ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2018–0417; FRL–9988–70–OAR]

RIN 2060–AT74

National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production Residual Risk and Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Hydrochloric Acid (HCl) Production source category. The proposed action presents the results of the residual risk and technology reviews (RTRs) conducted as required under the Clean Air Act (CAA). The proposed amendments address the startup, shutdown, and malfunction (SSM) provisions of the rule, add electronic reporting, and update the reporting and recordkeeping requirements.

DATES: *Comments.* Comments must be received on or before March 21, 2019. Under the Paperwork Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before March 6, 2019.

Public Hearing. If anyone contacts us requesting a public hearing on or before February 11, 2019, we will hold a hearing. Additional information about the hearing, if requested, will be published in a subsequent **Federal Register** document and posted at *https://www.epa.gov/stationary-sources-air-pollution/hydrochloric-acid-production-national-emission-standards-hazardous.* See **SUPPLEMENTARY INFORMATION** for information on requesting and registering for a public hearing.

ADDRESSES: *Comments.* Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2018–0417, at *https://www.regulations.gov.* Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. See **SUPPLEMENTARY INFORMATION** for detail about how the EPA treats submitted comments. *Regulations.gov* is our preferred method of receiving comments. However, the following other submission methods are also accepted:

- *Email: a-and-r-docket@epa.gov.* Include Docket ID No. EPA–HQ–OAR–2018–0417 in the subject line of the message.
- *Fax:* (202) 566–9744. Attention Docket ID No. EPA–HQ–OAR–2018–0417.
- *Mail:* To ship or send mail via the United States Postal Service, use the following address: U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA–HQ–OAR–2018–0417, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.
- *Hand/Courier Delivery:* Use the following Docket Center address if you are using express mail, commercial delivery, hand delivery, or courier: EPA Docket Center, EPA WJC West Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC 20004. Delivery verification signatures will be available only during regular business hours.

FOR FURTHER INFORMATION CONTACT: For questions about this proposed action, contact Nathan Topham, Sector Policies and Programs Division (Mail Code D243–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–0483; fax number: (919) 541–4991; and email address: *topham.nathan@epa.gov.* For specific information regarding the risk modeling methodology, contact Terri Hollingsworth, Health and Environmental Impacts Division (C539–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–2076; fax number: (919) 541–0840; and email address: *hollingsworth.terri@epa.gov.* For information about the applicability of the NESHAP to a particular entity, contact Marcia Mia, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building (Mail Code 2227A), 1200 Pennsylvania Avenue NW, Washington, DC 20460; telephone number: (202) 564–7042; and email address: *mia.marcia@epa.gov.*

SUPPLEMENTARY INFORMATION:

Public hearing. Please contact Adrian Gates at (919) 541–4860 or by email at *gates.adrian@epa.gov* to request a public hearing, to register to speak at the public hearing, or to inquire as to whether a public hearing will be held.

Docket. The EPA has established a docket for this rulemaking under Docket ID No. EPA–HQ–OAR–2018–0417. All documents in the docket are listed in *Regulations.gov*. Although listed, some information is not publicly available, *e.g.,* confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *Regulations.gov* or in hard copy at the EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the EPA Docket Center is (202) 566–1742.

Instructions. Direct your comments to Docket ID No. EPA–HQ–OAR–2018–0417. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *https://www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be CBI or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *https://www.regulations.gov* or email. This type of information should be submitted by mail as discussed below.

The EPA may publish any comment received to its public docket. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.,* on the Web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www2.epa.gov/dockets/commenting-epa-dockets.*

The *https://www.regulations.gov* website allows you to submit your comment anonymously, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through *https://www.regulations.gov,* your email

address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any digital storage media you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should not include special characters or any form of encryption and be free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at *https://www.epa.gov/dockets.*

Submitting CBI. Do not submit information containing CBI to the EPA through *https://www.regulations.gov* or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on any digital storage media that you mail to the EPA, mark the outside of the digital storage media as CBI and then identify electronically within the digital storage media the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI directly to the public docket through the procedures outlined in *Instructions* above. If you submit any digital storage media that does not contain CBI, mark the outside of the digital storage media clearly that it does not contain CBI. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2. Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404–02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA–HQ–OAR–2018–0417.

Preamble Acronyms and Abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

AEGL acute exposure guideline level
AERMOD air dispersion model used by the HEM–3 model
CAA Clean Air Act
CalEPA California EPA
CBI Confidential Business Information
CFR Code of Federal Regulations
Cl_2 chlorine
EPA Environmental Protection Agency
ERPG Emergency Response Planning Guideline
ERT Electronic Reporting Tool
HAP hazardous air pollutant(s)
HCl hydrochloric acid
HEM–3 Human Exposure Model, Version 1.1.0
HF hydrogen fluoride
HI hazard index
HQ hazard quotient
IRIS Integrated Risk Information System
km kilometer
MACT maximum achievable control technology
mg/m^3 milligrams per cubic meter
MIR maximum individual risk
NAAQS National Ambient Air Quality Standards
NAICS North American Industry Classification System
NESHAP national emission standards for hazardous air pollutants
NTTAA National Technology Transfer and Advancement Act
OAQPS Office of Air Quality Planning and Standards
OECA Office of Enforcement and Compliance Assurance
OMB Office of Management and Budget
PB–HAP hazardous air pollutants known to be persistent and bio-accumulative in the environment
POM polycyclic organic matter
REL reference exposure level
RFA Regulatory Flexibility Act
RfC reference concentration
RfD reference dose
RTR residual risk and technology review
SAB Science Advisory Board
SSM startup, shutdown, and malfunction
TOSHI target organ-specific hazard index
tpy tons per year
TRIM.FaTE Total Risk Integrated Methodology: Fate, Transport, and Ecological Exposure model
UF uncertainty factor
UMRA Unfunded Mandates Reform Act
URE unit risk estimate

Organization of this Document. The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

Table 1 of this preamble lists the NESHAP and associated regulated industrial source categories that are the subject of this proposal. Table 1 is not intended to be exhaustive, but rather provides a guide for readers regarding the entities that this proposed action is likely to affect. The proposed standards, once promulgated, will be directly applicable to the affected sources. Federal, state, local, and tribal government entities will not be affected by this proposed action. As defined in the *Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act Amendments of 1990* (see 57 FR 31576, July 16, 1992) and

Documentation for Developing the Initial Source Category List (*see* EPA–450/3–91–030), the HCl Production source category includes any facility engaged in the production of HCl. The category includes, but is not limited to, production of hydrochloric acid via any of the following methods: (1) Production of HCl as a by-product in the manufacture of organic chemicals; (2) direct reaction of salts and sulfuric acid (Mannheim process); (3) reaction of a salt, sulfur dioxide, oxygen, and water (Hargreaves process); or (4) burning chlorine (Cl_2) in the presence of hydrogen gas. On September 18, 2001 (66 FR 48174), the Fume Silica Production source category was combined with the HCl Production source category. The Fume Silica Production source category is any facility engaged in the production of fume silica. Fume silica is a fine white powder used as a thickener, thixotropic, or reinforcing agent in inks, resins, rubber, paints, and cosmetics. The category includes the production of fume silica by the combustion of silicon tetrachloride in hydrogen-oxygen furnaces.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS PROPOSED ACTION

Source category	NESHAP	NAICS code [1]
HCl production and fume silica production	HCl	325180

[1] North American Industry Classification System.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this action is available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this proposed action at *https://www.epa.gov/hydrochloric-acid-production-national-emission-standards-hazardous.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version of the proposal and key technical documents at this same website. Information on the overall residual RTR program is available at *https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html.*

A redline version of the regulatory language that incorporates the proposed changes in this action is available in the docket for this action (Docket ID No. EPA–HQ–OAR–2018–0417).

II. Background

A. What is the statutory authority for this action?

The statutory authority for this action is provided by sections 112 and 301 of the CAA, as amended (42 U.S.C. 7401 *et seq.*). Section 112 of the CAA establishes a two-stage regulatory process to develop standards for emissions of hazardous air pollutants (HAP) from stationary sources. Generally, the first stage involves establishing technology-based standards and the second stage involves evaluating those standards that are based on maximum achievable control technology (MACT) to determine whether additional standards are needed to address any remaining risk associated with HAP emissions. This second stage is commonly referred to as the ''residual risk review.'' In addition to the residual risk review, the CAA also requires the EPA to review standards set under CAA section 112 every 8 years to determine if there are ''developments in practices, processes, or control technologies'' that may be appropriate to incorporate into the standards. This review is commonly referred to as the ''technology review.'' When the two reviews are combined into a single rulemaking, it is commonly referred to as the ''risk and technology review.'' The discussion that follows identifies the most relevant statutory sections and briefly explains the contours of the methodology used to implement these statutory requirements. A more comprehensive discussion appears in the document titled *CAA Section 112 Risk and Technology Reviews: Statutory Authority and Methodology* in the docket for this rulemaking.

In the first stage of the CAA section 112 standard setting process, the EPA promulgates technology-based standards under CAA section 112(d) for categories of sources identified as emitting one or more of the HAP listed in CAA section 112(b). Sources of HAP emissions are either major sources or area sources, and CAA section 112 establishes different requirements for major source standards and area source standards. ''Major sources'' are those that emit or have the potential to emit 10 tons per year (tpy) or more of a single HAP or 25 tpy or more of any combination of HAP. All other sources are ''area sources.'' For major sources, CAA section 112(d)(2) provides that the technology-based NESHAP must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). These standards are commonly referred to as MACT standards. CAA section 112(d)(3) also establishes a minimum control level for MACT standards, known as the MACT ''floor.'' The EPA must also consider control options that are more stringent than the floor. Standards more stringent than the floor are commonly referred to as beyond-the-floor standards. In certain instances, as provided in CAA section 112(h), the EPA may set work practice standards where it is not feasible to prescribe or enforce a numerical emission standard. For area sources, CAA section 112(d)(5) gives the EPA discretion to set standards based on generally available control technologies or management practices (GACT standards) in lieu of MACT standards.

The second stage in standard-setting focuses on identifying and addressing any remaining (*i.e.,* ''residual'') risk according to CAA section 112(f). For source categories subject to MACT standards, section 112(f)(2) of the CAA requires the EPA to determine whether promulgation of additional standards is needed to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect. Section 112(d)(5) of the CAA provides that this residual risk review is not required for categories of area sources subject to GACT standards. Section 112(f)(2)(B) of the CAA further expressly preserves the EPA's use of the two-step approach for developing standards to address any residual risk and the Agency's interpretation of ''ample margin of safety'' developed in the *National Emissions Standards for Hazardous Air Pollutants: Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, Benzene Storage Vessels, Benzene Equipment Leaks, and Coke By-Product Recovery Plants* (Benzene NESHAP) (54 FR 38044, September 14, 1989). The EPA notified Congress in the Risk Report that the Agency intended to use the Benzene NESHAP approach in making CAA section 112(f) residual risk determinations (EPA–453/R–99–001, p. ES–11). The EPA subsequently adopted this approach in its residual risk determinations and the United States

Court of Appeals for the District of Columbia Circuit (the Court) upheld the EPA's interpretation that CAA section 112(f)(2) incorporates the approach established in the Benzene NESHAP. See *NRDC* v. *EPA,* 529 F.3d 1077, 1083 (D.C. Cir. 2008).

The approach incorporated into the CAA and used by the EPA to evaluate residual risk and to develop standards under CAA section 112(f)(2) is a two-step approach. In the first step, the EPA determines whether risks are acceptable. This determination ''considers all health information, including risk estimation uncertainty, and includes a presumptive limit on maximum individual lifetime [cancer] risk (MIR) [1] of approximately 1 in 10 thousand.'' 54 FR 38045, September 14, 1989. If risks are unacceptable, the EPA must determine the emissions standards necessary to reduce risk to an acceptable level without considering costs. In the second step of the approach, the EPA considers whether the emissions standards provide an ample margin of safety to protect public health ''in consideration of all health information, including the number of persons at risk levels higher than approximately 1 in 1 million, as well as other relevant factors, including costs and economic impacts, technological feasibility, and other factors relevant to each particular decision.'' *Id.* The EPA must promulgate emission standards necessary to provide an ample margin of safety to protect public health. After conducting the ample margin of safety analysis, we consider whether a more stringent standard is necessary to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

CAA section 112(d)(6) separately requires the EPA to review standards promulgated under CAA section 112 and revise them ''as necessary (taking into account developments in practices, processes, and control technologies)'' no less often than every 8 years. In conducting this review, which we call the ''technology review,'' the EPA is not required to recalculate the MACT floor. *Natural Resources Defense Council (NRDC)* v. *EPA,* 529 F.3d 1077, 1084 (D.C. Cir. 2008). *Association of Battery Recyclers, Inc.* v. *EPA,* 716 F.3d 667 (D.C. Cir. 2013). The EPA may consider cost in deciding whether to revise the standards pursuant to CAA section 112(d)(6).

[1] Although defined as ''maximum individual risk,'' MIR refers only to cancer risk. MIR, one metric for assessing cancer risk, is the estimated risk if an individual were exposed to the maximum level of a pollutant for a lifetime.

B. What is this source category and how does the current NESHAP regulate its HAP emissions?

As described in section I.A of this preamble, the HCl Production source category includes facilities that are engaged in the production of HCl. In the initial list of source categories, Fume Silica Production was listed as a distinct source category. While developing the NESHAP for HCl Production, the EPA determined that HAP emissions from fume silica production were attributable to HCl production at these facilities. Therefore, during the proposal and promulgation of the NESHAP for HCl Production, the Fume Silica Production source category was subsumed into the HCl Production source category and the resulting HCl Production source category now includes HCl production at fume silica production facilities as well as other facilities producing HCl that were previously included in the source category.

The HCl Production NESHAP covers sources located at major sources of HAP emissions. HCl production facilities are typically co-located at plant sites that include various other chemical manufacturing processes such as pesticide or organic chemical manufacturing. The HCl production facility is the basic unit defined in the NESHAP. Specifically, the rule defines an HCl production facility as the collection of unit operations and equipment associated with the production of liquid HCl product of 30 weight percent or greater. The production of liquid HCl product occurs through the absorption of gaseous HCl into either water or an aqueous HCl solution. The HCl production facility includes HCl storage tanks (as defined in 40 CFR 63.9075), HCl transfer operations that load the HCl product into a tank truck, rail car, ship, or barge, and equipment leaks. A plant site could have several separate and distinct HCl production facilities. The affected source includes all HCl production facilities at the same site.

An HCl production facility begins at the point where a gaseous stream containing HCl [2] enters an absorber and ends at the point where the liquid HCl product is loaded into a tank truck, rail car, ship, or barge, at the point the HCl product enters another process on the plant site, or at the point the HCl product leaves the plant site via pipeline. The gaseous stream leaving the absorption column contains HCl that was not absorbed into the liquid in the tower and any Cl_2 present in the inlet stream. If the outlet stream is directly discharged to the atmosphere or if it is routed through other control devices before being discharged to the atmosphere, it is considered an HCl process vent from an HCl production facility. If the outlet stream is routed (or recycled) to another process, it is not regulated under the HCl Production NESHAP, but could be regulated under a separate NESHAP related to the process to which it is routed. For example, if an HCl process vent emission stream is routed to a hazardous waste combustor regulated under 40 CFR part 63, subpart EEE, as supplemental combustion air, that process vent stream is subject to 40 CFR part 63, subpart EEE rather than the HCl Production NESHAP.

[2] For purposes of the HCl Production NESHAP, how the gaseous HCl is produced does not affect applicability of the rule to the source. The source category only addresses the production of liquid HCl.

C. What data collection activities were conducted to support this action?

The EPA used a variety of resources to obtain data about facilities and their emissions for use in our risk assessment. We used the EPA's Enforcement and Compliance History Online (ECHO) database to develop a list of potentially subject facilities. Using this list, we searched state environmental agency websites and correspondence with industry to obtain copies of title V permits to confirm whether facilities have HCl production subject to the NESHAP. Once the facility list was finalized, the EPA used the 2014 National Emissions Inventory (NEI) to get emissions data for each facility. We compared the NEI data to title V permits to provide additional information regarding the applicability of the HCl Production NESHAP. There were some instances in which sources listed in title V permits did not include HAP emissions in the NEI. As discussed in the memorandum titled *HCl RTR Modeling File Data Source Documentation,* which is available in the docket for this action, these gaps were filled using average data from other emission points for which data were available. Further discussion of the methodology used to develop the emissions dataset for the risk assessment can be found in the memorandum titled *HCl RTR Modeling File Data Source Documentation,* which is available in the docket for this action. Industry representatives provided data corrections where facility ownership or emission point parameters from the NEI were incorrect.

D. What other relevant background information and data are available?

We used information from the Reasonably Available Control Technology (RACT), Best Available Control Technology (BACT), and Lowest Achievable Emission Rate (LAER) Clearinghouse (RBLC) database, reviewed title V permits for each HCl production facility, and reviewed regulatory actions related to emissions controls at similar sources that could be applicable to HCl production. We reviewed the RBLC to identify potential additional control technologies. No additional control technologies applicable to HCl production were found using the RBLC. Additional information related to the original promulgation and subsequent amendments of the NESHAP is available in Docket ID No. EPA–HQ–OAR–2002–0057.

III. Analytical Procedures and Decision-Making

In this section, we describe the analyses performed to support the proposed decisions for the RTR and other issues addressed in this proposal.

A. How do we consider risk in our decision-making?

As discussed in section II.A of this preamble and in the Benzene NESHAP, in evaluating and developing standards under CAA section 112(f)(2), we apply a two-step approach to determine whether or not risks are acceptable and to determine if the standards provide an ample margin of safety to protect public health. As explained in the Benzene NESHAP, ''the first step judgment on acceptability cannot be reduced to any single factor'' and, thus, ''[t]he Administrator believes that the acceptability of risk under section 112 is best judged on the basis of a broad set of health risk measures and information.'' 54 FR 38046, September 14, 1989. Similarly, with regard to the ample margin of safety determination, ''the Agency again considers all of the health risk and other health information considered in the first step. Beyond that information, additional factors relating to the appropriate level of control will also be considered, including cost and economic impacts of controls, technological feasibility, uncertainties, and any other relevant factors.'' *Id.*

The Benzene NESHAP approach provides flexibility regarding factors the EPA may consider in making determinations and how the EPA may weigh those factors for each source category. The EPA conducts a risk assessment that provides estimates of the MIR posed by the HAP emissions from each source in the source category, the hazard index (HI) for chronic exposures to HAP with the potential to cause noncancer health effects, and the hazard quotient (HQ) for acute exposures to HAP with the potential to cause noncancer health effects.[3] The assessment also provides estimates of the distribution of cancer risk within the exposed populations, cancer incidence, and an evaluation of the potential for an adverse environmental effect. The scope of the EPA's risk analysis is consistent with the EPA's response to comments on our policy under the Benzene NESHAP where the EPA explained that:

> [t]he policy chosen by the Administrator permits consideration of multiple measures of health risk. Not only can the MIR figure be considered, but also incidence, the presence of non-cancer health effects, and the uncertainties of the risk estimates. In this way, the effect on the most exposed individuals can be reviewed as well as the impact on the general public. These factors can then be weighed in each individual case. This approach complies with the *Vinyl Chloride* mandate that the Administrator ascertain an acceptable level of risk to the public by employing his expertise to assess available data. It also complies with the Congressional intent behind the CAA, which did not exclude the use of any particular measure of public health risk from the EPA's consideration with respect to CAA section 112 regulations, and thereby implicitly permits consideration of any and all measures of health risk which the Administrator, in his judgment, believes are appropriate to determining what will 'protect the public health'.

See 54 FR 38057, September 14, 1989. Thus, the level of the MIR is only one factor to be weighed in determining acceptability of risk. The Benzene NESHAP explained that ''an MIR of approximately one in 10 thousand should ordinarily be the upper end of the range of acceptability. As risks increase above this benchmark, they become presumptively less acceptable under CAA section 112, and would be weighed with the other health risk measures and information in making an overall judgment on acceptability. Or, the Agency may find, in a particular case, that a risk that includes MIR less than the presumptively acceptable level is unacceptable in the light of other health risk factors.'' *Id.* at 38045. Similarly, with regard to the ample margin of safety analysis, the EPA stated in the Benzene NESHAP that: ''EPA believes the relative weight of the many factors that can be considered in selecting an ample margin of safety can only be determined for each specific source category. This occurs mainly because technological and economic factors (along with the health-related factors) vary from source category to source category.'' *Id.* at 38061. We also consider the uncertainties associated with the various risk analyses, as discussed earlier in this preamble, in our determinations of acceptability and ample margin of safety.

The EPA notes that it has not considered certain health information to date in making residual risk determinations. At this time, we do not attempt to quantify the HAP risk that may be associated with emissions from other facilities that do not include the source category under review, mobile source emissions, natural source emissions, persistent environmental pollution, or atmospheric transformation in the vicinity of the sources in the category.

The EPA understands the potential importance of considering an individual's total exposure to HAP in addition to considering exposure to HAP emissions from the source category and facility. We recognize that such consideration may be particularly important when assessing noncancer risk, where pollutant-specific exposure health reference levels (*e.g.,* reference concentrations (RfCs)) are based on the assumption that thresholds exist for adverse health effects. For example, the EPA recognizes that, although exposures attributable to emissions from a source category or facility alone may not indicate the potential for increased risk of adverse noncancer health effects in a population, the exposures resulting from emissions from the facility in combination with emissions from all of the other sources (*e.g.,* other facilities) to which an individual is exposed may be sufficient to result in increased risk of adverse noncancer health effects. In May 2010, the Science Advisory Board (SAB) advised the EPA ''that RTR assessments will be most useful to decision makers and communities if results are presented in the broader context of aggregate and cumulative risks, including background concentrations and contributions from other sources in the area.'' [4]

In response to the SAB recommendations, the EPA incorporates

[3] The MIR is defined as the cancer risk associated with a lifetime of exposure at the highest concentration of HAP where people are likely to live. The HQ is the ratio of the potential exposure to the HAP to the level at or below which no adverse chronic noncancer effects are expected; the HI is the sum of HQs for HAP that affect the same target organ or organ system.

[4] Recommendations of the SAB RTR Panel are provided in their report, which is available at: *http://yosemite.epa.gov/sab/sabproduct.nsf/4AB3966E263D943A8525771F00668381/$File/EPA-SAB-10-007-unsigned.pdf.*

cumulative risk analyses into its RTR risk assessments, including those reflected in this proposal. The Agency (1) conducts facility-wide assessments, which include source category emission points, as well as other emission points within the facilities; (2) combines exposures from multiple sources in the same category that could affect the same individuals; and (3) for some persistent and bioaccumulative pollutants, analyzes the ingestion route of exposure. In addition, the RTR risk assessments consider aggregate cancer risk from all carcinogens and aggregated noncancer HQs for all noncarcinogens affecting the same target organ or target organ system.

Although we are interested in placing source category and facility-wide HAP risk in the context of total HAP risk from all sources combined in the vicinity of each source, we are concerned about the uncertainties of doing so. Estimates of total HAP risk from emission sources other than those that we have studied in depth during this RTR review would have significantly greater associated uncertainties than the source category or facility-wide estimates. Such aggregate or cumulative assessments would compound those uncertainties, making the assessments too unreliable.

B. How do we perform the technology review?

Our technology review focuses on the identification and evaluation of developments in practices, processes, and control technologies that have occurred since the MACT standards were promulgated. Where we identify such developments, we analyze their technical feasibility, estimated costs, energy implications, and non-air environmental impacts. We also consider the emission reductions associated with applying each development. This analysis informs our decision of whether it is ''necessary'' to revise the emissions standards. In addition, we consider the appropriateness of applying controls to new sources versus retrofitting existing sources. For this exercise, we consider any of the following to be a ''development'':

- Any add-on control technology or other equipment that was not identified and considered during development of the original MACT standards;
- Any improvements in add-on control technology or other equipment (that were identified and considered during development of the original MACT standards) that could result in additional emissions reduction;
- Any work practice or operational procedure that was not identified or considered during development of the original MACT standards;
- Any process change or pollution prevention alternative that could be broadly applied to the industry and that was not identified or considered during development of the original MACT standards; and
- Any significant changes in the cost (including cost effectiveness) of applying controls (including controls the EPA considered during the development of the original MACT standards).

In addition to reviewing the practices, processes, and control technologies that were considered at the time we originally developed the NESHAP, we review a variety of data sources in our investigation of potential practices, processes, or controls to consider. See sections II.C and II.D of this preamble for information on the specific data sources that were reviewed as part of the technology review.

C. How do we estimate post-MACT risk posed by the source category?

In this section, we provide a complete description of the types of analyses that we generally perform during the risk assessment process. In some cases, we do not perform a specific analysis because it is not relevant. For example, in the absence of emissions of HAP known to be persistent and bioaccumulative in the environment (PB–HAP), we would not perform a multipathway exposure assessment. Where we do not perform an analysis, we state that we do not and provide the reason. While we present all of our risk assessment methods, we only present risk assessment results for the analyses actually conducted (see section IV.B of this preamble).

The EPA conducts a risk assessment that provides estimates of the MIR for cancer posed by the HAP emissions from each source in the source category, the HI for chronic exposures to HAP with the potential to cause noncancer health effects, and the HQ for acute exposures to HAP with the potential to cause noncancer health effects. The assessment also provides estimates of the distribution of cancer risk within the exposed populations, cancer incidence, and an evaluation of the potential for an adverse environmental effect. The seven sections that follow this paragraph describe how we estimated emissions and conducted the risk assessment. The docket for this rulemaking contains the following document which provides more information on the risk assessment inputs and models: *Residual Risk Assessment for the Hydrochloric Acid Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule.* The methods used to assess risk (as described in the seven primary steps below) are consistent with those described by the EPA in the document reviewed by a panel of the EPA's SAB in 2009,[5] and described in the SAB review report issued in 2010. They are also consistent with the key recommendations contained in that report.

1. How did we estimate actual emissions and identify the emissions release characteristics?

As discussed in the memorandum titled, *HCl RTR Modeling File Data Source Documentation,* emissions data for sources subject to the HCl Production NESHAP were gathered primarily from the 2014 NEI. We compared the NEI data for each facility to title V permits to determine which emission points listed in the NEI are subject to the HCl Production NESHAP and made corrections when data were missing from the NEI or appeared to be incorrect. For example, if the flow rate for an emission point was missing, we calculated this release characteristic using the stack velocity and cross-sectional area of the stack. Each correction we made is discussed in the memorandum and supporting documents, available in the docket for this action. Industry provided a few corrections of facility ownership and emission point parameters, which are also available in the docket for this action.

2. How did we estimate MACT-allowable emissions?

The available emissions data in the RTR emissions dataset include estimates of the mass of HAP emitted during a specified annual timeperiod. These ''actual'' emission levels are often lower than the emission levels allowed under the requirements of the current MACT standards. The emissions allowed under the MACT standards are referred to as the ''MACT-allowable'' emissions. We discussed the consideration of both MACT-allowable and actual emissions in the final Coke Oven Batteries RTR (70 FR 19998–19999, April 15, 2005) and in the proposed and final Hazardous Organic NESHAP RTR (71 FR 34428, June 14, 2006, and 71 FR 76609,

[5] U.S. EPA. *Risk and Technology Review (RTR) Risk Assessment Methodologies: For Review by the EPA's Science Advisory Board with Case Studies—MACT I Petroleum Refining Sources and Portland Cement Manufacturing,* June 2009. EPA–452/R–09–006. *https://www3.epa.gov/airtoxics/rrisk/rtrpg.html.*

December 21, 2006, respectively). In those actions, we noted that assessing the risk at the MACT-allowable level is inherently reasonable since that risk reflects the maximum level facilities could emit and still comply with national emission standards. We also explained that it is reasonable to consider actual emissions, where such data are available, in both steps of the risk analysis, in accordance with the Benzene NESHAP approach (54 FR 38044, September 14, 1989).

We were unable to use the NEI data to calculate allowable emissions based on the concentration-based standard. We attempted to calculate allowable emission rates using the flow rates in the NEI and the concentration based standards for HCl and Cl_2. For a number of sources, the calculated allowable emission values were substantially lower than actual emissions. This discrepancy could be due to incorrect flow rates in the NEI, conservatively high estimates of actual emissions, or actual emission estimates including HCl and Cl_2 emissions from sources not subject to the HCl NESHAP. We determined these estimates of allowable emission rates would not be appropriate. Instead, we estimated allowable emission rates by applying a factor of ten to actual emissions for process vents, material storage and loading, and storage tanks. Based on our engineering judgement, this factor of ten provides a very conservative estimate of allowable emission rates. Indeed, correspondence with industry suggests the allowable emission rates estimated using this method may be higher than facility-wide permitted emission rates for some facilities. Facilities typically operate below the level of the standard to provide a buffer between actual emission levels and the level of the standard. While we were not able to calculate the exact magnitude of this buffer for this source category, we believe that using a multiplier of 10 ensures we are not underestimating allowable emission rates. For more detail about the MACT-allowable emission levels, see the memorandum, *HCl RTR Modeling File Data Source Documentation,* which is available in the docket for this action. The standard for equipment leaks requires facilities to operate a leak detection and repair (LDAR) program. Consistent with other source categories with LDAR standards, we estimated that allowable emissions for equipment leaks are equal to actual emissions, since both actual and allowable emissions reflect the use of an LDAR program. Our estimates of actual and allowable emissions are further discussed in the memorandum titled *HCl RTR Modeling File Data Source Documentation.*

3. How do we conduct dispersion modeling, determine inhalation exposures, and estimate individual and population inhalation risk?

Both long-term and short-term inhalation exposure concentrations and health risk from the source category addressed in this proposal were estimated using the Human Exposure Model (HEM–3).[6] The HEM–3 performs three primary risk assessment activities: (1) Conducting dispersion modeling to estimate the concentrations of HAP in ambient air, (2) estimating long-term and short-term inhalation exposures to individuals residing within 50 kilometers (km) of the modeled sources, and (3) estimating individual and population-level inhalation risk using the exposure estimates and quantitative dose-response information.

a. Dispersion Modeling

The air dispersion model AERMOD, used by the HEM–3 model, is one of the EPA's preferred models for assessing air pollutant concentrations from industrial facilities.[7] To perform the dispersion modeling and to develop the preliminary risk estimates, HEM–3 draws on three data libraries. The first is a library of meteorological data, which is used for dispersion calculations. This library includes 1 year (2016) of hourly surface and upper air observations from 824 meteorological stations, selected to provide coverage of the United States and Puerto Rico. A second library of United States Census Bureau census block[8] internal point locations and populations provides the basis of human exposure calculations (U.S. Census, 2010). In addition, for each census block, the census library includes the elevation and controlling hill height, which are also used in dispersion calculations. A third library of pollutant-specific dose-response values is used to estimate health risk. These are discussed below.

b. Risk From Chronic Exposure to HAP

In developing the risk assessment for chronic exposures, we use the estimated annual average ambient air concentrations of each HAP emitted by each source in the source category. The HAP air concentrations at each nearby census block centroid located within 50 km of the facility are a surrogate for the chronic inhalation exposure concentration for all the people who reside in that census block. A distance of 50 km is consistent with both the analysis supporting the 1989 Benzene NESHAP (54 FR 38044, September 14, 1989) and the limitations of Gaussian dispersion models, including AERMOD.

For each facility, we calculate the MIR as the cancer risk associated with a continuous lifetime (24 hours per day, 7 days per week, 52 weeks per year, 70 years) exposure to the maximum concentration at the centroid of each inhabited census block. We calculate individual cancer risk by multiplying the estimated lifetime exposure to the ambient concentration of each HAP (in micrograms per cubic meter ($\mu g/m^3$)) by its unit risk estimate (URE). The URE is an upper-bound estimate of an individual's incremental risk of contracting cancer over a lifetime of exposure to a concentration of 1 microgram of the pollutant per cubic meter of air. For residual risk assessments, we generally use UREs from the EPA's Integrated Risk Information System (IRIS). For carcinogenic pollutants without IRIS values, we look to other reputable sources of cancer dose-response values, often using California EPA (CalEPA) UREs, where available. In cases where new, scientifically credible dose-response values have been developed in a manner consistent with EPA guidelines and have undergone a peer review process similar to that used by the EPA, we may use such dose-response values in place of, or in addition to, other values, if appropriate. The pollutant-specific dose-response values used to estimate health risk are available at *https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants.*

To estimate individual lifetime cancer risks associated with exposure to HAP emissions from each facility in the source category, we sum the risks for each of the carcinogenic HAP[9] emitted

[6] For more information about HEM–3, go to *https://www.epa.gov/fera/risk-assessment-and-modeling-human-exposure-model-hem.*

[7] U.S. EPA. Revision to the *Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions* (70 FR 68218, November 9, 2005).

[8] A census block is the smallest geographic area for which census statistics are tabulated.

[9] The EPA's 2005 *Guidelines for Carcinogen Risk Assessment* classifies carcinogens as: ''carcinogenic to humans,'' ''likely to be carcinogenic to humans,'' and ''suggestive evidence of carcinogenic potential.'' These classifications also coincide with the terms ''known carcinogen, probable carcinogen, and possible carcinogen,'' respectively, which are the terms advocated in the EPA's *Guidelines for Carcinogen Risk Assessment,* published in 1986 (51 FR 33992, September 24, 1986). In August 2000, the document, *Supplemental Guidance for Conducting Health Risk Assessment of Chemical Mixtures*

by the modeled facility. We estimate cancer risk at every census block within 50 km of every facility in the source category. The MIR is the highest individual lifetime cancer risk estimated for any of those census blocks. In addition to calculating the MIR, we estimate the distribution of individual cancer risks for the source category by summing the number of individuals within 50 km of the sources whose estimated risk falls within a specified risk range. We also estimate annual cancer incidence by multiplying the estimated lifetime cancer risk at each census block by the number of people residing in that block, summing results for all of the census blocks, then dividing this result by a 70-year lifetime.

To assess the risk of noncancer health effects from chronic exposure to HAP, we calculate either an HQ or a target organ-specific hazard index (TOSHI). We calculate an HQ when a single noncancer HAP is emitted. Where more than one noncancer HAP is emitted, we sum the HQ for each of the HAP that affects a common target organ or target organ system to obtain a TOSHI. The HQ is the estimated exposure divided by the chronic noncancer dose-response value, which is a value selected from one of several sources. The preferred chronic noncancer dose-response value is the EPA RfC defined as ''an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime'' (*https://iaspub.epa.gov/sor_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&vocabName=IRIS%20Glossary*). In cases where an RfC from the EPA's IRIS is not available or where the EPA determines that using a value other than the RfC is appropriate, the chronic noncancer dose-response value can be a value from the following prioritized sources, which define their dose-response values similarly to the EPA: (1) The Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Level (*http://www.atsdr.cdc.gov/mrls/index.asp*); (2) the CalEPA Chronic Reference Exposure Level (REL) (*http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0*); or (3), as noted above, a scientifically credible dose-response value that has been developed in a manner consistent with EPA guidelines and has undergone a peer review process similar to that used by the EPA. The pollutant-specific dose-response values used to estimate health risks are available at *https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants.*

c. Risk From Acute Exposure to HAP That May Cause Health Effects Other Than Cancer

For each HAP for which appropriate acute inhalation dose-response values are available, the EPA also assesses the potential health risks due to acute exposure. For these assessments, the EPA makes conservative assumptions about emission rates, meteorology, and exposure location. We use the peak hourly emission rate,[10] worst-case dispersion conditions, and, in accordance with our mandate under section 112 of the CAA, the point of highest off-site exposure to assess the potential risk to the maximally exposed individual.

To characterize the potential health risks associated with estimated acute inhalation exposures to a HAP, we generally use multiple acute dose-response values, including acute RELs, acute exposure guideline levels (AEGLs), and emergency response planning guidelines (ERPG) for 1-hour exposure durations, if available, to calculate acute HQs. The acute HQ is calculated by dividing the estimated acute exposure by the acute dose-response value. For each HAP for which acute dose-response values are available, the EPA calculates acute HQs.

An acute REL is defined as ''the concentration level at or below which no adverse health effects are anticipated for a specified exposure duration.'' [11] Acute RELs are based on the most sensitive, relevant, adverse health effect reported in the peer-reviewed medical and toxicological literature. They are designed to protect the most sensitive individuals in the population through the inclusion of margins of safety. Because margins of safety are incorporated to address data gaps and uncertainties, exceeding the REL does not automatically indicate an adverse health impact. AEGLs represent threshold exposure limits for the general public and are applicable to emergency exposures ranging from 10 minutes to 8 hours.[12] They are guideline levels for ''once-in-a-lifetime, short-term exposures to airborne concentrations of acutely toxic, high-priority chemicals.'' *Id.* at 21. The AEGL–1 is specifically defined as ''the airborne concentration (expressed as ppm (parts per million) or mg/m^3 (milligrams per cubic meter)) of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.'' The document also notes that ''Airborne concentrations below AEGL–1 represent exposure levels that can produce mild and progressively increasing but transient and nondisabling odor, taste, and sensory irritation or certain asymptomatic, nonsensory effects.'' *Id.* AEGL–2 are defined as ''the airborne concentration (expressed as parts per million or milligrams per cubic meter) of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.'' *Id.*

ERPGs are ''developed for emergency planning and are intended as health-based guideline concentrations for

(EPA/630/R–00/002), was published as a supplement to the 1986 document. Copies of both documents can be obtained from *https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=20533&CFID=70315376&CFTOKEN=71597944.* Summing the risk of these individual compounds to obtain the cumulative cancer risk is an approach that was recommended by the EPA's SAB in their 2002 peer review of the EPA's National Air Toxics Assessment (NATA) titled *NATA—Evaluating the National-scale Air Toxics Assessment 1996 Data—an SAB Advisory,* available at *http://yosemite.epa.gov/sab/sabproduct.nsf/214C6E915BB04E14852570CA007A682C/$File/ecadv02001.pdf.*

[10] In the absence of hourly emission data, we develop estimates of maximum hourly emission rates by multiplying the average actual annual emissions rates by a factor (either a category-specific factor or a default factor of 10) to account for variability. This is documented in *Residual Risk Assessment Hydrochloric Acid Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* and in Appendix 5 of the report: *Analysis of Data on Short-term Emission Rates Relative to Long-term Emission Rates.* Both are available in the docket for this rulemaking.

[11] CalEPA issues acute RELs as part of its Air Toxics Hot Spots Program, and the 1-hour and 8-hour values are documented in *Air Toxics Hot Spots Program Risk Assessment Guidelines, Part I, The Determination of Acute Reference Exposure Levels for Airborne Toxicants,* which is available at *http://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary.*

[12] National Academy of Sciences, 2001. *Standing Operating Procedures for Developing Acute Exposure Levels for Hazardous Chemicals,* page 2. Available at *https://www.epa.gov/sites/production/files/2015-09/documents/sop_final_standing_operating_procedures_2001.*pdf. Note that the National Advisory Committee for Acute Exposure Guideline Levels for Hazardous Substances ended in October 2011, but the AEGL program continues to operate at the EPA and works with the National Academies to publish final AEGLs (*https://www.epa.gov/aegl*).

single exposures to chemicals.'' [13] *Id.* at 1. The ERPG–1 is defined as ''the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to 1 hour without experiencing other than mild transient adverse health effects or without perceiving a clearly defined, objectionable odor.'' *Id.* at 2. Similarly, the ERPG–2 is defined as ''the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action.'' *Id.* at 1.

An acute REL for 1-hour exposure durations is typically lower than its corresponding AEGL–1 and ERPG–1. Even though their definitions are slightly different, AEGL–1s are often the same as the corresponding ERPG–1s, and AEGL–2s are often equal to ERPG–2s. The maximum HQs from our acute inhalation screening risk assessment typically result when we use the acute REL for a HAP. In cases where the maximum acute HQ exceeds 1, we also report the HQ based on the next highest acute dose-response value (usually the AEGL–1 and/or the ERPG–1).

For this source category, we used the default factor of 10 for the acute inhalation screening and refined screening assessment. In our acute inhalation screening risk assessment, acute impacts are deemed negligible for HAP for which acute HQs are less than or equal to 1 (even under the conservative assumptions of the screening assessment), and no further analysis is performed for these HAP. In cases where an acute HQ from the screening step is greater than 1, we consider additional site-specific data to develop a more refined estimate of the potential for acute exposures of concern. For this source category, the data refinements consisted of determining the highest HQ value that occurs outside facility boundaries. These refinements are discussed more fully in the *Residual Risk Assessment for the Hydrochloric Acid Production Source Category in Support of the Risk and Technology Review 2018 Proposed Rule,* which is available in the docket for this source category.

[13] *ERPGS Procedures and Responsibilities,* March 2014. American Industrial Hygiene Association. Available at: *https://www.aiha.org/get-involved/AIHAGuidelineFoundation/EmergencyResponsePlanningGuidelines/Documents/ERPG%20Committee%20Standard%20Operating%20Procedures%20%20-%20March%202014%20Revision%20%28Updated%2010-2-2014%29.pdf.*

4. How do we conduct the multipathway exposure and risk screening assessment?

The EPA conducts a tiered screening assessment examining the potential for significant human health risks due to exposures via routes other than inhalation (*i.e.,* ingestion). We first determine whether any sources in the source category emit any PB–HAP, as identified in the EPA's Air Toxics Risk Assessment Library (See Volume 1, Appendix D, at *http://www2.epa.gov/fera/risk-assessment-and-modeling-air-toxics-risk-assessment-reference-library*).

For the HCl Production source category, we did not identify emissions of any PB–HAP. Because we did not identify PB–HAP emissions, no further evaluation of multipathway risk was conducted for this source category.

5. How do we conduct the environmental risk screening assessment?

a. Adverse Environmental Effect, Environmental HAP, and Ecological Benchmarks

The EPA conducts a screening assessment to examine the potential for an adverse environmental effect as required under section 112(f)(2)(A) of the CAA. Section 112(a)(7) of the CAA defines ''adverse environmental effect'' as ''any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas.''

The EPA focuses on eight HAP, which are referred to as ''environmental HAP,'' in its screening assessment: Six PB–HAP and two acid gases. The PB–HAP included in the screening assessment are arsenic compounds, cadmium compounds, dioxins/furans, polycyclic organic matter (POM), mercury (both inorganic mercury and methyl mercury), and lead compounds. The acid gases included in the screening assessment are HCl and hydrogen fluoride (HF).

HAP that persist and bioaccumulate are of particular environmental concern because they accumulate in the soil, sediment, and water. The acid gases, HCl and HF, are included due to their well-documented potential to cause direct damage to terrestrial plants. In the environmental risk screening assessment, we evaluate the following four exposure media: Terrestrial soils, surface water bodies (includes water-column and benthic sediments), fish consumed by wildlife, and air. Within these four exposure media, we evaluate nine ecological assessment endpoints, which are defined by the ecological entity and its attributes. For PB–HAP (other than lead), both community-level and population-level endpoints are included. For acid gases, the ecological assessment evaluated is terrestrial plant communities.

An ecological benchmark represents a concentration of HAP that has been linked to a particular environmental effect level. For each environmental HAP, we identified the available ecological benchmarks for each assessment endpoint. We identified, where possible, ecological benchmarks at the following effect levels: Probable effect levels, lowest-observed-adverse-effect level, and no-observed-adverse-effect level. In cases where multiple effect levels were available for a particular PB–HAP and assessment endpoint, we use all of the available effect levels to help us to determine whether ecological risks exist and, if so, whether the risks could be considered significant and widespread.

For further information on how the environmental risk screening assessment was conducted, including a discussion of the risk metrics used, how the environmental HAP were identified, and how the ecological benchmarks were selected, see Appendix 9 of the *Residual Risk Assessment for the Hydrochloric Acid Production Source Category in Support of the Risk and Technology Review 2018 Proposed Rule,* which is available in the docket for this action.

b. Environmental Risk Screening Methodology

For the environmental risk screening assessment, the EPA first determined whether any facilities in the HCl Production source category emitted any of the environmental HAP. For the HCl Production source category, we identified emissions of HCl. Because one or more of the environmental HAP evaluated (HCl) is emitted by at least one facility in the source category, we proceeded to the second step of the evaluation.

c. PB–HAP Methodology

The environmental screening assessment includes six PB–HAP, arsenic compounds, cadmium compounds, dioxins/furans, POM, mercury (both inorganic mercury and methyl mercury), and lead compounds. With the exception of lead, the environmental risk screening assessment for PB–HAP consists of three tiers. The first tier of the environmental

risk screening assessment uses the same health-protective conceptual model that is used for the Tier 1 human health screening assessment. TRIM.FaTE model simulations were used to back-calculate Tier 1 screening threshold emission rates. The screening threshold emission rates represent the emission rate in tpy that results in media concentrations at the facility that equal the relevant ecological benchmark. To assess emissions from each facility in the category, the reported emission rate for each PB–HAP was compared to the Tier 1 screening threshold emission rate for that PB–HAP for each assessment endpoint and effect level. If emissions from a facility do not exceed the Tier 1 screening threshold emission rate, the facility ''passes'' the screening assessment, and, therefore, is not evaluated further under the screening approach. If emissions from a facility exceed the Tier 1 screening threshold emission rate, we evaluate the facility further in Tier 2.

In Tier 2 of the environmental screening assessment, the screening threshold emission rates are adjusted to account for local meteorology and the actual location of lakes in the vicinity of facilities that did not pass the Tier 1 screening assessment. For soils, we evaluate the average soil concentration for all soil parcels within a 7.5-km radius for each facility and PB–HAP. For the water, sediment, and fish tissue concentrations, the highest value for each facility for each pollutant is used. If emission concentrations from a facility do not exceed the Tier 2 screening threshold emission rate, the facility ''passes'' the screening assessment and typically is not evaluated further. If emissions from a facility exceed the Tier 2 screening threshold emission rate, we evaluate the facility further in Tier 3.

Like in the multipathway human health risk assessment, in Tier 3 of the environmental screening assessment, we examine the suitability of the lakes around the facilities to support life and remove those that are not suitable (*e.g.,* lakes that have been filled in or are industrial ponds), adjust emissions for plume-rise, and conduct hour-by-hour time-series assessments. If these Tier 3 adjustments to the screening threshold emission rates still indicate the potential for an adverse environmental effect (*i.e.,* facility emission rate exceeds the screening threshold emission rate), we may elect to conduct a more refined assessment using more site-specific information. If, after additional refinement, the facility emission rate still exceeds the screening threshold emission rate, the facility may have the potential to cause an adverse environmental effect.

To evaluate the potential for an adverse environmental effect from lead, we compared the average modeled air concentrations (from HEM–3) of lead around each facility in the source category to the level of the secondary National Ambient Air Quality Standards (NAAQS) for lead. The secondary lead NAAQS is a reasonable means of evaluating environmental risk because it is set to provide substantial protection against adverse welfare effects which can include ''effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.''

d. Acid Gas Environmental Risk Methodology

The environmental screening assessment for acid gases evaluates the potential phytotoxicity and reduced productivity of plants due to chronic exposure to HF and HCl. The environmental risk screening methodology for acid gases is a single-tier screening assessment that compares modeled ambient air concentrations (from AERMOD) to the ecological benchmarks for each acid gas. To identify a potential adverse environmental effect (as defined in section 112(a)(7) of the CAA) from emissions of HF and HCl, we evaluate the following metrics: The size of the modeled area around each facility that exceeds the ecological benchmark for each acid gas, in acres and km^2; the percentage of the modeled area around each facility that exceeds the ecological benchmark for each acid gas; and the area-weighted average screening value around each facility (calculated by dividing the area-weighted average concentration over the 50-km modeling domain by the ecological benchmark for each acid gas). For further information on the environmental screening assessment approach, see Appendix 9 of the *Residual Risk Assessment for the Hydrochloric Acid Production Source Category in Support of the Risk and Technology Review 2018 Proposed Rule,* which is available in the docket for this action.

6. How do we conduct facility-wide assessments?

To put the source category risks in context, we typically examine the risks from the entire ''facility,'' where the facility includes all HAP-emitting operations within a contiguous area and under common control. In other words, we examine the HAP emissions not only from the source category emission points of interest, but also emissions of HAP from all other emission sources at the facility for which we have data. For this source category, we conducted the facility-wide assessment using a dataset compiled from the 2014 NEI. The source category records of that NEI dataset were removed, evaluated, and updated as described in section II.C of this preamble: What data collection activities were conducted to support this action? Once a quality assured source category dataset was available, it was placed back with the remaining records from the NEI for that facility. The facility-wide file was then used to analyze risks due to the inhalation of HAP that are emitted ''facility-wide'' for the populations residing within 50 km of each facility, consistent with the methods used for the source category analysis described above. For these facility-wide risk analyses, the modeled source category risks were compared to the facility-wide risks to determine the portion of the facility-wide risks that could be attributed to the source category addressed in this proposal. We also specifically examined the facility that was associated with the highest estimate of risk and determined the percentage of that risk attributable to the source category of interest. The *Residual Risk Assessment for the Hydrochloric Acid Production Source Category in Support of the Risk and Technology Review 2018 Proposed Rule,* available through the docket for this action, provides the methodology and results of the facility-wide analyses, including all facility-wide risks and the percentage of source category contribution to facility-wide risks.

For this source category, we conducted the facility-wide assessment using a dataset that the EPA compiled from the 2014 NEI. We used the NEI data for the facility and did not adjust any category or ''non-category'' data. Therefore, there could be differences in the dataset from that used for the source category assessments described in this preamble. We analyzed risks due to the inhalation of HAP that are emitted ''facility-wide'' for the populations residing within 50 km of each facility, consistent with the methods used for the source category analysis described above. For these facility-wide risk analyses, we made a reasonable attempt to identify the source category risks, and these risks were compared to the facility-wide risks to determine the portion of facility-wide risks that could be attributed to the source category

addressed in this proposal. We also specifically examined the facility that was associated with the highest estimate of risk and determined the percentage of that risk attributable to the source category of interest. The *Residual Risk Assessment for the Hydrochloric Acid Production Source Category in Support of the Risk and Technology Review 2018 Proposed Rule,* available through the docket for this action, provides the methodology and results of the facility-wide analyses, including all facility-wide risks and the percentage of source category contribution to facility-wide risks.

7. How do we consider uncertainties in risk assessment?

Uncertainty and the potential for bias are inherent in all risk assessments, including those performed for this proposal. Although uncertainty exists, we believe that our approach, which used conservative tools and assumptions, ensures that our decisions are health and environmentally protective. A brief discussion of the uncertainties in the RTR emissions dataset, dispersion modeling, inhalation exposure estimates, and dose-response relationships follows below. Also included are those uncertainties specific to our acute screening assessments, multipathway screening assessments, and our environmental risk screening assessments. A more thorough discussion of these uncertainties is included in the *Residual Risk Assessment for the Hydrochloric Acid Production Source Category in Support of the Risk and Technology Review 2018 Proposed Rule,* which is available in the docket for this action. If a multipathway site-specific assessment was performed for this source category, a full discussion of the uncertainties associated with that assessment can be found in Appendix 11 of that document, *Site-Specific Human Health Multipathway Residual Risk Assessment Report.*

a. Uncertainties in the RTR Emissions Dataset

Although the development of the RTR emissions dataset involved quality assurance/quality control processes, the accuracy of emissions values will vary depending on the source of the data, the degree to which data are incomplete or missing, the degree to which assumptions made to complete the datasets are accurate, errors in emission estimates, and other factors. The emission estimates considered in this analysis generally are annual totals for certain years, and they do not reflect short-term fluctuations during the course of a year or variations from year to year. The estimates of peak hourly emission rates for the acute effects screening assessment were based on an emission adjustment factor applied to the average annual hourly emission rates, which are intended to account for emission fluctuations due to normal facility operations.

b. Uncertainties in Dispersion Modeling

We recognize there is uncertainty in ambient concentration estimates associated with any model, including the EPA's recommended regulatory dispersion model, AERMOD. In using a model to estimate ambient pollutant concentrations, the user chooses certain options to apply. For RTR assessments, we select some model options that have the potential to overestimate ambient air concentrations (*e.g.,* not including plume depletion or pollutant transformation). We select other model options that have the potential to underestimate ambient impacts (*e.g.,* not including building downwash). Other options that we select have the potential to either under or overestimate ambient levels (*e.g.,* meteorology and receptor locations). On balance, considering the directional nature of the uncertainties commonly present in ambient concentrations estimated by dispersion models, the approach we apply in the RTR assessments should yield unbiased estimates of ambient HAP concentrations. We also note that the selection of meteorology dataset location could have an impact on the risk estimates. As we continue to update and expand our library of meteorological station data used in our risk assessments, we expect to reduce this variability.

c. Uncertainties in Inhalation Exposure Assessment

Although every effort is made to identify all of the relevant facilities and emission points, as well as to develop accurate estimates of the annual emission rates for all relevant HAP, the uncertainties in our emission inventory likely dominate the uncertainties in the exposure assessment. Some uncertainties in our exposure assessment include human mobility, using the centroid of each census block, assuming lifetime exposure, and assuming only outdoor exposures. For most of these factors, there is neither an under nor overestimate when looking at the maximum individual risk or the incidence, but the shape of the distribution of risks may be affected. With respect to outdoor exposures, actual exposures may not be as high if people spend time indoors, especially for very reactive pollutants or larger particles. For all factors, we reduce uncertainty when possible. For example, with respect to census-block centroids, we analyze large blocks using aerial imagery and adjust locations of the block centroids to better represent the population in the blocks. We also add additional receptor locations where the population of a block is not well represented by a single location.

d. Uncertainties in Dose-Response Relationships

There are uncertainties inherent in the development of the dose-response values used in our risk assessments for cancer effects from chronic exposures and noncancer effects from both chronic and acute exposures. Some uncertainties are generally expressed quantitatively, and others are generally expressed in qualitative terms. We note, as a preface to this discussion, a point on dose-response uncertainty that is stated in the EPA's *2005 Guidelines for Carcinogen Risk Assessment;* namely, that ''the primary goal of EPA actions is protection of human health; accordingly, as an Agency policy, risk assessment procedures, including default options that are used in the absence of scientific data to the contrary, should be health protective'' (EPA's *2005 Guidelines for Carcinogen Risk Assessment,* page 1–7). This is the approach followed here as summarized in the next paragraphs.

Cancer UREs used in our risk assessments are those that have been developed to generally provide an upper bound estimate of risk. That is, they represent a ''plausible upper limit to the true value of a quantity'' (although this is usually not a true statistical confidence limit).[14] In some circumstances, the true risk could be as low as zero; however, in other circumstances the risk could be greater.[15] Chronic noncancer RfC and reference dose (RfD) values represent chronic exposure levels that are intended to be health-protective levels. To derive dose-response values that are intended to be ''without appreciable risk,'' the methodology relies upon an uncertainty factor (UF) approach (U.S. EPA, 1993 and 1994) which considers uncertainty, variability, and gaps in the available data. The UFs are applied to

[14] IRIS glossary (*https://ofmpub.epa.gov/sor_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&glossaryName=IRIS%20Glossary*).

[15] An exception to this is the URE for benzene, which is considered to cover a range of values, each end of which is considered to be equally plausible, and which is based on maximum likelihood estimates.

derive dose-response values that are intended to protect against appreciable risk of deleterious effects.

Many of the UFs used to account for variability and uncertainty in the development of acute dose-response values are quite similar to those developed for chronic durations. Additional adjustments are often applied to account for uncertainty in extrapolation from observations at one exposure duration (*e.g.,* 4 hours) to derive an acute dose-response value at another exposure duration (*e.g.,* 1 hour). Not all acute dose-response values are developed for the same purpose, and care must be taken when interpreting the results of an acute assessment of human health effects relative to the dose-response value or values being exceeded. Where relevant to the estimated exposures, the lack of acute dose-response values at different levels of severity should be factored into the risk characterization as potential uncertainties.

Uncertainty also exists in the selection of ecological benchmarks for the environmental risk screening assessment. We established a hierarchy of preferred benchmark sources to allow selection of benchmarks for each environmental HAP at each ecological assessment endpoint. We searched for benchmarks for three effect levels (*i.e.,* no-effects level, threshold effect level, and probable effect level), but not all combinations of ecological assessment/environmental HAP had benchmarks for all three effect levels. Where multiple effect levels were available for a particular HAP and assessment endpoint, we used all of the available effect levels to help us determine whether risk exists and whether the risk could be considered significant and widespread.

Although we make every effort to identify appropriate human health effect dose-response values for all pollutants emitted by the sources in this risk assessment, some HAP emitted by this source category are lacking dose-response assessments. Accordingly, these pollutants cannot be included in the quantitative risk assessment, which could result in quantitative estimates understating HAP risk. To help to alleviate this potential underestimate, where we conclude similarity with a HAP for which a dose-response value is available, we use that value as a surrogate for the assessment of the HAP for which no value is available. To the extent use of surrogates indicates appreciable risk, we may identify a need to increase priority for an IRIS assessment for that substance. We additionally note that, generally speaking, HAP of greatest concern due to environmental exposures and hazard are those for which dose-response assessments have been performed, reducing the likelihood of understating risk. Further, HAP not included in the quantitative assessment are assessed qualitatively and considered in the risk characterization that informs the risk management decisions, including consideration of HAP reductions achieved by various control options.

For a group of compounds that are unspeciated (*e.g.,* glycol ethers), we conservatively use the most protective dose-response value of an individual compound in that group to estimate risk. Similarly, for an individual compound in a group (*e.g.,* ethylene glycol diethyl ether) that does not have a specified dose-response value, we also apply the most protective dose-response value from the other compounds in the group to estimate risk.

e. Uncertainties in Acute Inhalation Screening Assessments

In addition to the uncertainties highlighted above, there are several factors specific to the acute exposure assessment that the EPA conducts as part of the risk review under section 112 of the CAA. The accuracy of an acute inhalation exposure assessment depends on the simultaneous occurrence of independent factors that may vary greatly, such as hourly emissions rates, meteorology, and the presence of humans at the location of the maximum concentration. In the acute screening assessment that we conduct under the RTR program, we assume that peak emissions from the source category and worst-case meteorological conditions co-occur, and, thus, resulting in maximum ambient concentrations. These two events are unlikely to occur at the same time, making these assumptions conservative. We then include the additional assumption that a person is located at this point during this same time period. For this source category, these assumptions would tend to be worst-case actual exposures as it is unlikely that a person would be located at the point of maximum exposure during the time when peak emissions and worst-case meteorological conditions occur simultaneously.

f. Uncertainties in the Multipathway and Environmental Risk Screening Assessments

For each source category, we generally rely on site-specific levels of PB–HAP or environmental HAP emissions to determine whether a refined assessment of the impacts from multipathway exposures is necessary or whether it is necessary to perform an environmental screening assessment. This determination is based on the results of a three-tiered screening assessment that relies on the outputs from models—TRIM.FaTE and AERMOD—that estimate environmental pollutant concentrations and human exposures for five PB–HAP (dioxins, POM, mercury, cadmium, and arsenic) and two acid gases (HCl and hydrogen chloride). For lead, we use AERMOD to determine ambient air concentrations, which are then compared to the secondary NAAQS standard for lead. Two important types of uncertainty associated with the use of these models in RTR risk assessments and inherent to any assessment that relies on environmental modeling are model uncertainty and input uncertainty.[16]

Model uncertainty concerns whether the model adequately represents the actual processes (*e.g.,* movement and accumulation) that might occur in the environment. For example, does the model adequately describe the movement of a pollutant through the soil? This type of uncertainty is difficult to quantify. However, based on feedback received from previous EPA SAB reviews and other reviews, we are confident that the models used in the screening assessments are appropriate and state-of-the-art for the multipathway and environmental screening risk assessments conducted in support of RTR.

Input uncertainty is concerned with how accurately the models have been configured and parameterized for the assessment at hand. For Tier 1 of the multipathway and environmental screening assessments, we configured the models to avoid underestimating exposure and risk. This was accomplished by selecting upper-end values from nationally representative datasets for the more influential parameters in the environmental model, including selection and spatial configuration of the area of interest, lake location and size, meteorology, surface water, soil characteristics, and structure of the aquatic food web. We also assume an ingestion exposure scenario and values for human exposure factors that represent reasonable maximum exposures.

In Tier 2 of the multipathway and environmental screening assessments,

[16] In the context of this discussion, the term ''uncertainty'' as it pertains to exposure and risk encompasses both *variability* in the range of expected inputs and screening results due to existing spatial, temporal, and other factors, as well as *uncertainty* in being able to accurately estimate the true result.

we refine the model inputs to account for meteorological patterns in the vicinity of the facility versus using upper-end national values, and we identify the actual location of lakes near the facility rather than the default lake location that we apply in Tier 1. By refining the screening approach in Tier 2 to account for local geographical and meteorological data, we decrease the likelihood that concentrations in environmental media are overestimated, thereby increasing the usefulness of the screening assessment. In Tier 3 of the screening assessments, we refine the model inputs again to account for hour-by-hour plume rise and the height of the mixing layer. We can also use those hour-by-hour meteorological data in a TRIM.FaTE run using the screening configuration corresponding to the lake location. These refinements produce a more accurate estimate of chemical concentrations in the media of interest, thereby reducing the uncertainty with those estimates. The assumptions and the associated uncertainties regarding the selected ingestion exposure scenario are the same for all three tiers.

For the environmental screening assessment for acid gases, we employ a single-tiered approach. We use the modeled air concentrations and compare those with ecological benchmarks.

For all tiers of the multipathway and environmental screening assessments, our approach to addressing model input uncertainty is generally cautious. We choose model inputs from the upper end of the range of possible values for the influential parameters used in the models, and we assume that the exposed individual exhibits ingestion behavior that would lead to a high total exposure. This approach reduces the likelihood of not identifying high risks for adverse impacts.

Despite the uncertainties, when individual pollutants or facilities do not exceed screening threshold emission rates (*i.e.,* screen out), we are confident that the potential for adverse multipathway impacts on human health is very low. On the other hand, when individual pollutants or facilities do exceed screening threshold emission rates, it does not mean that impacts are significant, only that we cannot rule out that possibility and that a refined assessment for the site might be necessary to obtain a more accurate risk characterization for the source category.

The EPA evaluates the following HAP in the multipathway and/or environmental risk screening assessments, where applicable: Arsenic, cadmium, dioxins/furans, lead, mercury (both inorganic and methyl mercury), POM, HCl, and HF. These HAP represent pollutants that can cause adverse impacts either through direct exposure to HAP in the air or through exposure to HAP that are deposited from the air onto soils and surface waters and then through the environment into the food web. These HAP represent those HAP for which we can conduct a meaningful multipathway or environmental screening risk assessment. For other HAP not included in our screening assessments, the model has not been parameterized such that it can be used for that purpose. In some cases, depending on the HAP, we may not have appropriate multipathway models that allow us to predict the concentration of that pollutant. The EPA acknowledges that other HAP beyond these that we are evaluating may have the potential to cause adverse effects and, therefore, the EPA may evaluate other relevant HAP in the future, as modeling science and resources allow.

IV. Analytical Results and Proposed Decisions

A. What are the results of the risk assessment and analyses?

As described above, for the HCl Production source category, we conducted an inhalation risk assessment and an environmental risk screening assessment on the only two HAP emitted, HCl and Cl_2. No PB–HAP are emitted from this source category; therefore, a multipathway risk assessment was not warranted. We present results of the risk assessment briefly below and in more detail in the residual risk document titled *Residual Risk Assessment for the Hydrochloric Acid Production Source Category in Support of the Risk and Technology Review 2018 Proposed Rule,* which is available in the docket for this action.

1. Inhalation Risk Assessment Results

Table 2 of this preamble provides an overall summary of the results of the inhalation risk assessment.

TABLE 2—INHALATION RISK ASSESSMENT SUMMARY FOR HCL PRODUCTION SOURCE CATEGORY

	Cancer MIR (in 1 million)		Cancer incidence (cases per year)	Population with cancer risk of 1-in-1 million or more	Population with cancer risk of 10-in-1 million or more	Max chronic noncancer HI actuals (and allowables)
	Based on actual emissions	Based on allowable emissions				
Source Category	0	0	0	0	0	0.2 (actuals) 2 (allowables)
Whole Facility	600		0.09	980,000	130,000	6

The inhalation risk modeling performed to estimate risks based on actual emissions relied primarily on emissions data from the NEI. For allowable emissions, the NEI data was used to calculate conservative estimates of emissions. The results of the inhalation cancer risk assessment, as shown in Table 2 of this preamble, indicate there is no quantifiable cancer risk posed by the source category since the two HAP emitted from the HCl Production source category are not known or suspected carcinogens. Neither the EPA nor the International Agency for Research on Cancer (IARC) has evaluated the weight of evidence with respect to human carcinogenicity for Cl_2. However, IARC has determined that hydrogen chloride is not classifiable as a human carcinogen. Likewise, the total estimated cancer incidence is 0 (zero) excess cancer cases per year and no people are estimated to have cancer risk associated with this source category. The maximum modeled chronic noncancer HI (TOSHI) value for the source category based on actual emissions is estimated to be 0.2, driven by emissions of Cl_2 from process vents. The target organ affected is the respiratory system. Exposure to HI levels will be less than 1 for populations in the vicinity of an HCl production facility as a result of emissions from this source category. The maximum chronic noncancer TOSHI would increase when based on allowable emissions, with a TOSHI as high as 2 (respiratory) driven by Cl_2 emissions from process vents at two facilities. Based on allowable emissions, 300 people are estimated to

have a noncancer HI above 1 at these two facilities.

2. Acute Risk Results

The screening and refined analyses for acute impacts was based on actual emissions, and to estimate the peak emission rates from the average rates, a default multiplier of 10 was used for emission points in the source category. The choice of a default multiplier of 10 is discussed in section III.C.3.c of this preamble. The results of the acute refined analysis indicate that the maximum off-facility-site acute HQ is 0.7, based on the REL value for HCl, and occurs at one facility. Refer to the document titled *HCl RTR Modeling File Data Source Documentation* (available in the docket for this action) for a detailed description of how the acute factors were developed for this source category. For more detailed acute risk results, refer to the residual risk document titled *Residual Risk Assessment for the Hydrochloric Acid Production Source Category in Support of the Risk and Technology Review 2018 Proposed Rule,* which is available in the docket for this action.

3. Multipathway Risk Screening Results

No PB–HAP (cadmium, dioxins, POM, mercury, arsenic, and lead) are emitted from this source category. Therefore, a multi-pathway assessment is not warranted.

4. Environmental Risk Screening Results

The only environmental HAP emitted by facilities in this source category is HCl. Results of the analysis for HCl indicate that, based on actual emissions, the maximum annual off-site concentration is below all ecological benchmarks for all facilities. Therefore, we do not expect an adverse environmental effect as a result of HAP emissions from this source category. For more detail on the environmental risk screening assessment, refer to the residual risk document titled *Residual Risk Assessment for the Hydrochloric Acid Production Source Category in Support of the Risk and Technology Review 2018 Proposed Rule,* which is available in the docket for this action.

5. Facility-Wide Risk Results

We performed an assessment of the facility-wide risks to provide context for the source category risks, using NEI data as described above. The maximum facility-wide cancer MIR is 600-in-1 million, mainly driven by ethylene oxide emissions from a variety of industrial processes, none of which are part of this source category. The total estimated cancer incidence from the facility-wide assessment is 0.09 excess cancer cases per year, or one excess case in every 11 years. We estimate that approximately 980,000 people have cancer risks greater than 1-in-1 million from exposure to HAP emitted from sources not subject to the HCl Production NESHAP. We estimate that the maximum facility-wide TOSHI is 6, mainly driven by emissions of trichloroethylene from chemical manufacturing processes that are not part of this source category. The target organs affected are kidney, immunological, developmental, neurological, reproductive, and liver. We estimate that approximately 760 people are exposed to noncancer HI levels above 1, based on facility-wide emissions (not subject to the HCl Production NESHAP) from the 19 facilities within this source category.

6. What demographic groups might benefit from this regulation?

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risk to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risk from the HCl Production source category across different demographic groups within the populations living near facilities.[17]

Results of the demographic analysis indicate that, for 3 of the 11 demographic groups, minorities, African American, and below the poverty level, the percentage of the population living within 5 km of facilities in the source category is greater than the corresponding national percentage for the same demographic groups. When examining the risk levels of those exposed to emissions from HCl production facilities, we find that no one within 50 km (risk modeling domain) is exposed to a cancer risk because the two HAP emitted are not known carcinogens. Furthermore, no person is exposed to a noncancer TOSHI greater than 1 due to HAP emissions from the HCl Production source category.

The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Hydrochloric Acid Production,* available in the docket for this action.

B. What are our proposed decisions regarding risk acceptability, ample margin of safety, and adverse environmental effect?

1. Risk Acceptability

As noted in section II.A of this preamble, the EPA sets standards under CAA section 112(f)(2) using ''a two-step standard-setting approach, with an analytical first step to determine an 'acceptable risk' that considers all health information, including risk estimation uncertainty, and includes a presumptive limit on MIR of 'approximately 1-in-10 thousand.' '' See 54 FR 38045, September 14, 1989. We weigh all health risk factors in our risk acceptability determination, including the cancer MIR, cancer incidence, the maximum noncancer TOSHI, the maximum acute noncancer HQ, the extent of noncancer risk, the distribution of cancer and noncancer risk in the exposed population, and the risk estimation uncertainties.

For this risk assessment, the EPA estimated risk based on actual and allowable emissions from HCl production sources. There are no quantifiable cancer risk or cancer incidence associated with this source category. Likewise, a TOSHI less than 1 indicates that the combined HAP affecting a particular target organ are not likely to cause adverse chronic noncancer health effects. Also, the acute refined assessment indicates little potential concern of acute noncancer health impacts. We identified no PB–HAP emitted from the source category, and, thus, no known potential for multi-pathway effects.

Considering all of the health risk information and factors discussed above, including the uncertainties discussed in section III of this preamble, the EPA proposes that the risks from the HCl Production source category are acceptable.

2. Ample Margin of Safety Analysis

As directed by CAA section 112(f)(2), we conducted an analysis to determine if the current emissions standards provide an ample margin of safety to protect public health. Under the ample margin of safety analysis, the EPA considers all health factors evaluated in the risk assessment and evaluates the cost and feasibility of available control technologies and other measures

[17] Demographic groups included in the analysis are: White, African American, Native American, other races and multiracial, Hispanic or Latino, children 17 years of age and under, adults 18 to 64 years of age, adults 65 years of age and over, adults without a high school diploma, people living below the poverty level, people living two times the poverty level, and linguistically isolated people.

(including the controls, measures, and costs reviewed under the technology review) that could be applied to this source category to further reduce the risks (or potential risks) due to emissions of HAP identified in our risk assessment. In this analysis, we considered the results of the technology review, risk assessment, and other aspects of our MACT rule review to determine whether there are any cost-effective controls or other measures that would reduce emissions further to provide an ample margin of safety with respect to the risks associated with these emissions.

As provided in more detail in section IV.D below, we did not identify any developments in processes, practices, or controls for HCl production facilities during our analysis for this proposal. Hydrochloric acid production facilities use scrubbers to control emissions of HCl and Cl_2. These devices are capable of achieving high levels of emission reductions and we did not identify additional technologies capable of further reducing emissions from HCl production facilities or any improvements to the existing technologies that would result in further reduction of emissions. Given that we did not identify any developments in practices, process, or control technologies and the low risks remaining after implementation of the NESHAP, we are proposing that the existing standards for the HCl Production source category provide an ample margin of safety.

Regarding the facility-wide risks due to ethylene oxide and trichloroethylene (described above), which are due to emission sources that are not part of the HCl Production source category, we intend to evaluate those facility-wide estimated emissions and risks further and may address these in a separate future action, as appropriate. In particular, the EPA is addressing ethylene oxide based on the results of the latest NATA released in August 2018, which identified the chemical as a potential concern in several areas across the country. The latest NATA estimates that ethylene oxide significantly contributes to potential elevated cancer risks in some census tracts across the U.S. (less than 1 percent of the total number of tracts). As noted on the EPA's NATA website, NATA is a screening tool for state, local, and tribal air agencies and the EPA suggests that NATA results be used cautiously.[18] These elevated risks are largely driven by an EPA risk value that was updated in late 2016. Although this updated risk value is also responsible for the elevated facility-wide risks calculated here, as noted earlier, these risks are due to emission sources that are not part of the HCl Production source category. Nevertheless, the EPA is interested in receiving public comments on the use of the update risk value for regulatory purposes.

The EPA will work with industry and state, local, and tribal air agencies as the EPA takes a two-pronged approach to address ethylene oxide emissions: (1) Reviewing CAA regulations for facilities that emit ethylene oxide—starting with air toxics emissions standards for miscellaneous organic chemical manufacturing facilities and commercial sterilizers; and (2) getting additional information on ethylene oxide emissions. This information will help the EPA as it evaluates opportunities to reduce ethylene oxide emissions as part of its regulations review, and will help the agency determine whether more immediate emission reduction steps are necessary in any particular locations. The EPA will post updates on its work to address ethylene oxide on its website at: *https://www.epa.gov/ethylene-oxide.*

3. Adverse Environmental Effect

The emissions data for this source category indicate the presence of one environmental HAP, HCl, emitted by sources within this source category. Based on the results of our environmental risk screening assessment, we conclude that there is not an adverse environmental effect as a result of HAP emissions from the HCl Production source category. Thus, we are proposing that it is not necessary to set a more stringent standard to prevent an adverse environmental effect.

C. What are the results and proposed decisions based on our technology review?

We did not identify any developments in processes, practices, or controls for HCl production facilities during our analysis for this proposal. We are not proposing any changes to the NESHAP based on our technology review. Scrubbers are used across the industry to control emissions of HCl and Cl_2, with similar performance among facilities. We reviewed the EPA's RACT/BACT/LAER Clearinghouse to identify possible developments and none were found. Additionally, we reviewed title V permits for all facilities and found no substantive differences in the control strategies employed for HCl production facilities. Finally, a search of peer reviewed literature did not yield any information regarding technology developments for HCl production.

D. What other actions are we proposing?

In addition to the proposed determinations regarding the RTRs described above, we are proposing some revisions to the NESHAP to address other issues. We are proposing revisions to the SSM provisions of the MACT rule in order to ensure that they are consistent with the Court decision in *Sierra Club* v. *EPA,* 551 F. 3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted sources from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM. We also are proposing various changes to recordkeeping and reporting requirements and adding electronic reporting. Our analyses and proposed changes related to these issues are discussed below.

1. SSM Requirements

In its 2008 decision in *Sierra Club* v. *EPA,* 551 F.3d 1019 (D.C. Cir. 2008), the Court vacated portions of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously.

We are proposing the elimination of the SSM exemption in this rule which appears at 40 CFR 63.9005(a). Consistent with *Sierra Club* v. *EPA,* we are proposing standards in this rule that apply at all times. We are also proposing several revisions to Table 7 (the General Provisions Applicability Table) as explained in more detail below. For example, we are proposing to eliminate the incorporation of the General Provisions' requirement that the source develop an SSM plan. We also are proposing to eliminate and revise certain recordkeeping and reporting requirements related to the SSM exemption as further described below.

The EPA has attempted to ensure that the provisions we are proposing to eliminate are inappropriate,

[18] In particular, the EPA has identified limitations to consider when looking at the results (*e.g.,* data gaps, default assumptions, and regional differences in emissions data completeness). A number of other aspects of the results are also worth noting, such as the results apply best to larger areas, not specific places; apply only to the analysis year (when the source data were collected); and assume a person breathes the air toxics emitted in the analysis every day for 70 years. See *https://www.epa.gov/national-air-toxics-assessment/nata-limitations* for a more complete discussion.

unnecessary, or redundant in the absence of the SSM exemption. We are specifically seeking comment on whether we have successfully done so.

In proposing the standards in this rule, the EPA has taken into account startup and shutdown periods. For the reasons explained below, the EPA is not proposing alternate standards for those periods, but is instead proposing that the source meet the otherwise applicable standards during these periods. We have no data indicating that emissions are different during startup or shutdown. For add-on control systems, the HCl Production NESHAP requires the measurement of scrubber flow rate and pH parameter limits apply at all times, including during periods of startup and shutdown. The HCl Production NESHAP requires add-on control device operating parameters to be recorded at least once every 15 minutes. The HCl Production NESHAP specifies in 40 CFR 63.9040(c) that if an operating parameter is out of the allowed range, this is a deviation from the operating limit and must be reported as specified in 40 CFR 63.9050(d).

The EPA is also proposing that the otherwise applicable limits would apply during periods of malfunction. Periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. Malfunctions, in contrast, are neither predictable nor routine. Instead they are, by definition, sudden, infrequent and not reasonably preventable failures of emissions control, process or monitoring equipment (40 CFR 63.2 [Definition of malfunction]). The EPA interprets CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards and this reading has been upheld as reasonable by the Court in *U.S. Sugar Corp.* v. *EPA,* 830 F.3d 579, 606–610 (2016). Under CAA section 112, emissions standards for new sources must be no less stringent than the level ''achieved'' by the best controlled similar source and emissions standards for existing sources generally must be no less stringent than the average emission limitation ''achieved'' by the best performing 12 percent of sources in the category. There is nothing in CAA section 112 that directs the Agency to consider malfunctions in determining the level ''achieved'' by the best performing sources when setting emission standards. As the Court has recognized, the phrase ''average emissions limitation achieved by the best performing 12 percent of'' sources ''says nothing about how the performance of the best units is to be calculated.'' *Nat'l Ass'n of Clean Water Agencies* v. *EPA,* 734 F.3d 1115, 1141 (D.C. Cir. 2013). While the EPA accounts for variability in setting emissions standards, nothing in CAA section 112 requires the Agency to consider malfunctions as part of that analysis. The EPA is not required to treat a malfunction in the same manner as the type of variation in performance that occurs during routine operations of a source. A malfunction is a failure of the source to perform in a ''normal or usual manner'' and no statutory language compels the EPA to consider such events in setting CAA section 112 standards.

As the Court recognized in *U.S. Sugar Corp,* accounting for malfunctions in setting standards would be difficult, if not impossible, given the myriad different types of malfunctions that can occur across all sources in the category and given the difficulties associated with predicting or accounting for the frequency, degree, and duration of various malfunctions that might occur. *Id.* at 608; ''the EPA would have to conceive of a standard that could apply equally to the wide range of possible boiler malfunctions, ranging from an explosion to minor mechanical defects. Any possible standard is likely to be hopelessly generic to govern such a wide array of circumstances.'' As such, the performance of units that are malfunctioning is not ''reasonably'' foreseeable. See, *e.g. Sierra Club* v. *EPA,* 167 F.3d 658, 662 (D.C. Cir. 1999 [''The EPA typically has wide latitude in determining the extent of data-gathering necessary to solve a problem. We generally defer to an agency's decision to proceed on the basis of imperfect scientific information, rather than to invest the resources to conduct the perfect study].'') See also, *Weyerhaeuser* v. *Costle,* 590 F.2d 1011, 1058 (D.C. Cir. 1978) (''In the nature of things, no general limit, individual permit, or even any upset provision can anticipate all upset situations. After a certain point, the transgression of regulatory limits caused by 'uncontrollable acts of third parties,' such as strikes, sabotage, operator intoxication or insanity, and a variety of other eventualities, must be a matter for the administrative exercise of case-by-case enforcement discretion, not for specification in advance by regulation.''). In addition, emissions during a malfunction event can be significantly higher than emissions at any other time of source operation. For example, if an air pollution control device with 99-percent removal goes off-line as a result of a malfunction (as might happen if, for example, the bags in a baghouse catch fire) and the emission unit is a steady state type unit that would take days to shut down, the source would go from 99-percent control to zero control until the control device was repaired. The source's emissions during the malfunction would be 100 times higher than during normal operations. As such, the emissions over a 4-day malfunction period would exceed the annual emissions of the source during normal operations. As this example illustrates, accounting for malfunctions could lead to standards that are not reflective of (and significantly less stringent than) levels that are achieved by a well-performing non-malfunctioning source. It is reasonable to interpret CAA section 112 to avoid such a result. The EPA's approach to malfunctions is consistent with CAA section 112 and is a reasonable interpretation of the statute.

Although no statutory language compels the EPA to set standards for malfunctions, the EPA has the discretion to do so where feasible. For example, in the Petroleum Refinery Sector Risk and Technology Review, the EPA established a work practice standard for unique types of malfunction that result in releases from pressure relief devices or emergency flaring events because the EPA had information to determine that such work practices reflected the level of control that applies to the best performers. 80 FR 75178, 75211–14 (December 1, 2015). The EPA will consider whether circumstances warrant setting standards for a particular type of malfunction and, if so, whether the EPA has sufficient information to identify the relevant best performing sources and establish a standard for such malfunctions. We also encourage commenters to provide any such information.

In the event that a source fails to comply with the applicable CAA section 112(d) standards as a result of a malfunction event, the EPA would determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. The EPA would also consider whether the source's failure to comply with the CAA section 112(d) standard was, in fact, sudden, infrequent, not reasonably preventable and was not instead caused in part by poor maintenance or careless operation. 40 CFR 63.2 (definition of malfunction).

If the EPA determines in a particular case that an enforcement action against a source for violation of an emission

standard is warranted, the source can raise any and all defenses in that enforcement action and the federal district court will determine what, if any, relief is appropriate. The same is true for citizen enforcement actions. Similarly, the presiding officer in an administrative proceeding can consider any defense raised and determine whether administrative penalties are appropriate.

The EPA is not aware of circumstances that would allow for establishing different emissions standard for some or all malfunctions that may occur at HCl production facilities and, therefore, is not proposing an alternative standard that would apply during periods of malfunction.

In summary, the EPA's interpretation of the CAA and, in particular, CAA section 112, is reasonable and encourages practices that will avoid malfunctions. Administrative and judicial procedures for addressing exceedances of the standards fully recognize that violations may occur despite good faith efforts to comply and can accommodate those situations. *U.S. Sugar Corp.* v. *EPA,* 830 F.3d 579, 606–610 (2016).

2. 40 CFR 63.9005 General Duty

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.6(e)(1)(i) by changing the ''yes'' in column 3 to a ''no.'' Section 63.6(e)(1)(i) describes the general duty to minimize emissions during periods of SSM. With the elimination of the SSM exemption, there is no need to differentiate between normal operations, startup and shutdown, and malfunction events in describing the general duty. We are proposing instead to add general duty regulatory text at 40 CFR 63.9005(b) that reflects the general duty to minimize emissions during all periods of operation. Therefore, the language the EPA is proposing for 40 CFR 63.9005(b) does not include that language from 40 CFR 63.6(e)(1).

We are also proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.6(e)(1)(ii) by changing the ''yes'' in column 3 to a ''no.'' This provision requires malfunctions to be corrected as quickly as practicable and minimize emissions consistent with safety and good air pollution control practices. Section 63.6(e)(1)(ii) imposes requirements that are not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 40 CFR 63.9005(b).

3. SSM Plan

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.6(e)(3) by changing the ''yes'' in column 3 to a ''no.'' Generally, these paragraphs require development of an SSM plan and specify SSM recordkeeping and reporting requirements related to the SSM plan. As noted, the EPA is proposing to remove the SSM exemptions. Therefore, affected units will be subject to an emission standard during such events. The applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance as they do during periods of normal operation and, thus, planning requirements specific for SSM are no longer necessary.

4. Compliance With Standards

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.6(f)(1) by changing the ''yes'' in column 3 to a ''no.'' The current language of 40 CFR 63.6(f)(1) exempts sources from non-opacity standards during periods of SSM. As discussed above, the Court in *Sierra Club* vacated the exemptions contained in 40 CFR 63.6(f)(1) and held that the CAA requires a standard to apply continuously. Consistent with *Sierra Club,* the EPA is proposing to revise standards in this rule to apply at all times.

5. 40 CFR 63.9020 Performance Testing

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.7(e)(1) by changing the ''yes'' in column 3 to a ''no.'' Section 63.7(e)(1) describes performance testing requirements. The EPA is instead proposing to add a performance testing requirement at 40 CFR 63.9020(a)(3). The performance testing requirements we are proposing to add differ from the General Provisions performance testing provisions in several respects. Specifically, the new proposed performance testing requirements do not include the language in 40 CFR 63.7(e)(1) restating the SSM exemption. However, we are including similar language that precludes startup and shutdown periods from being considered ''representative'' for purposes of performance testing. As provided in 40 CFR 63.7(e)(1), we are including language in 40 CFR 63.9020(a)(3) providing that performance tests conducted under this subpart should not be conducted during malfunctions. This is because conditions during malfunctions are often not representative of normal operating conditions. The EPA is proposing to add language that requires the owner or operator to record the process information that is necessary to document operating conditions during the test and include in such records an explanation to support that such conditions represent normal operation. Section 63.7(e) requires that the owner or operator make available upon request by the Administrator such records ''as may be necessary to determine the condition of the performance test,'' but does not specifically require the information to be recorded. The regulatory text the EPA is proposing to add to this provision builds on that requirement and makes explicit the requirement to record the information.

6. Monitoring

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.8(c)(1)(i) and (c)(1)(iii) by changing the ''yes'' in column 3 to a ''no.'' The cross-references to the general duty and SSM plan requirements in those subparagraphs are not necessary in light of the removal of the SSM exemption and other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control program for monitoring equipment (40 CFR 63.8(d)).

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.8(d)(3) by changing the ''yes'' in column 3 to a ''no.'' The final sentence in 40 CFR 63.8(d)(3) refers to the General Provisions' SSM plan requirement which is no longer applicable. The EPA is proposing to add to the rule at 40 CFR 63.9005(d)(5) text that is identical to 40 CFR 63.8(d)(3) except that the final sentence is replaced with the following sentence: ''The program of corrective action should be included in the plan required under § 63.8(d)(2).''

7. 40 CFR 63.9055 Recordkeeping

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.10(b)(2)(i) by changing the ''yes'' in column 3 to a ''no.'' Section 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recording provisions are no longer necessary because the EPA is proposing that recordkeeping and reporting applicable to normal operations will apply during startup and shutdown. In the absence of special provisions applicable to startup and shutdown, such as a startup and shutdown plan, there is no reason to

retain recordkeeping for startup and shutdown periods separate from the requirement that applies during normal operation.

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.10(b)(2)(ii) by changing the ''yes'' in column 3 to a ''no.'' Section 63.10(b)(2)(ii) describes the recordkeeping requirements during a malfunction. The EPA is proposing to add such requirements to 40 CFR 63.9055. The regulatory text we are proposing to add differs from the General Provisions it is replacing; the General Provisions require the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control, and monitoring equipment. The EPA is proposing that this requirement apply to any failure to meet an applicable standard and is requiring that the source record the date, time, and duration of the failure rather than the ''occurrence.'' The EPA is also proposing to add to 40 CFR 63.9055 a requirement that sources keep records that include a list of the affected source or equipment and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over the standard for which the source failed to meet the standard, and a description of the method used to estimate the emissions. Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The EPA is proposing to require that sources keep records of this information to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a standard, and to provide data that may document how the source met the general duty to minimize emissions when the source has failed to meet an applicable standard.

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.10(b)(2)(iv) by changing the ''yes'' in column 3 to a ''no.'' When applicable, the provision requires sources to record actions taken during SSM events when those actions were inconsistent with their SSM plan. The requirement is no longer appropriate if the EPA finalizes its proposal that SSM plans will no longer be required. The requirement previously applicable under 40 CFR 63.10(b)(2)(iv)(B) to record actions to minimize emissions and record corrective actions is now applicable in 40 CFR 63.9055.

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.10(b)(2)(v) by changing the ''yes'' in column 3 to a ''no.'' When applicable, the provision requires sources to record actions taken during SSM events to show that actions taken were consistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required.

8. 40 CFR 63.9050 Reporting

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.10(d)(5) by changing the ''yes'' in column 3 to a ''no.'' Section 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement, the EPA is proposing to add reporting requirements to 40 CFR 63.9050(c)(5). The replacement language differs from the General Provisions requirement in that it eliminates periodic SSM reports as a stand-alone report. We are proposing language that requires sources that fail to meet an applicable standard at any time to report the information concerning such events in the semi-annual compliance report already required in 40 CFR 63.9050. We are proposing that the report must contain the number, date, time, duration, and the cause of such events (including unknown cause, if applicable), a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The EPA is proposing this requirement to ensure that there is adequate information to determine compliance, to allow the EPA to determine the severity of the failure to meet an applicable standard, and to provide data that may document how the source met the general duty to minimize emissions during a failure to meet an applicable standard.

The proposed amendments eliminate the cross reference to 40 CFR 63.10(d)(5)(i) that contains the description of the previously required SSM report format and submittal schedule. These specifications are no longer necessary because the events will be reported in otherwise required reports with similar format and submittal requirements.

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.10(d)(5)(ii) by changing the ''yes'' in column 3 to a ''no.'' Section 63.10(d)(5)(ii) describes an immediate report for startups, shutdown, and malfunctions when a source failed to meet an applicable standard, but did not follow the SSM plan. We will no longer require owners and operators to report when actions taken during a startup, shutdown, or malfunction were not consistent with an SSM plan, because plans would no longer be required.

We are proposing to revise the General Provisions table (Table 7) entry for 40 CFR 63.10(c)(15) by changing the ''yes'' in column 3 to a ''no.'' The EPA is proposing that 40 CFR 63.10(c)(15) no longer apply. When applicable, the provision allows an owner or operator to use the affected source's SSM plan or records kept to satisfy the recordkeeping requirements of the SSM plan, specified in 40 CFR 63.6(e), to also satisfy the requirements of 40 CFR 63.10(c)(10) through (12). The EPA is proposing to eliminate this requirement because SSM plans would no longer be required, and, therefore, 40 CFR 63.10(c)(15) would no longer be available to satisfy the requirements of 40 CFR 63.10(c)(10) through (12).

9. Electronic Reporting

Through this proposal, the EPA is proposing that owners and operators of HCl production facilities submit electronic copies of required performance test reports, performance evaluations, notifications of compliance status, site-specific monitoring plans, and semiannual compliance reports through the EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI). A description of the electronic data submission process is provided in the memorandum, *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules,* available in Docket ID No. EPA–HQ–OAR–2018–0417. The proposed rule requires that performance test results collected using test methods that are supported by the EPA's Electronic Reporting Tool (ERT) as listed on the ERT website [19] at the time of the test be submitted in the format generated through the use of the ERT and that other performance test results be submitted in portable document format (PDF) using the attachment module of the ERT. Similarly, we are proposing that performance evaluation results of continuous monitoring systems and other performance evaluation results be

[19] *https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert.*

submitted in PDF using the attachment module of the ERT.

For performance test reports, performance evaluations, and semiannual compliance reports, the proposed rule requires that owners and operators submit information to CEDRI using the appropriate spreadsheet template. A draft version of the proposed templates for these reports is included in the docket for this rulemaking.[20] The EPA specifically requests comment on the content, layout, and overall design of the templates.

Additionally, the EPA has identified two broad circumstances in which electronic reporting extensions may be provided. In both circumstances, the decision to accept the claim of needing additional time to report is within the discretion of the Administrator, and reporting should occur as soon as possible. The EPA is providing these potential extensions to protect owners and operators from noncompliance in cases where they cannot successfully submit a report by the reporting deadline for reasons outside of their control. First, the situation where an extension may be warranted due to outages of the EPA's CDX or CEDRI, which precludes an owner or operator from accessing the system and submitting required reports, is addressed in 40 CFR 63.9050(m). Second, the situation where an extension may be warranted due to a force majeure event, which is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents an owner or operator from complying with the requirement to submit a report electronically as required by this rule, is addressed in 40 CFR 63.9050(n). Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazards beyond the control of the facility.

The electronic submittal of the reports addressed in this proposed rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability and transparency, will further assist in the protection of public health and the environment, will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance, and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting also eliminates paper-based, manual processes, thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data reporting errors, and providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the public. Moreover, electronic reporting is consistent with the EPA's plan [21] to implement Executive Order 13563 and is in keeping with the EPA's agency-wide policy [22] developed in response to the White House's Digital Government Strategy.[23] For more information on the benefits of electronic reporting, see the memorandum, *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules,* available in Docket ID No. EPA–HQ–OAR–2018–0417.

E. What compliance dates are we proposing?

The EPA is proposing that existing affected sources and affected sources that commenced construction or reconstruction on or before February 4, 2019 must comply with all of the amendments no later than 180 days after the effective date of the final rule. The final action is not expected to be a ''major rule'' as defined by 5 U.S.C. 804(2), so the effective date of the final rule will be the promulgation date as specified in CAA section 112(d)(10). For existing sources, we are proposing a change that would impact ongoing compliance requirements for 40 CFR part 63, subpart NNNNN. As discussed elsewhere in this preamble, we are proposing to change the requirements for SSM by removing the exemption from the requirements to meet the standard during SSM periods and by removing the requirement to develop and implement an SSM plan. Our experience with similar industries shows that this sort of regulated facility generally requires a time period of 180 days to read and understand the amended rule requirements; to evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule and make any necessary adjustments; and to update their operations to reflect the revised requirements. From our assessment of the timeframe needed for compliance with the revised requirements, the EPA considers a period of 180 days to be the most expeditious compliance period practicable, and, thus, is proposing that existing affected sources be in compliance with this regulation's revised requirements within 180 days of the regulation's effective date. We solicit comment on this proposed compliance period, and we specifically request submission of information from sources in this source category regarding specific actions that would need to be undertaken to comply with the proposed amended requirements, including the proposed amendments related to recordkeeping and reporting and the time needed to make the adjustments for compliance with them. We note that information provided may result in changes to the proposed compliance date. Affected sources that commence construction or reconstruction after February 4, 2019 must comply with all requirements of the subpart, including the amendments being proposed, no later than the effective date of the final rule or upon startup, whichever is later. All affected facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart NNNNN, until the applicable compliance date of the amended rule.

V. Summary of Cost, Environmental, and Economic Impacts

A. What are the affected sources?

We anticipate that 19 HCl production facilities currently operating in the United States will be affected by these proposed amendments. The basis for our estimate of affected facilities are provided in the memorandum, *Industry Characterization for the Hydrochloric Acid Production NESHAP Residual Risk and Technology Review,* which is available in the docket for this action. We are not currently aware of any planned or potential new or reconstructed HCl production facilities.

B. What are the air quality impacts?

We do not anticipate that the proposed amendments to this subpart will impact air quality. We are not proposing changes to the standard that

[20] See *Electronic Reporting Templates for Hydrochloric Acid Production, Subpart NNNNN,* available at Docket ID No. EPA–HQ–OAR–2018–0417.

[21] EPA's *Final Plan for Periodic Retrospective Reviews,* August 2011. Available at: *https://www.regulations.gov/document?D=EPA-HQ-OA-2011-0156-0154.*

[22] *E-Reporting Policy Statement for EPA Regulations,* September 2013. Available at: *https://www.epa.gov/sites/production/files/2016-03/documents/epa-ereporting-policy-statement-2013-09-30.pdf.*

[23] *Digital Government: Building a 21st Century Platform to Better Serve the American People,* May 2012. Available at: *https://obamawhitehouse.archives.gov/sites/default/files/omb/egov/digital-government/digital-government.html.*

will result in additional emission reductions beyond the levels already achieved by the NESHAP.

C. What are the cost impacts?

The cost impacts from these proposed amendments are savings in costs to affected production facilities. One way to present cost estimates is in present value (PV terms). The PV for these proposed amendments is equal to a savings of $84,514 at a discount rate of 3 percent and a savings of $62,136 at a discount rate of 7 percent, discounted to 2016. The equivalent annualized value, which is an annualized value consistent with the PV estimates, is equal to $22,736 at a discount rate of 3 percent and $18,344 at a discount rate of 7 percent (2016 dollars). These calculations are documented in the Economic Impact Analysis for the Proposed HCl Production RTR, which is available in the docket for this rulemaking.

D. What are the economic impacts?

With cost savings occurring for affected facilities, we do not anticipate the proposed amendments to yield adverse economic impacts, including negative impacts on employment.

E. What are the benefits?

As discussed above, we do not anticipate the proposed amendments to this subpart to impact air quality. The electronic submittal of the reports addressed in this proposed rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability and transparency, will further assist in the protection of public health and the environment, will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance, and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting also eliminates paper-based, manual processes, thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data reporting errors, and providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the public.

VI. Request for Comments

We solicit comments on all aspects of this proposed action. In addition to general comments on this proposed action, we are also interested in additional data that may improve the risk assessments and other analyses. We are specifically interested in receiving any improvements to the data used in the site-specific emissions profiles used for risk modeling. Such data should include supporting documentation in sufficient detail to allow characterization of the quality and representativeness of the data or information. Section VII of this preamble provides more information on submitting data.

Prior to publication of this proposal, Dow Chemical submitted several suggestions for changes to the HCl Production NESHAP. Most of these changes relate to monitoring, recordkeeping, and reporting requirements. The correspondence from Dow,[24] including their suggested regulatory language, are available in the docket for this action. We are specifically seeking comment on one issue raised by Dow in their May 30, 2018, correspondence, which is available in the docket for this action. Dow states that a definition for ''maintenance vents'' should be added to the rule if the exemptions for periods of SSM are removed.[25] Dow claims that regular maintenance activities require opening equipment after the equipment is cleaned and purged, presumably during periods that the equipment is being shut down which would previously be exempt from the emissions limits, and that these activities that only emit to the atmosphere during periods of maintenance or inspection would become subject to the requirements of the NESHAP if the exemption is removed. Dow recommends that certain emission points that exist due solely to maintenance and inspection of equipment be defined as maintenance vents and that EPA set work practice standards that require thoroughly purging and degassing the equipment to a control device prior to opening it to the atmosphere. They submitted recommended regulatory text for the definition of ''maintenance vent'' and corresponding work practices. We are seeking comment on:

- The necessity of this change for the HCl Production NESHAP in light of our proposed removal of the SSM exemptions;
- The estimated frequency of these maintenance activities;
- The cost associated with making (or not making) this change;
- The emissions impact of making (or not making) this change;
- Whether the regulatory language recommended by Dow reflects the best performers across the industry; and
- Whether it is feasible to set a numerical emission limit rather than a work practice standard, as Dow suggests.

VII. Submitting Data Corrections

The site-specific emissions profiles used in the source category risk and demographic analyses and instructions are available for download on the RTR website at *https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html.* The data files include detailed information for each HAP emissions release point for the facilities in the source category.

If you believe that the data are not representative or are inaccurate, please identify the data in question, provide your reason for concern, and provide any ''improved'' data that you have, if available. When you submit data, we request that you provide documentation of the basis for the revised values to support your suggested changes. To submit comments on the data downloaded from the RTR website, complete the following steps:

1. Within this downloaded file, enter suggested revisions to the data fields appropriate for that information.

2. Fill in the commenter information fields for each suggested revision (*i.e.,* commenter name, commenter organization, commenter email address, commenter phone number, and revision comments).

3. Gather documentation for any suggested emissions revisions (*e.g.,* performance test reports, material balance calculations).

4. Send the entire downloaded file with suggested revisions in Microsoft® Access format and all accompanying documentation to Docket ID No. EPA–HQ–OAR–2018–0417 (through the method described in the **ADDRESSES** section of this preamble).

5. If you are providing comments on a single facility or multiple facilities, you need only submit one file for all facilities. The file should contain all suggested changes for all sources at that facility (or facilities). We request that all data revision comments be submitted in the form of updated Microsoft® Excel files that are generated by the Microsoft® Access file. These files are provided on the RTR website at *https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html.*

[24] Emails from Russell Wozniak to Nathan Topham, dated May 30, 2018, and September 24, 2018. Available in the docket for this action, Docket ID No. EPA–HQ–OAR–2018–0417.

[25] In section IV.D, above, the EPA has proposed to remove the SSM exemptions in the HCl Production NESHAP.

VIII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to OMB for review.

B. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs

This action is not expected to be an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

C. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 2032.09. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

We are proposing changes to the recordkeeping and reporting requirements associated with 40 CFR part 63, subpart NNNNN, in the form of eliminating the SSM plan and reporting requirements and adding electronic reporting.

Respondents/affected entities: The respondents to the recordkeeping and reporting requirements are owners or operators of facilities that produce HCl subject to 40 CFR part 63, subpart NNNNN.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart NNNNN).

Estimated number of respondents: Nineteen (19) facilities.

Frequency of response: Initially and semiannually.

Total estimated burden: The annual recordkeeping and reporting burden for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be 22,000 hours (per year). These proposed amendments reflect 314 hours (per year) in reduced burden to comply with the rule due to the removal of SSM recordkeeping/reporting requirements and the addition of electronic reporting. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The annual recordkeeping and reporting cost for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be $2,200,000 (rounded, per year), including $754,000 annualized capital or operation and maintenance costs. This results in a decrease of $17,000 (rounded, per year) to comply with the proposed amendments to the rule.

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 in 40 CFR are listed in 40 CFR part 9.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden to the EPA using the docket identified at the beginning of this rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to *OIRA_submission@omb.eop.gov,* Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than March 6, 2019. The EPA will respond to any ICR-related comments in the final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. There are no small entities among the 14 ultimate parent companies impacted by this proposed action given the Small Business Administration small business size definition for this industry (1,000 employees or greater for NAICS 325180), and no significant economic impact on any of these entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. No tribal facilities are known to be engaged in HCl production processes that would be affected by this action. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in sections III.A and IV.A and B of this preamble.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA)

This action involves technical standards. Therefore, the EPA conducted a search to identify potentially applicable voluntary consensus standards. However, the Agency identified no such standards. A thorough summary of the search conducted and results are included in the memorandum titled *Voluntary Consensus Standard Results for Hydrochloric Acid Production Residual Risk and Technology Review,* which is available in the docket for this action.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). The documentation for this decision is contained in section IV.A.6 of this preamble and the technical report, *Hydrochloric Acid Production*

Demographic Analysis, which is available in the docket for this action.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

Dated: December 20, 2018.

Andrew R. Wheeler,

Acting Administrator.

For the reasons stated in the preamble, the EPA proposes to amend title 40, chapter I, part 63 of the Code of Federal Regulations as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart NNNNN—National Emission Standards for Hazardous Air Pollutants for Hydrochloric Acid Production

■ 2. Section 63.8985 is amended by revising paragraph (f) to read as follows:

§ 63.8985 Am I subject to this subpart?

* * * * *

(f) An HCl production facility is not subject to this subpart if all of the gaseous streams containing HCl and chlorine (Cl_2) from HCl process vents, HCl storage tanks, and HCl transfer operations are recycled or routed to another process for process purpose, prior to being discharged to the atmosphere.

■ 3. Section 63.9005 is amended by revising paragraphs (a)–(c) and (d)(4)–(6) to read as follows:

§ 63.9005 What are my general requirements for complying with this subpart?

(a) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced after April 17, 2003, but before February 5, 2019, you must be in compliance with the emission limitations and work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction. After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], for each such source you must be in compliance with the emission limitations in this subpart at all times. For new and reconstructed sources for which construction or reconstruction commenced after February 4, 2019, you must be in compliance with the emissions limitations in this subpart at all times.

(b) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced after April 17, 2003, but before February 5, 2019, you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i). After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for each such source, and after [DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for new and reconstructed sources for which construction or reconstruction commenced after February 4, 2019, at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(c) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced after April 17, 2003, but before February 5, 2019, you must develop a written startup, shutdown, and malfunction plan according to the provisions in § 63.6(e)(3). For each such source, a startup, shutdown, and malfunction plan is not required after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**]. No startup, shutdown, and malfunction plan is required for any new or reconstructed source for which construction or reconstruction commenced after February 4, 2019.

(d) * * *

(4) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced after April 17, 2003, but before February 5, 2019, ongoing operation and maintenance (O&M) procedures in accordance with the general requirements of §§ 63.8(c)(1), (3), (4)(ii), (7), and (8), and 63.9025. After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for each such source, and after [DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for new and reconstructed sources for which construction or reconstruction commenced after February 4, 2019, ongoing operation and maintenance (O&M) procedures in accordance with the general requirements of §§ 63.8(c)(1)(ii), (3), (4)(ii), (7), and (8), and 63.9025.

(5) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced after April 17, 2003, but before February 5, 2019, ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d). After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for each such source, and after [DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for new and reconstructed sources for which construction or reconstruction commenced after [February 4, 2019, ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d) except for the requirements related to startup, shutdown, and malfunction plans referenced in § 63.8(d)(3). The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (*i.e.,* superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under § 63.8(d)(2).

(6) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced after April 17, 2003, but before February 5, 2019, ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c) and (e)(1) and (2)(i). After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for each such source, and after [DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for new and reconstructed sources for which construction or reconstruction commenced after February 4, 2019, ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c)(1) through (c)(14), and (e)(1) and (2)(i).

■ 4. Section 63.9020 is amended by revising paragraphs (a)(2) and (a)(3) to read as follows:

§ 63.9020 What performance tests and other procedures must I use?

(a) * * *

(2) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced after April 17, 2003, but before February 5, 2019, you must conduct each performance test under representative conditions according to the requirements in § 63.7(e)(1) and under the specific conditions that this subpart specifies in Table 3. After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for each such source, and after [DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for new and reconstructed sources for which construction or reconstruction commenced after February 4, 2019, you must conduct each performance test under conditions representative of normal operations. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(3) You may not conduct performance tests during periods of startup, shutdown, or malfunction.

* * * * *

■ 5. Section 63.9025 is amended by revising paragraph (a)(3) to read as follows:

§ 63.9025 What are my monitoring installation, operation, and maintenance requirements?

(a) * * *

(3) For at least 75 percent of the operating hours in a 24-hour period, you must have valid data (as defined in your site-specific monitoring plan) for at least 4 equally spaced periods each hour.

* * * * *

■ 6. Section 63.9030 is amended by revising paragraph (c) to read as follows:

§ 63.9030 How do I demonstrate initial compliance with the emission limitations and work practice standards?

* * * * *

(c) For existing sources and for new or reconstructed sources which commenced construction or reconstruction after April 17, 2003, but before February 5, 2019, before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.9045(f)-(g). After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for such sources, and after [DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for new or reconstructed sources which commence construction or reconstruction after February 4, 2019, you must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.9045(f)–(g) and § 63.9050(d).

■ 7. Section 63.9040 is amended by revising paragraph (e) to read as follows:

§ 63.9040 How do I demonstrate continuous compliance with the emission limitations and work practice standards?

* * * * *

(e) For existing sources and for new or reconstructed sources which commenced construction or reconstruction after April 17, 2003, but before February 5, 2019, before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with § 63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in § 63.6(e). After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for such sources, and after [DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] for new and reconstructed sources which commence construction or reconstruction after February 4, 2019, the exemptions for periods of startup, shutdown, and malfunction in § 63.6(e) no longer apply.

■ 8. Section 63.9045 is amended by revising paragraph (f) to read as follows:

§ 63.9045 What notifications must I submit and when?

* * * * *

(f) You must submit the Notification of Compliance Status, including the performance test results, within 180 calendar days after the applicable compliance dates specified in § 63.8995.

* * * * *

■ 9. Section 63.9050 is amended by revising paragraphs (a), (c)(4), (c)(5), (d) introductory text, (f) introductory text and adding paragraphs (g) through (n).

§ 63.9050 What reports must I submit and when?

(a) You must submit a compliance report that includes the information in § 63.9050(c) through (e), as applicable, as specified in Table 6 to this subpart.

* * * * *

(c) * * *

(4) For existing sources and for new or reconstructed sources for which construction or reconstruction commenced after April 17, 2003, but before February 5, 2019, before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i). A startup, shutdown, and malfunction plan and the information in § 63.10(d)(5)(i) is not required after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**].

(5) For existing sources and for new or reconstructed sources which commenced construction or reconstruction after April 17, 2003, but before February 5, 2019, before [DATE 181 DAYS AFTER PUBLICATION OF

FINAL RULE IN THE **FEDERAL REGISTER**], if there are no deviations from any emission limitations that apply to you, a statement that there were no deviations from the emission limitations during the reporting period.

* * * * *

(d) For each deviation from an emission limitation occurring at an affected source where you are using a CMS to comply with the emission limitation in this subpart, you must include the information in paragraphs (c)(1) through (6) of this section and the following information in paragraphs (d)(1) through (9) of this section and § 63.10(e)(3)(vi). This includes periods of startup, shutdown, and malfunction.

* * * * *

(f) For existing sources and for new or reconstructed sources which commenced construction or reconstruction after April 17, 2003, but before February 5, 2019, before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], for each startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan you must submit an immediate startup, shutdown and malfunction report. Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report according to paragraphs (f)(1) and (2) of this section. An immediate startup, shutdown, and malfunction report is not required after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**].

* * * * *

(g) Within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedures specified in paragraphs (g)(1) through (3) of this section.

(1) *Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test.* Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) *Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.* Submit the results of the performance test as an attachment in the ERT.

(3) *Confidential business information (CBI).* If you claim some of the information submitted under paragraph (a)(1) is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (a)(1) of this section.

(h) Within 60 days after the date of completing each continuous monitoring system (CMS) performance evaluation (as defined in § 63.2), you must submit the results of the performance evaluation following the procedures specified in paragraphs (h)(1) through (3) of this section.

(1) *Performance evaluations of CMS measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation.* Submit the results of the performance evaluation to the EPA via CEDRI, which can be accessed through the EPA's CDX. The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on the EPA's ERT website.

(2) *Performance evaluations of CMS measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation.* Submit the results of the performance evaluation as an attachment in the ERT.

(3) *Confidential business information (CBI).* If you claim some of the information submitted under paragraph (a)(1) is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (a)(1) of this section.

(i) You must submit to the Administrator compliance reports. Beginning on [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], submit all subsequent reports following the procedure specified in paragraph (l) of this section.

(j) You must submit to the Administrator performance evaluations. Beginning on [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], submit all subsequent reports following the procedure specified in paragraph (l) of this section.

(k) You must submit to the Administrator a Notification of Compliance Status. Beginning on [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], submit all subsequent reports following the procedure specified in paragraph (l) of this section.

(l) If you are required to submit reports following the procedure specified in this paragraph, you must submit reports to the EPA via CEDRI. CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). You must use the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*) for this subpart. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. If you claim some of the information required to be submitted via CEDRI is confidential business information (CBI), submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement

Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(m) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (m)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning 5 business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date, time and length of the outage;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(n) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (n)(1) through (5) of this section.

(1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

■ 10. Section 63.9055 is amended by revising paragraph (b)(1) and adding paragraphs (c) and (d).

§ 63.9055 What records must I keep?

* * * * *

(b) * * *

(1) For existing sources and for new or reconstructed sources which commenced construction or reconstruction after April 17, 2003, but before February 5, 2019, before [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], the records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. for a period of five years. A startup, shutdown, and malfunction plan is not required after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**].

* * * * *

(c) After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], you must keep records of each deviation specified in paragraphs (c)(1) through (3) of this section.

(1) For each deviation record the date, time and duration of each deviation.

(2) For each deviation, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(3) Record actions taken to minimize emissions in accordance with 63.9005(b), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(d) Any records required to be maintained by this part that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

■ 11. Table 1 to subpart NNNNN of part 63 is amended by correcting a typographical error in entry 2.

TABLE 1 TO SUBPART NNNNN OF PART 63—EMISSION LIMITS AND WORK PRACTICE STANDARDS

For each . . .	You must meet the following emission limit and work practice standard
* * * * * * *	
2. Emission stream from an HCl storage tank at an existing source	Reduce HCl emissions by 99 percent or greater or achieve an outlet concentration of 120 ppm by volume or less.
* * * * * * *	

■ 12. Revise table 6 of subpart NNNNN of part 63 to read as follows:

Table 6 to Subpart NNNNN of Part 63—Requirements for Reports

As stated in § 63.9050(a), you must submit a compliance report that includes the information in § 63.9050(c) through (e) as well as the information in the following table. For existing sources and for new or reconstructed sources which commenced construction or reconstruction after April 17, 2003, but before February 5, 2019, before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], you must also submit startup, shutdown, and malfunction (SSM) reports according to the requirements in § 63.9050(f) and the following. A startup, shutdown, and malfunction plan is not required after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**].

If . . .	Then you must submit a report or statement that:
1. There are no deviations from any emission limitations that apply to you.	There were no deviations from any emission limitations that apply to you during the reporting period. Include this statement in the compliance report.
2. There were no periods during which the operating parameter monitoring systems were out-of-control in accordance with the monitoring plan.	There were no periods during which the CMS were out-of-control during the reporting period. Include this statement in the compliance report.
3. There was a deviation from any emission limitation during the reporting period.	Contains the information in § 63.9050(d). Include this statement in the compliance report.
4. There were periods during which the operating parameter monitoring systems were out-of-control in accordance with the monitoring plan.	Contains the information in § 63.9050(d). Include this statement in the compliance report.
5. There was a SSM during the reporting period that is not consistent with your SSM plan.	For existing sources and for new or reconstructed sources which commenced construction or reconstruction after April 17, 2003, but before February 5, 2019, before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], contains the information in § 63.9050(f). Include this statement in the compliance report. A startup, shutdown, and malfunction plan is not required after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**].
6. There were periods when the procedures in the LDAR plan were not followed.	Contains the information in § 63.9050(c)(7). Include this statement in the compliance report.

■ 13. Table 7 to subpart NNNNN of part 63 is amended by:
■ a. Removing the entry ''§ 63.6(e)(1)–(2)'';
■ b. Adding the entries ''§ 63.6(e)(1)(i)'', ''§ 63.6(e)(1)(ii)'', and ''§ 63.6(e)(1)(iii)–(e)(2)'' in numerical order;
■ c. Revising the entry ''§ 63.6(e)(3)'';
■ d. Revising the entry ''§ 63.6(f)(1)'';
■ e. Revising the entry ''§ 63.7(e)(1)'';
■ f. Removing the entry ''§ 63.8(c)(1)–(3)'';
■ g. Adding the entries ''§ 63.8(c)(1)(i)'', ''§ 63.8(c)(1)(ii)'', ''§ 63.8(c)(1)(iii)'', and ''§ 63.8(c)(2)–(3)'' in numerical order;
■ h. Removing the entry ''§ 63.8(d)–(e)'';
■ i. Adding the entries ''§ 63.8(d)(1)–(2)'', ''§ 63.8(d)(3)'', and ''§ 63.8(e)'' in numerical order;
■ j. Removing the entry ''§ 63.10(b)(2)(i)–(xi)'';
■ k. Adding the entries ''§ 63.10(b)(2)(i)–(ii)'', ''§ 63.10(b)(2)(iii)'', ''§ 63.10(b)(2)(iv)'', ''§ 63.10(b)(2)(v)'', ''§ 63.10(b)(2)(vi)'', and ''§ 63.10(b)(2)(vii)–(xi)'' in numerical order;
■ l. Removing the entry ''§ 63.10(c)'';
■ m. Adding the entries ''§ 63.10(c)(1)–(14)'' and ''§ 63.10(c)(15'' in numerical order; and
■ n. Revising the entry ''§ 63.10(d)(5)'';

The revisions and additions read as follows:

TABLE 7 TO SUBPART NNNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNNN

* * * * * * *

Citation	Requirement	Applies to subpart NNNNN	Explanation
*	*	*	*
§ 63.6(e)(1)(i)	General Duty to minimize emissions ..	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	Subpart NNNNN requires affected units to meet emissions standards at all times. See § 63.9005(b) for general duty requirement.
§ 63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP.	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	
§ 63.6(e)(1)(iii)–(e)(2)	Operation and maintenance requirements.	Yes.	

TABLE 7 TO SUBPART NNNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNNN—Continued

* * * * * * *

Citation	Requirement	Applies to subpart NNNNN	Explanation
§ 63.6(e)(3)	SSM plans	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	
§ 63.6(f)(1)	Compliance except during SSM	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	
*	* *	* *	* *
§ 63.7(e)(1)	Conditions for conducting performance tests.	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	See § 63.9020(a) for performance testing requirements.
*	* *	* *	* *
§ 63.8(c)(1)(i)	General duty to minimize emissions and CMS operation.	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	
§ 63.8(c)(1)(ii)	Continuous monitoring system O&M	Yes	Applies as modified by § 63.9005(d).
§ 63.8(c)(1)(iii)	Requirement to develop SSM Plan for CMS.	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	
§ 63.8(c)(2)–(3)	Continuous monitoring system O&M	Yes	Applies as modified by § 63.9005(d).
*	* *	* *	* *
§ 63.8(d)(1)–(2)	Quality control program and CMS performance evaluation.	Yes	Applies as modified by § 63.9005(d).
§ 63.8(d)(3)	Written procedures for CMS	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	See § 63.9005(d)(5) for written procedures for CMS.
§ 63.8(e)	Performance evaluation of CMS	Yes	Applies as modified by § 63.9005(d).
*	* *	* *	* *
§ 63.10(b)(2)(i)–(ii)	Records related to SSM periods	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	See 63.9055 for recordkeeping of (1) date, time and duration; (2) listing of affected source or equipment, and an estimate of the quantity of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.
§ 63.10(b)(2)(iii)	Maintenance Records	Yes.	

TABLE 7 TO SUBPART NNNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNNN—Continued

Citation	Requirement	Applies to subpart NNNNN	Explanation
*	*	*	*
§ 63.10(b)(2)(iv)	Actions taken to minimize emissions during SSM.	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	
§ 63.10(b)(2)(v)	Actions taken to minimize emissions during SSM.	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	
§ 63.10(b)(2)(vi)	Recordkeeping for CMS malfunctions	Yes.	
§ 63.10(b)(2)(vii)–(xi)	Records for performance tests and CMS.	Yes.	
*	*	*	*
§ 63.10(c)(1)–(14)	Additional recordkeeping requirements for sources with CMS.	Yes	Applies as modified by § 63.9005 (d).
§ 63.10(c)(15)	Use of SSM Plan	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	
*	*	*	*
§ 63.10(d)(5)	SSM reports	No, for new or reconstructed sources which commenced construction or reconstruction after February 4, 2019. Yes, for all other affected sources before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], and No thereafter.	See § 63.9050(c)(5) for malfunction reporting requirements.
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