the negative), the change may be made using the minor permit revision process; otherwise, it must use the significant permit revision procedures. To summarize the minor permit revision criteria, a minor permit revision is <u>not allowed</u> if the change: (1) violates an applicable requirement; (2) significantly changes existing monitoring, reporting, or recordkeeping; (3) establishes or changes case-by-case emissions limitations; (4) establishes a potential-to-emit limitation; (5) is a title I modification; or (6) is required by the permitting authority to be a significant permit modification. Criterion (2) is clearly the one criteria that might be triggered by incorporation of CAR requirements, since CAR requirements could change existing monitoring, reporting,

or recordkeeping requirements in the permit. To determine if criterion (2) does apply, it is necessary to determine if incorporation of CAR requirements will result in a significant change to monitoring, reporting or recordkeeping requirements.

In terms of their significance to monitoring, recordkeeping or reporting requirements, changes from the CAR can be sorted into two broad categories, depending on the amount of discretion a source has in determining the new requirement. The first category comprises changes over which the source has little discretion in determining the monitoring, recordkeeping or reporting requirements. In most cases, the monitoring, recordkeeping and reporting requirements are established by the CAR, and once the source has decided to be covered by the CAR, it has no ability to change the requirements. For example, § 65.47(e) requires owners or operators of storage vessels using floating or external roofs to record when the roof was set on its legs and when it was refloated. This is a new record not previously required under any referencing storage vessel rule. As another example, § 65.44(c)(9)(ii) allows up to two 30-day extensions (after an initial 45 days) to empty and remove a storage vessel from service after the source finds that

it is unsafe to perform gap seal measurements. Under subpart Kb of 40 CFR part 60 and subpart Y of 40 CFR part 61, the source was allowed one 30 day extension, which required prior approval [§ 60.113b(b)(4)(iii) and § 61.272(b)(4)(iii)]; extensions were not addressed under subpart Ka of 40 CFR part 60. Under the CAR (as in the HON), both the first and second 30-day extensions are available to the source without requesting prior approval by EPA; although documentation for why an extension is necessary must be maintained. Other examples include § 65.48(c)(2)(ii), which requires reporting of storage vessel seal gap measurement results, rather than all raw seal gap measurement data as required in subpart Kb of 40 CFR part 60, subpart Y of 40 CFR part 61, and subpart G of 40 CFR part 63 [§ 60.115b(b)(2), § 61.276(d)(1), and § 63.122(e)(1)]; or § 65.161(a)(3), which requires keeping records of the latest 3 hours of continuous (15-minute) monitoring data, rather than keeping records of all continuous monitoring data, as under the HON, see § 63.152(f)(2).

The examples given so far illustrate changes in which the source is adopting the CAR requirements in lieu of previous requirements, without changing or adding to

the CAR requirements. Other requirements under the CAR, still within the first category, may require a source to determine monitoring requirements. For example, under § 65.148(c)(1), a facility using an incinerator to meet the 98 percent reduction requirement of § 65.63(a)(2) of subpart D for process vents, is required to monitor temperature within a range of temperature determined by the source. The source may establish, as part of its title V application, the parameter range that it will use, based on a performance test, or it may rely on prior performance tests or use an existing range or an established limit in a referenced subpart. In EPA's view, a change in a parameter range based on a relevant EPA-approved performance test is not a significant change, since the range is determined by the results of the test and cannot be set arbitrarily. In addition, the parameter to be monitored is set by the CAR, and is therefore outside the source's discretion.

Thus, EPA does not consider this first category of changes to be "significant changes" within the meaning of criterion (2) for minor permit revisions. The EPA interprets the criterion as requiring the significant permit revision process when a significant monitoring change is made in the permit revision process, and

especially when the changes are source-specific monitoring changes involving significant judgment. The types of changes to monitoring requirements that EPA considers significant within the meaning of criterion (2) include establishing equivalent SIP monitoring requirements, streamlining of redundant monitoring requirements, or significant changes to source-specific monitoring. The first category of CAR requirements should not have these characteristics, since the amount of judgment involved in establishing source-specific requirements such as parameter levels is not significant. There is also no requirement to demonstrate that these requirements are equivalent to existing requirements, as would be the case when establishing equivalent SIP requirements or streamlining.

The second category of changes involves significant discretion on the part of the source in determining monitoring, recordkeeping or reporting requirements. For example, under § 65.63(d) of subpart D, which applies to a group 2A process vent without a recovery device, a source is allowed to establish the parameters that it will monitor, and the parameter ranges, in order to maintain a TRE index value greater than 1.0. Another example is under § 65.162(e) of subpart G, which applies

to sources who are directed under § 65.154(c)(2) or § 65.155(c)(1) to set unique monitoring parameters, or who request under § 65.156(e) approval to monitor a different parameter than those listed in relevant monitoring requirements of subpart G of the CAR.

If this second type of change were established for the first time through the permit revision process, EPA would consider it to be a significant change in monitoring under the meaning of criterion (2) of § 70.7(e)(2)(i)(A), since the source has significant discretion in establishing not only the parameter to be monitored, but the methods that are used in making that judgment. Establishing these kinds of monitoring requirements in the permit is similar to permit streamlining, equivalent SIP requirements, and other changes that involve significant judgment discussed above. In White Paper #2, EPA indicated that streamlining could be accomplished as part of the initial permit application or as a significant permit revision, both of which provide for EPA review of streamlined requirements. The current part 70 requires that equivalent SIP limits established in the permit must follow initial issuance, renewal, or significant permit revision procedures [See § 70.6(a)(1)(iii)].

If, however, EPA has approved unique or different monitoring requirements prior to the permit revision taking place, as may be the case under the CAR, EPA would consider the significant permit revision procedure to be unnecessary. For example, if EPA has approved a request to use alternative monitoring or recordkeeping procedures under § 65.7(b) and (c) of subpart A or § 65.162(d) of subpart G procedures, the source has no discretion but to comply with those alternative requirements once the Agency has granted approval. Consequently, the absence of discretion justifies the minor permit revision process, rather than the significant permit revision procedures.

Note that under the proposed changes to part 70 (60 FR 45529, August 31, 1995), incorporation of new requirements such as the CAR may be allowed under the proposed "notice-only" provisions, in which EPA and public review is not required, if the permit is incorporating previously-adopted requirements and if source-specific requirements are not being established through the permit. Incorporation either of provisions adopted in the CAR rule, or of source-specific requirements proposed by the source and approved by EPA after promulgation of today’s rule (provided the permit

process was not the vehicle for EPA approval) would likely be eligible for notice-only procedures under the concept outlined in the 1995 proposal. If EPA adopts the notice-only procedures, the procedures would be available once the State in which the source is located had incorporated the revised procedure into its permit program. Until then, the current part 70 permit procedures apply as outlined above.

IX. Extension of the Consolidation to Include the State Implementation Plan

The EPA recognizes that States have developed and incorporated into the State Implementation Plan (SIP) rules and requirements that affect many of the same emission units also subject to the referencing subparts being consolidated in today's proposal. Those regulations typically include reasonably available control technology (RACT) and other requirements designed for attainment and maintenance of national ambient air quality standards (NAAQS). Hence, even upon final promulgation of the CAR, in many areas SOCMI sources implementing the CAR still could remain subject to two separate sets of requirements -- the CAR and State and federally-enforceable RACT requirements. Reduction of compliance burdens through consolidation of regulatory

requirements could be greatly enhanced by expanding the benefits of today's proposal to address federally enforceable SIP requirements that apply to SOCMI sources.

In an effort to facilitate burden reduction for sources subject to state specific SIP requirements, EPA is proposing three actions. First, EPA is proposing to pre-approve the CAR as meeting the RACT requirement of the Act. Thus, with respect to SIPs that expressly allow for the approval of alternatives to existing RACT requirements by the State and EPA, additional EPA action will not be needed prior to implementation of the CAR by a specific source. The source will still need State approval of the CAR for that source prior to implementation. This pre-approval, discussed further below, would expedite the consolidation of the RACT requirement with other applicable requirements through implementation of the CAR since no additional EPA action would be necessary prior to implementation of the CAR. Second, based on EPA’s proposal to pre-approve the CAR as meeting RACT, EPA is proposing a streamlined process for review and approval of SIP submittals that incorporate the CAR requirements. This action will expedite the process for incorporating into the SIP the CAR for purposes of complying with RACT requirements,

particularly in states where the SIP does not already allow for the use of approved alternatives. Finally, EPA is recognizing the use of the title V permitting process as a mechanism through which the streamlining of overlapping requirements stemming from the SIP, NSPS, and NESHAP programs can be accomplished. Below, each of these mechanisms for expanding the benefits of the CAR rulemaking to encompass SIP requirements is discussed. First, however, a description of RACT and EPA's basis for pre-approving the CAR as RACT is provided.

A. Pre-Approval of the CAR as Meeting the Clean Air Act Reasonably Available Control Technology Requirement

For purposes of defining RACT, EPA has historically issued control techniques guidelines (CTGs). These CTGs are not regulatory in nature, but rather establish a presumptive norm for RACT. In other words, the CTGs, which are issued after an opportunity for public input, establish one or more methods of control or emission reduction levels that EPA deems as RACT-level control for certain operations. In developing the CTGs, EPA provides the scientific and technical documentation to support these controls as a RACT level of control. In developing RACT rules to be incorporated into a federally-approved SIP, a State can adopt the methods of control specified

in the CTG or establish other methods of control. To the extent the State relies on the control methods specified in the CTG, EPA will not undertake further analysis in determining that the State has established RACT-level of control for those sources. However, if a State elects to require other types of control, the State must provide the relevant scientific and technical information to demonstrate that the selected controls meet the underlying statutory RACT requirement.

Currently, EPA has issued six CTGs, shown in table 4, applicable to emission points at sources covered by the CAR. Pursuant to section 182(b)(2)(B) of the Act, States were

required to submit RACT rules by November 15, 1992 for emission sources whose CTGs were issued prior to the 1990 Clean Air Act Amendments. Therefore, RACT rules for petroleum liquids in fixed roof and external floating roof tanks; manufacture of high-density polyethylene, polypropylene, and polystyrene resins; SOCMI and polymer manufacturing equipment leaks; and SOCMI air oxidation processes were due by November 15, 1992. For emission sources covered by CTG's issued after the 1990 Amendments, the EPA was required to establish a submittal date, pursuant to section 182(b)(2)(A) of the Act. The RACT rules for SOCMI distillation and reactor processes were required to be submitted by March 23, 1995, as stated in the Federal Register notice (59 FR 13717, March 23, 1994) announcing the submittal due date.

TABLE 4. CONTROL TECHNIQUES GUIDELINES

Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed-Roof Tanks, EPA-450/2-77-036, December 1977
Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks, EPA-450/2-78-047, December 1978
Control of Volatile Organic Compound emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins, EPA-450/3-83-008, November 1983
Control of Volatile Organic Compound Leaks from Synthetic Organic Chemical and Polymer Manufacturing Equipment, EPA-450/3-83-006, March 1984
Control of Volatile Organic Compound Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry, EPA-450/3-84-015, December 1984
Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry, EPA-450/4-91-031, August 1993

After State adoption, control measures are submitted to EPA for approval into the federally-enforceable SIP. Hence, once a State-enforceable measure is approved into the SIP, it becomes enforceable as a federal requirement.

In order to establish that provisions in the CAR are at least as stringent as RACT, it is necessary to understand the basis for RACT and the standards that

constitute the CAR. The general requirement for RACT in nonattainment areas is found in section 172(c)(1) of the Act. Section 182(a)(2)(A) and (b)(2) provide more specific requirements for stationary sources that emit volatile organic compound (VOC). The EPA has defined RACT as ". . . the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility" (44 FR 53761, September 17, 1979). These are control techniques that are widely used that can be readily applied to existing sources without unreasonable burden.

The "reasonably" available control technology reflected in SIP levels can be contrasted with the generally more stringent bases for the new source performance standards (NSPS) and national emission standards for hazardous air pollutants (NESHAP) which comprise the CAR. The NSPS, which apply to newly constructed stationary sources that emit criteria pollutants, are based on ". . . the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair

quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated," (CAA section 111(a)(1)) or best demonstrated technology (BDT). This presumably (but not necessarily) higher level of control than RACT (which generally is developed for existing sources) can be justified for new, modified, or reconstructed sources, because such controls can be incorporated into the design of the source prior to construction, modification, or reconstruction, making it more technically and economically feasible than for existing sources that can have prohibitive design constraints or costs.

Prior to the 1990 Amendments, for NESHAP, the Act required the Administrator to ". . .establish any such standard at the level which in his judgment provides an ample margin of safety to protect the public health from such hazardous air pollutant." 42 U.S.C. 7412(b)(1)(B). Although EPA policy has evolved over the years regarding the interpretation of this wording, it was generally accepted that the basis for the standards established would reflect at least the basis analogous to that established for NSPS, i.e. "best controls" considering the impacts.

The Act, as amended in 1990, provides that NESHAP must ". . .require the maximum degree of reduction in emissions. . .that the Administrator, taking into consideration the cost of achieving such emission reduction, and any nonair quality health and environmental impacts and energy requirements, determines is achievable. . .", or maximum achievable control technology (MACT), for short. The Act 112(d)(2). This basis is very similar to that for NSPS, as is evidenced by the statutory wording, and again generally reflects control at least as stringent as, if not more than, RACT.

The statutory language for setting NSPS and NESHAP clearly mandate a basis for those standards no less stringent, and conceivably more stringent, than that for RACT. An examination of the CTGs that apply to SOCMI reveal that the NSPS and NESHAP that form the basis for today’s proposed CAR are all at least as stringent as the corresponding RACT requirements contained in the CTG’s, especially since most of the CAR is based on the HON, which is the NESHAP applicable to the SOCMI.

In addition to the appropriate stringency qualifications, the CAR will be established through regulation, thus it is appropriate to augment the CTG's, which were issued after public notice and comment, with

the CAR. Therefore, since EPA believes that the CAR is at least as stringent as the RACT established in the CTG and since this action fulfills the procedural requirements for establishing RACT, EPA is proposing to pre-approve the CAR as RACT.

B. EPA Approval of the CAR as an Alternative Compliance Measure for the State Implementation Plan

The EPA is aware that some State SIPs provide for the use of alternative emission limitations, control technologies, or monitoring methods for purposes of complying with the applicable SIP requirement. Use of such alternatives generally requires the prior approval of both EPA and the State to ensure that the alternative is equivalent to the method currently approved into the SIP. The EPA is proposing, based on its pre-approval of the CAR as meeting RACT, that where a SIP allows sources to adopt alternative means of control after approval by the State and EPA, no additional EPA approval will be required prior to the source implementing the CAR. In other words, EPA is proposing that a determination in the final CAR rule that the CAR is RACT for the relevant sources, will fulfill the EPA approval requirement in SIPs for adoption of alternative means of complying with

a SIP-approved RACT requirement.[1] Therefore, if -- in accordance with an alternative measures provision in an approved SIP -- a source applied to a State, seeking to implement the CAR rather than the current SIP-approved RACT measures, the State could approve the use of the CAR as an alternative means of compliance and further EPA approval would not be necessary for the source to implement the CAR. In these cases -- where the SIP expressly provides for the approval of alternative measures -- this pre-approval should provide an expedited mechanism for using the CAR to consolidate SIP and Federal emission standards.

However, through this proposed action, EPA is not and cannot revise any specific SIP to include the CAR. Where a SIP allows approval of alternative means of compliance, the source must still receive State approval, consistent with the terms in the SIP, in order to use the CAR as an alternative means of compliance. Independent State approval is necessary because the State has

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[1] EPA's pre-approval only applies if the State is approving the CAR as federally-promulgated. If the State wishes to approve an alternative that differs from the approved federal CAR, these streamlined procedures would not apply. Rather a full SIP revision request would be needed. However, as noted in section C., below, EPA might be able to use the direct final process in processing some SIP revisions.

retained the authority to determine whether alternative means of control meet the State-adopted RACT requirements. States have the authority under section 116 of the Clean Air Act to establish controls that exceed RACT. Therefore, although EPA is proposing that the CAR is at least equivalent to the presumptive RACT requirement in the existing CTGs, the State must have the opportunity to determine whether the CAR is an appropriate alternative to the measures that were adopted by the State and approved into the SIP. This determination is critical since a State may have adopted tighter means of control for purposes of attaining the NAAQS or meeting some other applicable requirement of the CAA (for example, 15 percent VOC reduction requirement).

For cases in which the SIP requirements are more stringent than the CAR as it would apply to specific sources, EPA recognizes that use of the CAR as an alternative to the SIP may jeopardize achievement or maintenance of the NAAQS. In those cases, EPA expects that the State would disapprove use of the CAR as an alternative means of compliance with the SIP.

In determining whether the CAR can be used as an alternative to the SIP, the State must consider whether the CAR requires control to an equal or higher degree

than the emission limitations of the SIP. Because EPA, through this rulemaking, is establishing the compliance measures (monitoring, recordkeeping, and reporting) which correspond to a particular control option as sufficient to assure compliance with the presumptive RACT emission limitation, EPA believes that it will not be necessary for a State to compare the particular compliance measures of the SIP to the CAR in order to approve the CAR as an alternative if the State has adopted the presumptive measures that were provided in the CTG. Rather, the State may choose to restrict its review to the sufficiency of the control measures and emission limitations in the CAR, in order to provide for greater use of the burden reductions inherent in the compliance measures of today's proposed CAR.

The EPA believes that there will be few, if any, instances in which the CAR would serve to relax a previously applicable SIP requirement. However, since there may be limited cases where that could occur, EPA is seeking comment on whether a more rigorous SIP review process should be required in those few instances. Therefore, EPA is seeking comment on whether the State should be required to submit through the formal SIP revision process any state approval of the CAR where the

CAR provides for fewer emission reductions than the previously-approved SIP.

Although a source may implement the CAR upon State approval, EPA is also proposing that the State subsequently submit the CAR for official incorporation into the SIP. The EPA is proposing that the State could make this submission through letter notice.[2] This process will serve to ensure that the applicable control requirement, i.e., the CAR, is reflected in the SIP. Without this process, the SIP would continue to indicate that the source was subject to the previously approved RACT limit. The letter notice will ensure that EPA is informed about the applicable SIP requirements for sources and will allow the Agency to fulfill its obligation to provide that information to the public (See for example The Act 110(h), 42 USC 7410(h)).

Since, at this point the incorporation of the CAR into the SIP will merely be a technical revision, EPA believes that letter notice is an acceptable procedure. Under the letter notice procedures, the State submits the revision by letter to EPA upon State approval of the CAR for a specific source or group of sources. The EPA would

[2] For further information on the letter notice process, see 55 FR 5829, February 16, 1990.

not need to undertake a lengthy notice-and-comment rulemaking process to incorporate the revision into the SIP. Rather, the regional office would notify the State and the source by letter that the SIP was being revised to reflect the submission. Periodically, each EPA Regional office would publish a notice in the Federal Register to notify the public of the SIP revisions that had been made. Furthermore, at that time, EPA would ensure that the federally-approved SIP reflected the CAR as the alternative means of compliance for the relevant source(s).

The EPA seeks comment on the validity and usefulness of this approach to extend consolidation of regulatory requirements to include SIP requirements.

C. Expedited State Implementation Plan Approvals for Incorporation of the CAR as a Reasonably Available Control Technology Compliance Option

In many cases the SIP explicitly provides an exclusive means of compliance with RACT. This exclusivity would preclude the use of the process proposed above since the SIP does not allow for an alternative means of compliance. In such cases, the State may utilize other options to address overlapping requirements between the SIP, NSPS, and NESHAP programs.

One approach which the State could take would be to revise the regulations which form the basis of the SIP, either to include boilerplate provisions for approved alternatives or to explicitly incorporate the CAR as a means of complying with RACT. EPA is proposing the use of measures described below in order to ensure that this SIP revision process would work quickly and effectively so that the CAR may be utilized as quickly as possible as a compliance tool.

Because EPA is proposing to determine through this action that the CAR is at least equivalent to presumptive RACT, EPA believes that there will be little need for public comment on a case-by-case basis as SIPs are revised to incorporate the federally-enacted CAR as an alternative means of compliance. However, it will be necessary for some States to revise their SIPs to include the CAR for this purpose. Therefore, such States would need to submit the CAR to EPA as a SIP revision. For States that submit the CAR, as finalized in the federal rules, EPA is proposing to use letter notice procedures to revise the SIP to incorporate the CAR. (Again, EPA seeks comment on whether a different process should be used where the CAR would relax the previously-approved SIP requirement.) However, if a State submits a rule

that differs from that established through the final federal rulemaking on the CAR, EPA would need to undertake notice-and-comment rulemaking procedures in order to provide an opportunity for public participation.

Although EPA believes notice-and-comment rulemaking would be needed if the State-adopted rule differs from the federally-enacted CAR, in some instances, EPA might be able to utilize the existing "direct final" method of rulemaking in order to significantly expedite the rulemaking process. Under such a procedure, EPA publishes a proposed and final action simultaneously indicating that if no adverse comments are received, the final action will be effective 60 days following publication. If adverse comments are received, EPA will withdraw the final action, address the comments and subsequently publish a new final action in light of the comments received.[3]

[3] For further information on the direct final process, see 59 FR 24054, May 10, 1994.

D. Streamlining of Overlapping State Implementation Plan, New Source Performance Standards, and National Emission Standards for Hazardous Air Pollutants Requirements in the Title V Permitting Process

In addition to undertaking rulemaking to revise the SIP, or as an option to that approach, the State may wish to take advantage of the title V permitting process as a mechanism for addressing overlapping requirements. The process by which this may be accomplished is discussed in detail in EPA guidance entitled, "White Paper Number 2 For Improved Title V Implementation," issued on March 5, 1996.

The White Paper Number 2 describes how a source may propose streamlining to distill or "streamline" multiple overlapping requirements into one set that will assure compliance with all requirements. According to the guidance, multiple emissions limits applying to an emission unit may be streamlined into one limit if that limit is at least as stringent as the most stringent limit. If no one requirement is clearly more stringent than the others, the applicant may synthesize the conditions of all the applicable requirements into a single new permit term that will assure compliance with all requirements. The streamlined monitoring,

recordkeeping, and reporting requirements would generally be those associated with the most stringent emissions limit, providing they would assure compliance to the same extent as any subsumed monitoring. Thus, monitoring, recordkeeping, or reporting to determine compliance with subsumed limits would not be required where the source implements the streamlined approach.

It is important to emphasize that while streamlining may be initiated by either the applicant or the permitting authority, it can only be implemented where the permit applicant consents to its use.

X. Summary of Benefits and Other Impacts

The CAR contains a number of significant benefits to all parties; in fact, regulatory improvement benefitting all is the main purpose of the CAR, as described earlier in the discussion on goals and objectives. Many of the same benefits and features of the CAR help all the parties equally, while some are more beneficial to others. The benefits and improvements of the CAR are individually discussed in detail in section VI of this preamble. The most significant benefits afforded by the CAR include:

- requirements in 3 different parts and 16 different subparts have been brought together into 1 set of requirements in a single part;

- structure of the rule is designed with the "end-user" in mind;
- monitoring requirements for equipment leaks have been greatly reduced and simplified; and
- data handling burden has been greatly reduced due to requirements to keep only the most recent 3 hours of CPMS monitoring data.

The recordkeeping and reporting burden associated with the CAR reflects a substantial reduction in burden hours as compared to the referencing subparts. EPA has assessed the recordkeeping and reporting burden for the CAR and estimates a net reduction in burden of about 1700 hours per year for a representative chemical plant with 3 process units opting to use the CAR. Burden reduction is a function of the size and complexity of a plant site and will therefore vary for individual plant sites.

In addition, it is expected that the CAR will provide improved compliance and resource savings. By having a clearer, simpler, smaller, consistent set of rules, both industry and enforcement agencies will know better what is expected, and can concentrate on implementing and complying with the requirements instead of trying to understand provisions of several different rules. Because the rules can be much more easily implemented, there will be better compliance. By the same token, when the regulations are more easily implemented, with resulting better compliance, there will

be less enforcement action and litigation, saving resources of both enforcement agencies and industry.

XI. Additional Amendments to Equipment Leak Referencing Subparts

Today's action includes some additional amendments to 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V that are not necessitated by proposal of the CAR. Rather, these amendments are being proposed in order to clarify some specific provisions and to incorporate some provisions for safety consistent with the HON equipment leak provisions that have been amended several times in recent years. Today's proposed amendments would incorporate these same improvements into 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V. The rationale for all of the proposed amendments remains the same as it was for amending the HON. Discussion of these HON amendments is found in preambles to the proposed amendments (59 FR 48175, September 20, 1994; 60 FR 18020, April 10, 1995; 61 FR 31435, June 20, 1996; and 62 FR 2721, January 17, 1997). The proposed amendments to 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V consist of the following changes.

A. Closed-vent Systems and Control Devices

The language in 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V defining CVS would be changed from "systems. . .composed of piping" to "systems. . .composed of hard-piping [or] ductwork." Definitions of "hard-piping" and "ductwork," taken from the HON, would be added to both 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V to accommodate the amended definition of CVS. Definitions distinguishing between hard-piping and ductwork allow for a distinction to be made between the applicable inspection requirements.

The inspection requirements for CVS hard-piping and ductwork have been clarified in 40 CFR part 61, subpart V to be consistent with 40 CFR part 60, subpart VV and the HON. Closed-vent system ductwork must be inspected initially and annually thereafter using Test Method 21; CVS hard-piping must be inspected initially using Test Method 21, and then visually inspected annually thereafter. Prior to these amendments, there was no clear distinction made in 40 CFR part 61, subpart V between ductwork and hard-piping inspection requirements, and all conveyance systems had to be inspected annually using Method 21. However, EPA recognizes that systems constructed of hard-piping are extremely unlikely to leak, and therefore, annual Method 21 inspections are

unnecessary for hard-piping. Further discussion about the inspection requirements for CVS ductwork versus CVS hard-piping is included in the Federal Register notice proposing this amendment for 40 CFR part 60, subpart VV (59 FR 36155, July 15, 1994) and in the Federal Register notice issuing the final HON (59 FR 19447, April 22, 1994).

The definitions of CVS in 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V would also be modified for consistency with the HON to include systems that are routed back to a process. Similarly, provisions in both subparts that require a control device for pumps, compressors, or pressure relief devices would be amended to allow routing to a fuel gas system or routing back to a process in lieu of routing through a CVS to a control device.

B. Sampling Connection Systems

The HON provisions on the treatment of purge material would be added to 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V. The added provisions would allow three additional control options for purge materials. These options include: (1) sending purge material to a hazardous waste treatment, storage, and disposal facility (TSDF), if it contains hazardous waste;

(2) sending purge material to a facility permitted by a State to handle municipal or industrial solid waste, if it is not hazardous waste; or (3) sending the purge material to a waste management unit that is complying with the group 1 wastewater provisions of 40 CFR part 63, subpart G.

When EPA amended the HON with these three additional control options, the option to send purge material to a waste management unit that is complying with the HON Group 1 wastewater provisions included an exemption for streams that do not contain any organic HAP listed on table 9 of 40 CFR part 63, subpart G. This exemption is not included in the proposed amendments for 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V. These two subparts address VOC, and benzene and vinyl chloride, respectively.

Table 9 was created to help define organic HAP of regulatory concern for the HON wastewater provisions. It therefore does not serve as an appropriate basis for exemption from VOC controls under 40 CFR part 60, subpart VV. Many regulated VOC are not HAP, and they have never been assessed for inclusion in table 9. No satisfactory substitute for table 9 exists for VOC. Moreover, table 9 is not an appropriate basis for exemption under 40 CFR

part 61, subpart V because subpart V applies to streams containing benzene or vinyl chloride, and table 9 lists both of these compounds.

The EPA is not including the exemption because the circumstances associated with purge material in wastewater streams are not the same in these cases as were present with the HON amendment. For more discussion on how table 9 was developed see the Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry -- Background Information for Final Standards, Volume 2B: Comments on Wastewater (EPA-453/R-94-003b) section 3.2 The control options allowed in the proposed amendment meet the intent of the sampling connection system provisions, which is to ensure that purged material is captured and either returned to a process or destroyed, and offers additional compliance flexibility.

The HON definition of "sampling connection systems" would also be added to 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V. Prior to this proposed amendment, neither subpart included a definition of this term. The addition would be made for clarity and would not effect the requirements in either subpart.

C. Standards for Control Devices and Recovery Systems Provisions for recovery devices and enclosed combustion devices in 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V would be amended to allow an exit concentration of 20 parts per million by volume (ppmv) as an alternative to the 95 percent control efficiency requirement. The 20 ppmv alternative standard was added to the HON provisions (61 FR 43698, August 26, 1996). The use of this option is provided for cases where there would be large amounts of dilution air, such as enclosed vented processes. The EPA considers the 20 ppmv alternative standards to be a reasonable design concentration for circumstances covered by these two subparts. For low concentration streams, it is difficult to obtain the 95 percent removal that is required. A 20 ppmv outlet concentration is obtainable for these streams. In addition, EPA reiterates that this proposed alternative standard will be allowed only in the cases where circumvention by dilution can reasonably be detected.

D. Safety Considerations

Several amendments made to the HON equipment leak provisions for safety reasons (60 FR 18073, April 10, 1995) are being proposed for 40 CFR part 60, subpart VV

and 40 CFR part 61, subpart V. These amendments are being proposed for safety reasons and for consistency among equipment leak rules; they would exempt equipment from particular requirements (for example, inspections) if the required activity may pose a safety hazard. Use of these proposed exemptions will be strictly limited to equipment for which a real need could be reasonably argued.

Pumps would be exempt from monthly monitoring and weekly visual inspection requirements if such monitoring or inspection is unsafe. The owner or operator must maintain a written plan for monitoring and inspecting these pumps as frequently as possible under safe conditions. The associated recordkeeping requirements for inspection and monitoring would be amended accordingly.

Pressure relief devices equipped with a rupture disc upstream of the pressure relief device would be exempt from the requirement to operate with no detectable emissions. Owners and operators would have to replace these rupture discs as soon as is practical and no later than 5 days after each pressure release.

Open-ended valves and lines would be exempt from the requirement to be closed or sealed if they are part of an

emergency shutdown system, or if the open-ended valve or line contains material that would autocatalytically polymerize or cause a safety hazard if capped or sealed.

Any parts of a closed-vent system that are designated by the owner or operator as unsafe to inspect would be exempt from requirements for initial and annual inspection and monitoring. The owner or operator would have to maintain records of equipment so designated and a written plan for inspecting this equipment as often as possible under safe conditions.

Parts of a CVS that cannot be inspected without elevating the inspector more than 2 meters above a support surface could be designated difficult to inspect and thereby exempt from inspection and monitoring requirements. Equipment designated difficult to inspect must be part of a modified or reconstructed process unit or the owner or operator must designate no more than 3 percent of the CVS equipment difficult to inspect. Additionally, the owner or operator must maintain a written plan for inspecting the equipment at least every 5 years.

XII. Solicitation of Specific Comments

The Administrator solicits comments on all aspects of this proposal. Comments on specific technical

features of the rule are solicited in section VI of this preamble as each topic is discussed. These technical features include:

- the introduction of halogen scrubbers for NSPS process vents;
- The validity and usefulness of the CAR's implementation mechanism;
- The EPA's proposed policy for delegation to States; and
- The CAR's provisions requiring correction to 3 percent oxygen for all combustion device concentration measurements.

The Administrator specifically requests comments on the usefulness of incorporating two features into the rule. First, should tables citing the provisions of the referencing subparts that still apply to owners and operators complying with the CAR be added to the CAR? And second, should a subgrouping program similar to that established for valve equipment leak monitoring [see § 65.106(b)(4)] be created for connector equipment leak monitoring?

In this section, the Administrator is also specifically requesting comments on the overall effectiveness of the proposed rule. Commenters should provide any available data and rationale to support their comments on each topic.

The Administrator specifically requests comments on how well the proposed rule meets the President's objectives of rule consolidation. The stated goal of the rule is articulated in the March 16, 1995 White House papers entitled, "Reinventing Environmental Regulation," as follows:

> EPA will work with key industries, beginning with the chemical industry, to eliminate conflicting and overlapping Federal air compliance requirements. Deleting duplicative and confusing requirements will result in increased understanding by industry about emission limits and monitoring, recordkeeping and reporting requirements, and will reduce compliance costs -- with no measurable loss of environmental protection. Subsequently, consolidation for other media will be undertaken, based on experience gained with air rules.

The successes of this pilot project for the chemical industry should be measured against the 10 principles for reinventing environmental regulation, which were listed in the President's March 16 policy, as follows:

1. Protecting public health and the environment are important national goals, and individuals, businesses and government must take responsibility for the impact of their actions.

2. Regulation must be designed to achieve environmental goals in a manner that minimizes costs to

individuals, businesses, and other levels of government.

3. Environmental regulations must be performance-based, providing maximum flexibility in the means of achieving our environmental goals, but requiring accountability for the results.

4. Preventing pollution, not just controlling or cleaning it up, is preferred.

5. Market incentives should be used to achieve environmental goals, whenever appropriate.

6. Environmental regulation should be based on the best science and economies, subject to expert and public scrutiny, and grounded in values Americans share.

7. Government regulations must be understandable to those who are affected by them.

8. Decision making should be collaborative, not adversarial, and decision makers must inform and involve those who must live with the decisions.

9. Federal, State, tribal and local governments must work as partners to achieve common environmental goals, with non-Federal partners taking the lead when appropriate.

10. No citizen should be subjected to unjust or disproportionate environmental impacts.

The CAR addresses several of these principles (numbers 1, 2, 3, 6, 7, 8, and 9). Comments are

requested on the following topics to evaluate how well the CAR embraces these principles and to identify specific changes that could be made to improve the benefits of consolidation.

- One intent of the CAR is to provide an end-user friendly structure to regulatory requirements. Would you want to see this structure repeated in future rulemakings? What could have been done better?

- One intent of the CAR is to update, clarify, and eliminate ambiguity in the regulatory requirements. Was this goal accomplished? What specific improvements could be made?

- One intent of the CAR is to provide for improved environmental results by clarifying and simplifying the set of regulations. Do you believe that the proposed rule will improve the level of compliance?

- One intent of the CAR is to reduce the overall regulatory compliance burden. The goal was to achieve burden reduction for all parties: EPA, the states, the public, and the regulated community. Will the proposed rule reduce burden? What further improvements can be made?

- One intent of the CAR is to have a single, consolidated set of requirements for the SOCMI Industry. Is the proposed single rule an improvement?

- One intent of the CAR is to reduce the amount of regulatory information that stakeholders must review to determine regulatory requirements in the SOCMI Industry. Has this goal been met?

- One intent of the CAR is to reduce the complexities of overlapping regulations among different Federal air programs. How well has this goal been met? What improvements could be made?

- One intent of the CAR is to provide a linear logic in proceeding through the regulatory requirements; i.e., start at the beginning of a rule and work your way as far into the regulation as is appropriate for the emission point. For example, if a section of the regulation does not apply to the emissions unit then everything necessary for achieving compliance should be identified at that regulation location and with no need to go deeper into the regulation to make sure that there is not an imbedded requirement (for example, a reporting requirement located near the end of a rule related to an exemption contained in an earlier section). How well was this goal met?

- The CAR constitutes a substantial re-organization of massive amounts of regulatory information. Underlying regulatory intent was intended to be retained except where noted in this preamble. Has the reorganization of the information implied a change in substantive requirements or compliance expectations that has not been explicitly identified?

- The CAR is optional at the choice of the SOCMI owner/operator as an alternative compliance program for existing rules. Are the requirements for opting into CAR compliance and opting out of CAR compliance clear?

XIII. Administrative Requirements

A. Public Hearing

A public hearing will be held, if requested, to provide opportunity for interested persons to make oral presentations regarding the requirements in the proposed regulation in accordance with section 307(d)(5) of the Act. Persons wishing to make oral presentation on the proposed regulation should contact EPA at the address

given in the ADDRESSES section of this preamble. Oral presentations will be limited to 15 minutes each. Any member of the public may file a written statement before, during, or within 30 days after the hearing. Written statements should be addressed to the Air and Radiation Docket and Information Center at the address given in the ADDRESSES section of this preamble and should refer to Docket No. A-96-01. A verbatim transcript of the hearing and written statements will be available for inspection and copying during normal business hours at the EPA's Air and Radiation Docket and Information Center in Washington, DC (see ADDRESSES section of the preamble).

B. Docket

The docket is an organized and complete file of all the information considered by EPA in the development of this rulemaking. The docket is a dynamic file, since material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process.

C. Paperwork Reduction Act

The information collection requirements in these proposed rules have been submitted for approval to the

Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request (ICR) document has been prepared by the EPA (ICR No. 1854.01) and copies may be obtained from Sandy Farmer, OPPE Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M Street, S.W.; Washington, DC 20460 or by calling (202) 260-2740.

Information is required to ensure compliance with the provisions of the proposed rules. If the relevant information were collected less frequently, the EPA would not be reasonably assured that a source is in compliance with the proposed rules. In addition, the EPA's authority to take administrative action would be reduced significantly.

The proposed rules would require that facility owners or operators retain records for a period of at least five years, which exceeds the three year retention period contained in the guidelines in 5 CFR 1320.6. The five year retention period is consistent with the provisions of the General Provisions of 40 CFR Part 63, and with the five year records retention requirement in the operating permit program under Title V of the CAA.

All information submitted to the EPA for which a claim of confidentiality is made will be safeguarded

according to the EPA policies set forth in Title 40, Chapter 1, Part 2, Subpart B, Confidentiality of Business Information. See 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 3999, September 8, 1978; 43 FR 42251, September 28, 1978; and 44 FR 17674, March 23, 1979. Even where the EPA has determined that data received in response to an ICR is eligible for confidential treatment under 40 CFR Part 2, Subpart B, the EPA may nonetheless disclose the information if it is "relevant in any proceeding" under the statute [42 U.S.C. 7414(C); 40 CFR 2.301(g)]. The information collection complies with the Privacy Act of 1974 and Office of Management and Budget (OMB) Circular 108.

Information to be reported consists of emission data and other information that are not of a sensitive nature. No sensitive personal or proprietary data are being collected.

The estimated annual average hour burden for CAR is about 6,600 hours per respondent. The estimated annual average cost of this burden is about $255,000 for each of the estimated 100 (projected) respondents.

Reports are required on a semi-annual basis and as required, as in the case of startup, shutdown, and malfunction plans. Burden means the total time, effort,

or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations are listed in 40 CFR part 9 and 48 CFR Chapter 15.

Comments are requested on the EPA's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICRs to the Director, OPPE Regulatory Information Division; U.S.

Environmental Protection Agency (2137); 401 M Street, S.W., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, N.W., Washington, DC 20503, marked "Attention: Desk Officer for EPA." Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR's between 30 and 60 days after [INSERT PUBLICATION DATE IN THE FEDERAL REGISTER], a comment to OMB is best assured of having its full effect if OMB receives it by [INSERT 30 DAYS AFTER PUBLICATION DATE IN THE FEDERAL REGISTER]. The final rules will respond to any OMB or public comments on the information collection requirements contained in this proposal.

D. Executive Order 12866

Under Executive Order 12866 (58 FR 5173, October 4, 1993) the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity,

competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of the Executive Order, EPA has determined that this rule is a "significant regulatory action." Therefore, the proposed regulation presented in this notice was submitted to the OMB for review as required. Any written comments from the OMB to EPA and any written EPA response to those comments will be included in the Docket listed at the beginning of this notice in the ADDRESSES section of this preamble.

E. Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980, 5 U.S.C. 601 *et seq.* (RFA), generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to

notice and comment rulemaking requirements unless the agency contends that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. This proposed rule would not have a significant impact upon a substantial number of small entities because it is an optional compliance method and does not introduce any new requirements. Sources, including small entities, may choose to comply with the proposed rule if they determine that it would be beneficial to do so.

Therefore, I certify that this action will not have a significant economic impact on a substantial number of small entities.

F. Unfunded Mandates

Title II of the Unfunded Mandate Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for the proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal

governments, in the aggregate, or to the private sector, of $100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of the EPA regulatory proposals with significant Federal intergovernmental mandates, and

informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that these rules do not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate or the private sector in any one year. Thus, today's rules are not subject to the requirements of sections 202 and 205 of the UMRA.

The EPA has determined that these rules contain no regulatory requirements that might significantly or uniquely affect small governments. No small government entities have been identified that have involvement with these source categories and, as such, are not covered by the regulatory requirements of the proposed regulations.

G. Enhancing the Intergovernmental Partnership Under Executive Order 12875

In compliance with Executive Order 12875, EPA has involved States and local governments in the development of this rule. State and local air pollution control associations participated in the regulatory development and have provided regulatory review.

H. Clean Air Act

In accordance with section 117 of the Act, publication of this proposal was preceded by consultation

with appropriate advisory committees, independent experts, and Federal departments and agencies. This regulation will be reviewed 8 years from the date of promulgation. This review will include an assessment of such factors as evaluation of the residual health risks, any overlap with other programs, the existence of alternative methods, enforceability, improvements in emission control technology and health data, and the recordkeeping and reporting requirements.

I. National Technology Transfer and Advancement Act

Under section 12 of the National Technology Transfer and Advancement Act of 1995, the EPA must consider the use of "voluntary consensus standards," if available and applicable, when implementing policies and programs, unless it would be "inconsistent with applicable law or otherwise impractical." The intent of the National Technology Transfer and Advancement Act is to reduce the costs to the private and public sectors by requiring federal agencies to draw upon any existing, suitable technical standards used in commerce or industry.

A "voluntary consensus standard" is a technical standard developed or adopted by a legitimate standards-developing organization. The Act defines "technical standards" as "performance-based or

design-specific technical specifications and related management systems practices." A legitimate standards-developing organization must produce standards by consensus and observe principles of due process, openness, and balance of interests. Examples of organizations that are regarded as legitimate standards-developing organizations include the American Society for Testing and Materials (ASTM), International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), American Petroleum Institute (API), National Fire Protection Association (NFPA) and Society of Automotive Engineers (SAE).

The technical standards proposed with this notice are standards that have been proposed and promulgated under other rulemakings for similar source control applicability and compliance determinations. Since today's proposal does not involve the establishment or modification of technical standards, the requirements of the National Technology Transfer and Advancement Act do not apply.

J. Executive Order 13045

The Executive Order 13045 applies to any rule that EPA determines (1) "economically significant" as defined under Executive order 12866, and (2) the environmental

health or safety risk addressed by the rule has a disproportionate effect of children. If the regulatory action meets both criteria, the Agency must evaluate the environment health or safety effects of the planned rule on children; and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This proposed rule is not subject to E.O. 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children.

K. Executive Order 13084: Consultation and Coordination with Indian Tribal Governments

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments. If the mandate is unfunded, EPA must provide to the Office of Management and Budget, in a

separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected and other representatives of Indian tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities." Today's rule does not significantly or uniquely affect the communities of Indian tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

List of Subjects

40 CFR part 60

Environmental protection, Administrative practice and procedure, Air pollution control, Chemical manufacturing, Intergovernmental relations, Volatile organic compounds, Hazardous substances, and Reporting and recordkeeping requirements, Incorporation by reference.

40 CFR part 61

Environmental protection, Administrative practice and procedure, Air pollution control, Chemical manufacturing, Intergovernmental relations, Volatile organic compounds, Hazardous substances, Reporting and recordkeeping requirements, Incorporation by reference.

40 CFR part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Chemical manufacturing, Intergovernmental relations, Volatile organic compounds, Hazardous substances, Reporting and recordkeeping requirements, Incorporation by reference.

40 CFR part 65

Environmental protection, Administrative practice and procedure, Air pollution control, Chemical manufacturing, Intergovernmental relations, Volatile organic compounds, Hazardous substances, Reporting and recordkeeping requirements, Incorporation by reference.

Date	Carol M. Browner, Administrator

[___.___]